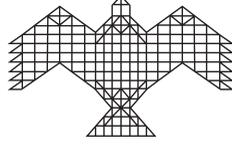




NATIONAL INSTITUTE OF ADVANCED STUDIES
Bengaluru, India

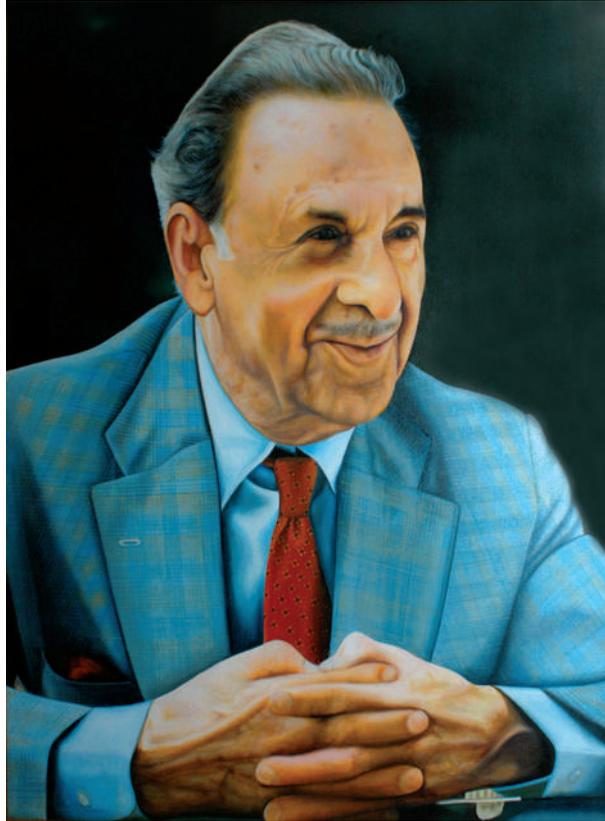
ANNUAL REPORT
2023 – 2024





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Bengaluru, India

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JRD Tata
Founding Chairman

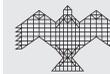
The Vision and Mission of NIAS

To integrate the findings of scholarship in the natural and social sciences with technology and the arts through multi-disciplinary research on the complex issues that face Indian and global society.

To assist in the creation of new leadership with broad horizons in all sectors of society by disseminating the conclusions of such research through appropriate publications and courses as well as dialogues with leaders and the public.

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FROM DIRECTOR'S DESK



This year is the Birth Centenary of Dr Raja Ramanna, the Founder Director of the NIAS. The celebrations were inaugurated by Prof CNR Rao, Honorary President, JNCASR on January 25, 2024. A tribute concert on 'Paramanu and Paramatma' was also organised. A series of the activities reflecting Dr Ramanna's contributions has been planned.

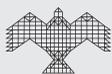
I am very happy to present highlights of the research activities.

Under Energy, Environment and Climate Change, a methodology for selection of potential sites for small and modular reactors has been developed through use of remote sensing and GIS. This approach has been used for selecting sites for NPCIL, NTPC, Jindal steel, etc. The study on the impact of FGD installations on future trends of CO₂ and SO_x revealed that though there will a reduction in SO_x, CO₂ is likely to increase. The energy transition in the residential cooking sector in India were studied and an evidence-based approach was developed. Inputs on GHG emissions for aviation, navigation and railways; HFCs and PFCs, etc. were provided for 4th National Communications to UNFCCC. Based on the study on the Almatti-Pennar Interlinking of Rivers, the revised alignment has been prepared by the National Water Development Agency (NWDA). Dr Tejal Kanitkar was a member of the Government of India delegation to COP 28 and IPCC meetings.

The Inequality and Human Development Programme focused on the transformation prompted by the changes in rural areas were studied, specific to the left behind, technology and inequality, inequality and autonomous adaptation to climate change, gender and intra-personal inequality and inequality of aggression. A study on interactions between social and economic factors to explain district level variations in the incidences of Maoist insurgencies in the Indian states revealed the connection between poverty and Maoism, characterised by a complex interplay between social persecution and economic deprivation. The study drew motivation from theories of social discrimination and capability.

Under the Education Programme, the gifted and talented children were provided mentorship from Jawahar Navadoya Schools, Kendriya Vidyalaya, Army Public Schools, as well as in rural schools. Advanced Learning Centres in these schools were set up. Linkages between vocational skill policy, dropout reduction and employability among adolescent youth and education and vocational skill opportunities in Orissa, Assam and Manipur were explored.

The Conflict Resolution and Peace Research Programme pursued evidence-based research on conflicts and study peace as a political process. The local governance issues in selected areas in Assam and Odisha were examined the prism of cooperative federalism. The role of informal organisations in Manipur and Mizoram in decentralised



governance was found to be critical. The first Conflict Annual was published and a project on 'Conflict History' was initiated.

Science, Technology and International Relations Programme addressed international relations from science and technology perspective. The focus of research was on emergence of new space powers including small nations and commercial entities. The programme conducts area studies on Pakistan, Europe, Africa and China and publishes, The World This week, Africa Weekly, Pakistan Reader Evening Brief and Europe Monitor.

The International Strategic and Securities Studies Programme focused on policy, geopolitics, strategy and security dynamics. The future needs of the Indian navy vis-à-vis capability of the Indian industries were evaluated, including delay in the construction of non-conventional submarines. Technologies such as artificial intelligence, electronic warfare and tactics were analysed. The NIAS-CISAC dialogues were held on the theme of 'US-India Cooperation on Global Security.'

Under the Consciousness Studies Programme, a study has been carried out to examine ecological systems that contribute to notions of well-being in Ayurveda and Mavilan healing traditions. A narrative ecology of healing, agentic herbs and co-creative healing and natural ecological systems were examined. Human observations of Indian paintings and an individual's emotional involvement in a work of art were traced. An innovative compression-complexity-based measures of causality was developed having applications in econometrics, cognitive science, epidemiology and consciousness studies.

The project on Early Fusion Music, provided inputs on development of a new genre of compositions in south Indian classical music, where devotional words in Sanskrit or Telugu, were set to popular tunes, played by European Bands during late 18th to early 20th century. The phylogeny of tunes through computational analysis of acoustic signals characterised the complexity in the notations.

Under the Heritage, Science and Society Programme, a geospatial database of 25 cultural sites has been developed using primarily remote sensing for characterising these sites. On-site analysis of excavated Iron Age sites in Southern India was conducted using portable x-ray fluorescence analysis. The identification of sun-facing feature of the Karnataka Dravida temple-building traditions at Badami and Hoysala period was carried out.

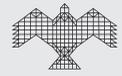
The Urban and Mobility Studies focused on explored the social and economic reverberations of urbanisation and migration. The study on the garment industry revealed the positive impact of industry as a generator of employment for unskilled urban women, while drawing attention to low wages and poor working conditions. The pathways to mechanisms COVID-19 stressors and psychological conditions which influence HIV risk were identified.

The Animal Behaviour and Cognition Programme addressed ecology and behaviour of primates, elephants and fish. The geographic pattern of illegal wildlife trade hot spots of nocturnal slender loris was investigated. The behaviour trajectories taken by hatchery reared juvenile mahseers were studied to enhance their survival post-release. The study on wild, feral and cultivated species in Delhi and Guwahati provided an insight into effects of urbanisation.

An ocean box model was developed to capture the evolution of CO₂ and salinity under the Complex System Programme. The location of how oceanic carbon sinks and sources showed how freshwater flows control the climate.

A network of students for monitoring the impact of climate change and communicating the risk of natural disasters in the coastal regions of Kerala and Karnataka has been set up. The study explored the interplay between perceptions and mental models of climate change amongst the adolescents.

Policy briefs on Small and modular reactors, air quality forecasting and resources framework and cooperative federalism and local governance in India have been issued.



Under the Doctoral Programme, 71 students have been pursuing their research. This year 9 students were awarded PhD degree by the Manipal Academy of Higher Education and Trans-Disciplinary Health Science and Technology, Bengaluru.

Many training programmes have been organised. They are:

36th Annual Programme for Senior Executives on 'Leadership in a World in Transition'.

NIAS-DST Training Programmes on 'Science and Technology: Global Developments and Perspectives,' 'Transformational Leadership in Science: Re-imaging Science in Indian Society' and 'Policy for Science and Science for Policy.'

Emerging Defence Technologies and Applications, and Sensor Fusion for Strategic systems and its Challenges for BEL Academy for Excellence.

The dignitaries who visited NIAS include:

HE Mr Philip Green, High Commissioner of Australia to India visited on launching an area study on "China, East Asia & Pacific,

HE Juris Bone, Latvia's Ambassador to India visited India to interact with young scholars about global politics,

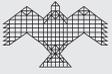
Prof Tim Jones, Vice Chancellor, Liverpool University, UK visited to discuss about documentation of cultural heritage sites,

Shri Amit Sharma, Managing Director, Tata Consulting Engineers Limited.

The financial status is still precarious. The Tata Trusts continued their partial financial support. These funds are not sufficient to meet expenditure towards salary of faculty and staff. Efforts have been initiated to raise additional funds from other research foundations and trusts. It is likely that additional funds will be available from 2025 onwards.

The activities are now being restructured to address issues related to climate change and energy transition, sustainable development goals and strategic and security studies. It is expected that such restructuring will help to address current national, regional and global issues.

Shailesh Nayak
Director, NIAS



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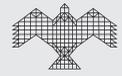
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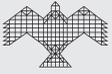
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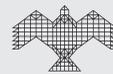


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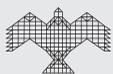
The National Institute of Advanced Studies (NIAS) acknowledges its gratitude to its funding agencies, organisations, and institutes for their support in various forms to run the doctoral programme, conduct research activities, and organise training programmes, meetings, workshops, seminars and symposia successfully.

We are profoundly grateful to:

Sir Dorabji Tata Trust and Allied Trusts, Mumbai and Sir Ratan Tata Trust and Allied Trusts, Mumbai for providing continued support to NIAS for sustaining its activities.

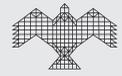
We express our gratitude to:

Army Welfare Education Society, New Delhi
Department of Atomic Energy, Government of India
Department of Biotechnology, Government of India
Defence Research and Development Organisation, Government of India
Department of Science and Technology, Government of India
Department of Space, Government of India
Environmental Management and Policy Research Institute, Bengaluru
Government of Karnataka, Bengaluru
Indian Council of Philosophical Research, New Delhi
Indian Council of Social Science Research, New Delhi
Indian Council of World Affairs, New Delhi
Indian Knowledge System, Ministry of Education, New Delhi
Indian National Science Academy, New Delhi
Institute of Wood Science and Technology, Bengaluru
Ministry of Earth Sciences, Government of India
Ministry of Environment, Forest and Climate Change, Government of India
National Commission for Women, New Delhi
NITI Aayog, New Delhi
Office of the Principal Scientific Advisor to the Government of India
Reserve Bank of India, Mumbai
Science and Engineering Research Board, New Delhi
Ananth Technologies Limited, Bengaluru
Azim Premji University, Bengaluru
Bharat Dynamics Limited, Hyderabad
Bharat Electronics Limited, Bengaluru
Crimson Energy Experts Private Limited, New Delhi
Greater Bengaluru Parisara Foundation, Bengaluru
Indian Rare Earths Limited, Mumbai
Indira Gandhi Memorial Trust, New Delhi
Jindal Renewable Power Private Limited, Mumbai
Mr TV Mohandas Pai, Bengaluru
National Thermal Power Corporation Limited, New Delhi



Nuclear Power Corporation of India Limited, Mumbai
Oil India Limited, Noida
RG Manudhane Foundation for Excellence, Mumbai
Sheela Kanoria Foundation, New Delhi
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Ghent University, Belgium
Gilead Sciences, INC
Hanns-Seidel-Stiftung Foundation, Germany
Humane Society International, USA
Konrad-Adenauer-Stiftung e.V., Germany
Loughborough University, United Kingdom
Rufford Foundation, UK
Texas A&M University, Texas
The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Belgium
The International AIDS Vaccine Initiative, USA
The Luigi and Laura Dallapiccola Foundation, UK
University of South Carolina, USA
University of Sydney, Australia

NIAS looks forward to receiving continued support from our well-wishers, funding agencies and all others towards actualising our research and academic mandate.



EXECUTIVE SUMMARY

The activities of NIAS are organised under four schools: Conflict and Security Studies, Humanities, Natural Sciences and Engineering, and Social Sciences. The following is a summary of the major outcomes and achievements of the various programmes and initiatives of the four schools at NIAS.

1. CONFLICT RESOLUTION AND PEACE RESEARCH

The programme has two primary verticals – Conflict Resolution and Peace Research. On Conflict Resolution, the Programme pursues evidence-based research on individual conflicts and aims to conceptualize conflict. A special focus during recent years has been on the socioeconomic impact assessment of development projects. Adopting the principle of ‘development as a social’ process, the programme evaluates the socioeconomic impact of planned and implemented development projects commissioned by the government, PSUs, and private agencies. On Peace Research, the programme continues its global focus. The NIAS Conflict Weekly acts as a flagship publication, tracking interpreting and analysing conflicts and peace processes across the world, from the Americas to Africa and the Pacific. In 2023-24, the programme published its first Conflict Annual, and also kickstarted “Conflict History Project.”

2. SCIENCE, TECHNOLOGY AND INTERNATIONAL RELATIONS

During 2023-24, the Science, Technology and International Relations Programme kickstarted a fourth Area Studies on China, East and the Pacific. The other three Area Studies include Pakistan, Europe, and Africa. The programme continues its flagship publication – ‘The World This Week’ published every Sunday. As a part of capacity building, the programme organises ‘Global Politics, Young Voices’, an exclusive platform for young scholars. The programme continued its network activity under the ‘International Studies Network Bangalore’ with seven academic institutions from Chennai, Pondicherry, Bengaluru, and Goa.

3. INTERNATIONAL STRATEGIC AND SECURITY STUDIES

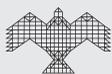
The emphasis of the programme is on integrating complex elements of science and technology with policy, geopolitics, strategic and security dynamics. Research in the programme examines technology and technology applications in areas like Hypersonic Weapon Systems and Cyber Security. Another goal is development and application of software and analysis tools for issues such as Space Domain Awareness and Maritime domain and defence. Research was carried out on Policy Frameworks/Roadmap for creation of defence space ecosystem for India. The programme also explored the possibility of collaboration in the area of underwater domain awareness, which involves creating a comprehensive system for monitoring and detecting underwater threats that could pose a risk to national security. Indian Navy requirements and the role of the Indian defence industry was assessed through a workshop.

4. CONSCIOUSNESS STUDIES

The research, outreach and documentation completed by the Consciousness Studies Programme this academic year pertained largely to the projects funded by the ICPR, and SERB. The larger goal of the Consciousness Studies Programme is an interdisciplinary and multidisciplinary mandate that tries to connect knowledge, wellbeing and ‘the beyond’ to seek both the manifest and subliminal meanings and experiences of consciousness. The beyond is identified as the unknown space that invokes complex questions and challenges, and that are explored using principles of causality, AI, indigenous healing, metaphysics, ethnography, literature and the arts.

5. HERITAGE, SCIENCE AND SOCIETY

The Heritage, Science and Society Programme works on documenting and preserving material culture and tangible and intangible heritage using scientific techniques of materials characterisation and heritage documentation. Research projects included archaeo-technological trajectory of craft traditions and experimental re-construction as pedagogical tools, material culture studies in the Nilgiris region,



archaeological aspects of Indian stone working practices ranging from megalithic monuments to temple architecture, and creation of geospatial databases. The programme brought out several scholarly and other publications, two workshops, exhibitions, master classes, and other events.

6. ANIMAL BEHAVIOUR AND COGNITION

The main focus of the Animal Behaviour and Cognition Programme is to investigate human-animal interactions and behaviour across a range of species and environmental contexts with the larger objective of promoting biodiversity conservation and a more equitable human-wildlife coexistence. The major projects that were engaged in for this purpose include: elephant-mahout relationships in southern India, golden langur-human relationships in Assam, behavioural adaptations in Deccan mahseer juveniles, patterns characterising wildlife trade in southern India and the role of gut microbiota as a driver for wildlife crop raiding. Other studies on traditional ecological and health systems in South Asia, the past, present and future of bonnet macaques in the city of Bengaluru and nutritional benefits of crop raiding behaviour in macaques were also carried out.

7. COMPLEX SYSTEMS

The Complex Systems Programme has been doing frontier, interdisciplinary research based on principles of nonlinear dynamics. Work at IAS was focused on understanding the dynamical mechanisms of changes in the physical environment which manifest as changes in living systems. This included (i) construction of a mathematical model which enables calculating average salinity and carbon dioxide content in oceans, and predicts location of ocean carbon sinks, and (ii) modelling impact of environmental changes on fragile ecosystems.

8. ENERGY, ENVIRONMENT AND CLIMATE CHANGE

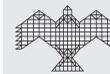
Energy, Environment, and Climate Change Programme faculty completed a very productive year during which two doctoral students were awarded their PhD degrees and a record number of papers were published. Faculty members were awarded nine new research projects, and participated in the government's official delegation to COP 28 and IPCC. The programme's policy research and recommendations to enhance coking coal security were endorsed by NITI Aayog, as was its policy brief on Small Modular Reactors; the programme's policy recommendations on decarbonising the energy-intensive steel and aluminium sectors are under consideration by DAE.

9. SCIENCE COMMUNICATION

The Science Communication Programme aims to strengthen the science-society relationship by integrating knowledge from science, social science and humanities. The programme launched two externally funded projects – 'Student-Scientists: A network of students for monitoring the impact of climate change and communicating the risk of natural disasters in the coastal regions of Kerala and Karnataka' and 'Kalarippayattu and Wellbeing'. Training students from both colleges and schools to monitor selected parameters of their environment and supporting coastal society in their efforts to mitigate with the climate change by communicating scientific information are the objectives the first project aims to achieve. Targets of the second project include collection, curation and communication of the practices recommended for ensuring physical and psychological wellbeing by an Indian martial arts tradition- the kalarippayattu. Additionally, the programme organised a national conference titled 'Intelligence – In Animals, Humans and Machines'.

10. EDUCATION

The Education Programme rests on the premise that the education system in India is entrapped in several contradictions. Attempting to match local and national priorities with global regimes, the programme works on connecting research with teaching, advocacy and policy. Identifying critical issues in education, the current research priorities are: integrating education for the gifted and talented in formal school education, early career mentoring and its challenges for women in STEM; women in leadership in higher education, learning analytics in higher education; interlinkages of vocational education, school dropout and livelihoods; and education and sustainability and exclusion in education.



11. INEQUALITY AND HUMAN DEVELOPMENT

The Inequality and Human Development Programme has sought to improve policy and other interventions by developing a deeper understanding of existing socio-economic processes in the context of inequality. It has been researching methods to improve the effectiveness of interventions in the social sector by both government and other institutions, using multidisciplinary and empirically consistent conceptualisation of inequality. It has examined questions arising from five inter-related social transformations, and conceptualised the link between inequality and intervention, portraying government policy as a perpetual cycle, persistently moving through stages of formulation, implementation, and evaluation. Additionally, the programme made significant achievements in disseminating the research findings through publication and various other outreach activities.

12. URBAN AND MOBILITY STUDIES

The Urban and Mobility Studies Programme explores various social, cultural and political dimensions of urbanisation and migration in India through an interdisciplinary lens. Research projects completed in the past year include a study of women workers in the readymade garments industry in Bengaluru; and a study of changes in land use, property relations, livelihoods and urban ecologies in the context of large-scale real estate development in Bengaluru. Ongoing research includes studies of labour contracting and labour migration in the construction industry in Bengaluru; climate change-induced migration in the Sundarbans; the health risks of sexual and gender minority communities in urban spaces; and the interconnections between stigma, mental health and health inequities.

TRAINING PROGRAMMES

A total of six training programmes were conducted. These include the 36th NIAS Programme for Senior Executives; NIAS-BEL Workshop on Sensors, Fusion and Tracking for Airborne Applications for junior and middle-level executives of Bharat Electronics Limited (BEL); and three NIAS-DST Programmes on Science and Technology – Science and Sustainability in India; Science, Technology and Innovation Policy; and Policy for Science and Science for Policies. Leadership in Defence Manufacturing Technology Programme for DRDO Scientists was organised in two modules.

DOCTORAL PROGRAMME

NIAS is recognized as a centre for research by Manipal Academy of Higher Education (MAHE), Mysore University and the University of Trans-disciplinary Health Sciences and Technology (TDU) from which students get their PhD degrees. At present there are seventy-one students pursuing interdisciplinary research in natural and engineering sciences, social sciences, humanities and arts. A total of nine students were awarded PhD degrees last year.

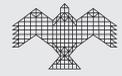
OUTREACH

NIAS has initiated various means of outreach for extending news and updates of the academic achievements of faculty members. The lectures delivered by NIAS faculty and the public programmes organised by NIAS were conducted using the online/offline mode.

SCHOOL OF CONFLICT AND SECURITY STUDIES

Programmes

- Conflict Resolution and Peace Research
- Science, Technology and International Relations
- International Strategic and Security Studies

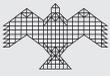


SCHOOL OF CONFLICT AND SECURITY STUDIES

The School of Conflict and Security Studies, has three programmes – Conflict Resolution and Peace Research (CRPR) Programme, International Strategic and Security Studies Programme (ISSSP), and Science, Technology and International Relations (STIR) Programme. The three programmes of the School complement each other in terms of research focus and activities. While ISSSP looks at larger security issues, CRPR looks at conflict resolution and peace research, and STIR adds value by merging S&T with diplomacy and global politics. The School works closely with various departments of the government, from Defence Research and Development Organisation (DRDO) to Department of Science and Technology (DST). The School also maintains links with several international institutions and scholars.

Programmes

- **Conflict Resolution and Peace Research**
- **Science, Technology and International Relations**
- **International Strategic and Security Studies**



CONFLICT RESOLUTION AND PEACE RESEARCH PROGRAMME

Introduction

The Conflict Resolution and Peace Research Programme has two broad areas. In conflict resolution, the programme pursues evidence-based research on individual conflicts and aims to conceptualize conflict more broadly. In peace research, the Programme aims to study peace as a political process and intends to provide policy inputs.

Research Activities

Economic Impact Assessment of Oil India Limited (OIL) in Assam: This study project was commissioned by the Oil India Limited (OIL), Assam. The main objectives of this study were to investigate the economic impact of the OIL in the state of Assam and to identify the key stakeholders and the areas where the OIL can improve its socio-economic activities in Assam. The study has been completed and the final report has been submitted to the OIL.

Cooperative Federalism in India: Experiences from Odisha and Assam: Funded by the Hanns Seidel Foundation, Germany, the study investigated the nature and scope of federalism in the context of Odisha and Assam. More specifically, local governance issues in certain areas in Assam and Odisha were examined. As part of the study, a roundtable discussion was conducted on several aspects of local governance through the prism of cooperative federalism. The study has been completed and based on the findings of the study, two NIAS-HSS policy briefs were brought out.

Formal and Informal Decentralisation in Manipur and Mizoram: Funded by the Indian Council for Social Science Research, New Delhi, the main objectives of this research are to investigate the interactions between the formal and the informal institutions in decentralised governance in Manipur and Mizoram. In doing so, the study also intends to identify the informal institutions that play important roles in the decentralised governance process in these two states. This project is likely to be completed in December, 2024. As the outcome of the study an ORF issue brief (*The Social and Political Dimensions of Ethnic Conflicts in Manipur*) has been published.

State of Peace and Conflict Annual: Initiated in 2023, an annual study aims to examine the state of peace processes and conflicts across the regions. The study will focus on major issues during the year, trends, and a short forecast. In 2023, the programme published the first NIAS Conflict Annual; the study will continue to examine developments relating to conflicts and peace processes.

Study on Contemporary Conflicts and Peace Building: The project's primary focus is on contemporary conflicts and peace processes. As a part of the project, the NIAS International Peace Research Initiative (NIAS-IPRI) organises an annual workshop. The IPRI also publishes *Conflict Weekly*, the flagship publication, monitoring contemporary conflicts and peace processes on a daily/weekly basis.

Conflict History Project: In 2024, the programme kicked off the "Conflict History Project." The project aims to expand its study of contemporary conflicts and look at them through a historical prism. It examines the following: brief history, actors and issues, major trends, contemporary state and implications, and trajectory into the 2020s. The objective is to build a "Conflict Database" at NIAS.

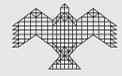
IPRI Peace Lectures: The International Peace Research Initiative (IPRI) organises a series of Peace Lectures, inviting scholars and subject experts from across the world to interact with young scholars from partner institutions.

D Suba Chandran, *Professor & Head*

Anshuman Behera, *Associate Professor*

Amit Mukherjee, *Assistant Professor (till August 1, 2023)*

Doctoral Students: Aparupa Bhattacharjee, Hrudaya Chandana, David Jangminlien, Saransh Kumar, Zarnain Manzoor, Nitin Rawat, Jenish Anil Trivedi



SCIENCE, TECHNOLOGY, AND INTERNATIONAL RELATIONS PROGRAMME

Introduction

The Science, Technology and International Relations Programme aims to look at international relations from a S&T perspective, and vice-versa. The programme also attempts to develop area studies at the global level.

Research Activities

Global Politics: Contemporary World Order: A primary focus of the programme is on pursuing contemporary developments, with an objective to trace the big picture, changes in the world order, global and regional developments. As a part of this process, the programme publishes the following: *The World This Week*, *Africa Weekly*, *Pakistan Reader Evening Brief*, and *Europe Monitor*.

Space Research: The primary focus is on the growing space industry, new technologies, the norms and behaviour of space powers, and national security. In 2023, the focus was on the Second Space Age which has seen the emergence of new space powers that includes small nations, private entities, and commercial space players.

Arctic Research: This project looks at the following verticals: Contemporary developments in the Arctic; institutions dealing with Arctic governance; climate change, Arctic and their interactions and fallouts; the importance of the Arctic for India; and an Arctic strategy for India.

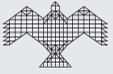
Science, Technology and International Relations (STIR): Based on the premise that the coming decades would increasingly witness "Tech War" following the "Cold War" and "Trade War" prism of international relations, the interaction between S&T and IR has become critical. The current focus is on Cyber and AI. A fortnightly – STIR focuses on International Relations.

Global Climate Governance: Research on climate change is undertaken from a multidisciplinary perspective with a special focus on global politics and international relations. During 2023-24, the focus was on global climate regime and its complex interactions at the local, national, and regional levels, mapping the debates on climate finance, and the divide between the developed and the developing countries within the global climate regime.

Area Studies: Pakistan, Europe, Africa and China: *NIAS Europe Studies* aims to monitor, record, and analyze contemporary developments across Europe. As part of research activities, a "Europe Lecture Series" and "Europe Annual Dialogue" was conducted in collaboration with the KAS India Office. *NIAS Africa Studies* focuses on contemporary Africa through multiple verticals - internal politics, peace and conflict issues, civil-military relations, non-traditional security issues, radicalism, regional complexities (Horn of Africa, Sahel and North Africa), geopolitics and external relations. *NIAS Pakistan Reader* aims to study contemporary Pakistan at national and provincial levels, civil-military relations, ethnic complexities, and economic constraints. PR conducts a 'NIAS Certificate Course on Contemporary Pakistan' with the aim to build a network of young scholars from across India.

Global Politics, Young Voices (GPYV): NIAS GPYV is a capacity building exercise, aimed to provide a platform for young scholars working on contemporary world affairs. Young scholars and faculty from different institutions in Chennai, Pondicherry, Mysore, Manipal, Bengaluru, New Delhi and other parts of the country, take part in these discussions.

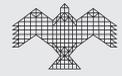
International Studies Network Bangalore (ISNB): The network now included the following institutions: Christ Deemed to be University (Department of International Studies and History), Kristu Jayanti College (Department of History), Pondicherry University (Centre for Maritime Studies), Goa University (Department of Political



Science), University of Mysore (Department of International Relations), and Stella Maris College (Department of International Studies), Loyola College (Department of History), and Madras University (Department of Strategic and Defence Studies).

D Suba Chandran, *Professor & Head*

Doctoral Students: Harini Madhusudan, Rashmi Ramesh, Rohini Reenum, Akriti Sharma, Lokendra Sharma, Ankit Singh



INTERNATIONAL STRATEGIC AND SECURITY STUDIES PROGRAMME

Introduction

The emphasis is on integrating complex elements of science and technology with policy, geopolitics, strategic and security dynamics. The International Strategic and Security Studies Programme examines technology and technology applications in some key areas like Hypersonic Weapon Systems, Space and Maritime domain. Research on various subjects that have the potential to foster Australia-India cooperation, particularly in the realm of defence was pursued. Focus was on exploring the possibility of collaboration in the area of underwater domain awareness, which involves creating a comprehensive system for monitoring and detecting underwater threats, such as submarines, mines, and other hazards that could pose a risk to national security.

Research Activities

Policy Frameworks: Faculty worked on creating roadmap for creation of defence space ecosystem for India that specifically addresses current and futuristic requirements for the Indian defence forces for obtaining Information Superiority (in terms of Imagery, ELINT, SIGINT, Early Missile Launch Warning,) Superiority in closing the Observe, Orient, Decide and Act (OODA) Loop (Sensor to Shooter) through secure communications and sensor networks, and precision navigation and timing support resources.

Technologies and Tactics involved in the Ukraine war: A study was carried out on the arms race in AI weaponry in the Ukraine war. AI systems exhibit the capabilities for planning missions, navigating, 3D mapping, recognising targets, flying through cities and buildings, and coordinating attacks. The conflict has seen a significant use of Electronic Warfare (EW) systems, which are used to disrupt communications, radar systems, and other electronics. The Ukrainian military has also used EW systems to jam Russian communications and navigation signals, ensuring that communications infrastructure is still protected.

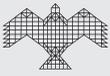
India – Australia Defence Cooperation: The research focused on exploring potential collaboration between India and Australia in the underwater domain. The objective was to conduct extensive research and analysis, taking into account various factors such as the geopolitical landscape, technological advancements, economic opportunities, and environmental considerations.

Indian Navy Requirements and Role of the Indian Defence Industry: The aim of this project was to assess the future needs of the Indian navy and to evaluate the capability of the Indian defence industry to meet those needs. The research included a detailed analysis of the Indian Navy's Submarine Development Programme to identify the reasons for the delay in constructing non-conventional submarines. The findings of this research were published in a special issue of the Journal of Asian Security and International Affairs in 2023. Another ongoing study is currently focusing on the role of MSMEs (Micro, Small and Medium Enterprises) in the construction of Indian Naval Warships and Combat Systems. This study emphasizes the importance of specialized knowledge in creating innovative solutions, designing and developing equipment/systems, and utilizing Intellectual Property to contribute to the defence sector.

Outreach

A national seminar on MSMEs and Indian Maritime Security was held in March 2024 to understand the perspective of public sector shipyards on the concept of self-reliance. The seminar discussed ways to enhance MSME's role in naval shipbuilding, identified policy constraints from the perspective of incentives and processes followed by Services and DPSUs, and assessed challenges faced by MSMEs.

A workshop on Sensors Fusion for Strategic Systems and Its Challenges was conducted for BEL Academy from October 27 to 31, 2023. Topics included Sensor Fusion for Aircraft Modernisation, Algorithms for Sensor Fusion – Kalman Filters, Fundamentals of Sensor Materials, Satellite Image data fusion, Sensor Fusion for Drone Applications, Fifth Generation Avionics and Sensor Fusion, Synthetic Aperture Radars, Trends in EO Systems and Sensor Fusion for Airborne Applications, Underwater Sensor Fusion and Inertial Sensor fusion.



NIAS-CISAC Dialogue on India–US Cooperation on Global Security Strategic Security Threats of 21st Century, September 25 to 27, 2023.

The NIAS – CISAC Dialogue ‘India–US Cooperation on Global Security’ was held in July 23, 2023 on the subject of ‘Assessing Modernization of Nuclear Forces: Issues and Implications’. Subjects discussed included Nuclear Modernization in the US, Russia and China, Nuclear Modernization in South Asia and Next Steps for the US and India to Reduce Nuclear Risks. An in-person dialogue was held from September 25 to 27, 2023. Topics discussed included: South Asia and Indo-Pacific Security Issues; Space Security and Emerging Security Challenges; Sensor Networks for Detecting Space Debris and Monitoring Critical Satellites; Arms Control of Space and Counter Space Systems; Control of And Drone Employment. AI Issues and Regulation; Nuclear Safety and Security Issues – Nuclear Powerplant Safety in the Light of Zaporizhzhia Power Plant; Development in Nuclear Materials Safety and Security.

The NIAS – Christ University Seminar on Indo–Pacific in Turbulent Times was held at Christ University, Bengaluru, on April 12, 2023.

PM Soundar Rajan, *Visiting Professor & Head*

D Suba Chandran, *Professor*

S Chandrashekar, *JRD Tata Chair Visiting Professor (till June 30, 2023)*

Rajaram Nagappa, *Honorary Visiting Professor*

N Ramani, *Visiting Professor*

M Mayilvaganan, *Associate Professor (till August 14, 2023)*

Amit Mukherjee, *Assistant Professor (till August 1, 2023)*

Prakash Panneerselvam, *Assistant Professor*

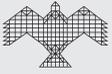
Post-doctoral Associate: Anjani Devi *(till September 12, 2023)*

Doctoral Students: Varun Mohan, Mr Virain Mohan, KG Ramkumar

SCHOOL OF HUMANITIES

Programmes

- Consciousness Studies
- Heritage, Science and Society

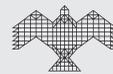


SCHOOL OF HUMANITIES

The School of Humanities is engaged in research in the broad areas of philosophy, psychology, literature, archaeology, history, mathematical modelling, fine arts, and culture. The Programmes of the School currently focuses on philosophical foundations of sciences; cognitive sciences; scientific and philosophical studies of consciousness; indigenous healing traditions; integrated information theory; archaeometallurgy and analysis of ancient metals; and translations of Kannada classics into English.

Programmes

- **Consciousness Studies**
- **Heritage, Science and Society**



CONSCIOUSNESS STUDIES PROGRAMME

Introduction

The research, outreach and documentation completed by the Consciousness Studies Programme (CSP) this academic year pertained largely to the projects funded by the ICPR, and SERB-TARE. This academic year, the focus was on the humanistic and health aspects of consciousness along with a critical approach to the theorization of the self in the context of AI. The overall goal is to bring to the public and interested students and scholars the importance of health, aesthetic pleasure, and knowledge as a triune reality deeply interconnected with consciousness.

Research Activities

Research work is guided by funded projects and long-term initiatives based on research topics that guide the programme. The projects were funded by the ICPR, and SERB-TARE.

Placing Well-being: The Role of Ecology in the Āyurvedic and Māvīlan Healing Traditions: Supported by the Tata Trusts, this study attempts to examine how ecological systems contribute to notions of well-being in Āyurvedā and Māvīlan healing traditions. The study examines three themes – a) a narrative ecology of healing, b) agentic herbs and co-creative healing, and c) healing natural ecological systems.

ICPR Project on Health Humanities and Philosophy: This study aims to find methods to bring philosophy to the social space of understanding, practicing and living with a transformative and creative goal of discovering the life-purpose and life-meaning. The outcomes of the project will place philosophy of health in the map of global health and sustainability goals.

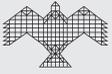
Art and AI: Funded by the Tata Trusts, the study on “Art remains in heart: complexity, entropy, deep AI, eye-tracking, experience, creativity, and familiarity offer limited insight into aesthetic appeal” was completed. The research work was the first-of-its-kind study that used multi-faceted behavioural and quantitative experimental measures to explore human observations of Indian paintings and traced the different aspects of an individual’s emotional and perceptual involvement with a work of art using the emotion classification system in Indian aesthetics. The research provides crucial information about the complex nature of aesthetic experiences and highlights the limitations of current empirical aesthetics in decoding the subjective experience of art.

Chaotic dynamics of Neural Networks: Supported by the SERB-TARE scheme, this study focuses on a theoretical/mathematical understanding of causality as well as practical development of new robust measures for causal inference from noisy time series measurements. The study has produced innovative compression-complexity based measures of causality that consistently outperform infotheoretic methods with applications ranging from econometrics, cognitive science, epidemiology, and consciousness studies.

AI, Consciousness and The New Humanism: Fundamental Reflections on Minds and Machine: Edited by Sangeetha Menon, Saurabh Todariya, Tilak Agerwala, this is the first interdisciplinary book from India on the topic of AI in the context of social sciences and humanities. The book enriches the understanding of cutting-edge questions on AI and society, presents leading expertise from diverse humanities and scientific communities around the world, and offers fundamental reflections on questions from humanities, social sciences, brain studies and philosophy on AI.

Outreach

The Reading Glass: NIAS CSP Reading Glass group continues to engage with different disciplines on matters of importance in humanities to bring in “consciousness conversations”. Three discussions of note were conducted on “the Unknown”, “Common Sense” and “Is Experience Alone a Slippery Slope?”.



Consciousness Conversations: The inaugural podcast of the online programme “Consciousness Conversations” was held on July 27, 2023 and attended by 120 participants from around the world. This podcast live show focuses on presenting consciousness as a deep enabler to bring social change and social good. A New Year Special Edition of “Consciousness Conversations” focused on the interrelationship between the newness, consciousness, and the self.

Kannada Mahabharata: A public lecture was on ‘Reimagining the Indian Literary Canon’ was organised on December 22, 2023 at NIAS Auditorium on the English translation of Kannada Mahabharata (15th c.) by Kumara Vyasa. The lecture was given by Prof SN Sridhar the renowned linguist and Director of Mattoo Centre for India Studies at Stony Brook, New York.

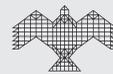
Programme on Mental Health: A NIAS in-house lecture and interactive session was organised with Dr Urvakhsh Mehta, Professor of Psychiatry, NIMHANS. November 21, 2023. This was the first of a series of lectures and interactive sessions on mental health, jointly organised by IC-NIAS and NIAS CSP.

Sangeetha Menon, *Professor & Head*

Sisir Roy, *Honorary Visiting Professor*

Nithin Nagaraj, *Associate Professor*

Doctoral Students: Anand Ganesh, Pushya Gautama, Hema S Karnam, Meera Kumar Menon, Niharika Sharma



HERITAGE, SCIENCE AND SOCIETY PROGRAMME

Introduction

The Heritage, Science and Society Programme works on documenting and preserving material culture and tangible and intangible heritage using scientific techniques of materials characterisation and heritage documentation. Research areas include archaeological sciences, archaeomaterials and archaeometallurgy, landscape archaeology and geospatial techniques, monumental architecture, crafts documentation, experimental archaeology, conservation science and performance studies in dance and music. With new expertise in the use of portable x-ray fluorescence analysis techniques, new strides were made in onsite analysis of excavated material from Iron Age sites in southern India. Cultural landscapes were explored using satellite imagery and supported by ground surveys and site explorations to assess the integrity of cultural heritage landscapes and to make policy recommendations regarding heritage boundaries. The architectural heritage of Karnataka and other regions were explored with specific reference to quarrying, stone working, and orientations of temples and monuments with respect to astronomical aspects.

Research Activities

Archaeotechnological and Ethnoarchaeological Studies: Supported by TCS Foundation, a project was initiated to explore the archaeotechnological trajectory of craft traditions and experimental re-construction as pedagogical tools. Workshops explored how engagement with material culture and crafts heritage can help to contribute to the understanding of history of science and technology and in education to inculcate a spirit of scientific enquiry and scientific temper. Research work continued on the DST-SHRI funded project on 'Archaeometallurgical, ethnometallurgical and ethnoarchaeological investigations on metal artefacts'. Major fieldwork was undertaken to Iron Age-Early historic sites of Adichanallur, Sivagalai, Kodumanal, Thurukurapatti, Mayiladumparai, Keeladi, Krishnagiri, Nilgiris to document and collect metal artefact samples.

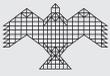
Nilgiris Material Culture Studies: As part of the NIAS-TCS Material Culture Initiative, Prof Sharada Srinivasan explored the ethnographic and megalithic collections in Government Museum, Ooty to identify intriguing bronze vessels, metal and ceramic artefacts for further scientific investigations. She also published a paper in the edited volume 'The Nilgiri Hills' published by Orient Longman. Prof Srinivasan and her team undertook field surveys in Nilgiris for the University of Ghent collaborative Nilgiris Archaeology Project. Dr Udaya Kumar obtained ASI permits to conduct surveys in the Nilgiris to explore old stone circles. Dr Diya Mukherjee received a UK Virtual Fellowship from the University of Liverpool in 2023 to study Bankura Terracotta traditions.



Adichanallur Site Museum with Prominent Displays of XRF Analysis Work of Metal Artefacts by NIAS Team.

Monumental Architectural Studies: Dr Srikumar Menon has been working on archaeological aspects of Indian stone working practices ranging from megalithic monuments to temple architecture. The identification of a sun-facing feature of the Karnataka Dravida temple-building tradition at Badami, as well as two equinoctially aligned temples of the Hoysala period in Late Karnataka Dravida idiom are prominent results of this study. This ongoing investigation has been expanded to cover temples in northern India as well as the Himalaya, like the temples of Khajuraho, the Katarmal Sun Temple near Almora etc.

Geoarchaeology Studies: Supported by SAC Ahmedabad, the study by Dr Rajini focused on four geomorphologically significant areas: the Ganga delta, Krishna-Godavari delta, Gulf of Kambhat, and Ghaghar



plains. The Cultural Landscape Research project involved the creation of a geospatial database for 25 cultural landscapes in India. The final report and all related documents were submitted to IIRS in November 2023. The MoES supported project on India's Medieval Coastline concluded in March 2023 and the final report compiled and submitted in August 2023. Dr Rajini also conducted a detailed spatial analysis Bodhgaya, revealing new insights about its archaeological landscape in a co-authored paper with Sanjukta Dutta from Ashoka University.

Outreach

As part of the NIAS-TCS Heritage Initiative, Dr S Udayakumar and Prof Sharada organised two workshops: 'Manne (mud): Pottery in Material Culture' was held at NIAS on August 24 and 25, 2023, and 'Experimental Approaches in Material Culture: Stone Tool Knapping' on November 2 and 3, 2023. Prof Sharada Srinivasan curated various events on the Nilgiri Hills as a biodiversity and cultural hotspot at Bangalore International Centre as part of the Nilgiri Bicentenary celebrations. In addition to various talks, exhibitions on 'A Photographic Journey through Nilgiris' and 'Honey Bees of the Nilgiris' were also conducted. Prof Sharada Srinivasan also conducted a master class on carbon as part of the Carbon Exhibition by Science Gallery, Bengaluru for students aged 15 to 28, on May 16 and 17, 2023.



Carbon Master Class Demonstration of XRF Analysis at NIAS, May 16, 2023.

Dr Rajani conducted a Digital Archaeology Workshop for Department of History and Archaeology, Nagaland University on March 15 and 21, 2024. The sessions included lectures on applications of remote sensing and GIS, practical sessions of analysing satellite imagery, GPS survey and tracking and map making. She also conducted a half day workshop on the use of AI tools for research and writing, on September 14, 2023. Dr Rajani and her colleagues presented the research outputs of a DST-supported study on intercultural dynamics in South Indian classical music, through a stage performance 'Carnatic Cadenzas' as part of the EDM 2023 conference at JN Tata Auditorium, IISc. Dr Srikumar Menon presented a talk on his recent book 'God on the Hill and Other stories' at the NIAS Literary Arts and Heritage Forum in February 2024.



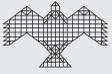
Carbon Master Class Experimental Pottery Firing at NIAS, May 16, 2023.

Sharada Srinivasan, *Professor & Head*
Deepti Navaratna, *TV Raman Pai Chair Visiting Professor*
S Ranganathan, *Honorary Visiting Professor*
Srikumar M Menon, *Associate Professor*
MB Rajani, *Associate Professor*
S Udayakumar, *Assistant Professor*
Post-Doctoral Associate: Diya Mukherjee
Doctoral Students: Titir Debnath, Divya Hoskere, Preeth Khona, Aishwarya Mhaske, Pornima Rajkarne, Meera Vishwanath

SCHOOL OF NATURAL SCIENCES AND ENGINEERING

Programmes

- Animal Behaviour and Cognition
- Complex Systems
- Energy, Environment and Climate Change
- Science Communication

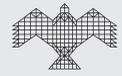


SCHOOL OF NATURAL SCIENCES AND ENGINEERING

The School carries out original research and policy advocacy in fields as diverse as environmental science, animal behaviour, climate change, nonlinear dynamics, science communication, human-animal interactions, and pollution and energy. The school trains a large number of PhD students as well as several young research fellows and project assistants due to the success of its faculty in securing long-term research funding from multiple sources. The faculty is also well-recognized for their policy advocacy and outreach that extends NIAS's standing with the government and amongst academia. The four Programmes of the School are as follows:

Programmes

- **Animal Behaviour and Cognition**
- **Complex Systems**
- **Energy, Environment and Climate Change**
- **Science Communication**



ANIMAL BEHAVIOUR AND COGNITION PROGRAMME

Introduction

The primary goals of the Animal Behaviour and Cognition Programme are to understand the evolution of social behaviour and communication, the cognitive foundations of behaviour and to study intraspecific variation in the ecology and behaviour of animals. These core areas of research are complemented by other research interests of faculty members in the areas of environmental decision-making, animal personality, urban ecology, human-wildlife conflict, human-animal studies, environmental education and natural resource conservation. Over the past year, programme members were involved in several different studies that underscore the interdisciplinary nature of work carried out in the programme. All projects by programme members were funded by national (SERB-DST, CSRI-DST, DBT) and international (ERC, Leakey, Rufford, HSI) organisations.

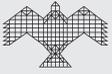
Research Activities

Primate Studies: These included projects on primate cognitive behaviour, an investigation of illegal wildlife trade events in southern India that focuses on the slender loris, and newly initiated studies on golden langur-human relationships in Assam, and the past, present and future of bonnet macaques in the city of Bengaluru. Through the CSRI-DST -supported project on Food Object Recognition in Primates, Prof Sindhu Radhakrishna investigated how primates make food object choices. The project was completed in October 2023, and the final report was submitted. The study on illegal wildlife trade is a collaborative project with HSI-India and aims to understand the geographic patterns that characterise trade hotspots and focuses on small mammals, particularly species like the nocturnal slender loris. Prof Sindhu Radhakrishna and her collaborators also initiated two new studies on the physiological mechanisms of primate crop raiding. While the Azim Premji University grant-supported study will explore the nutritional benefits of crop raiding behaviour in macaques, the DBT-BioCare study will investigate the role of gut microbiota as a driver for primate crop raiding.

Fish Studies: The focus of these studies is the Mahseer, a group of freshwater megafishes. Led by Dr VV Binoy, the objective of the DST-SERB supported study is to document the alternate behavioural trajectories taken by hatchery reared juvenile mahseers and the coping strategies exhibited by them during encounters with the Alien Invasive Fishes (AIF). Hence findings from these studies will help to develop behaviour-based strategies to enhance the survival of the juvenile mahseers post release. The attitude and behaviours of various stakeholders such as hatchery managers, anglers, government officials, NGOs, general public etc. towards different species of mahseers present in India, were also studied with an aim to develop educational programmes and policy recommendations to reduce human pressure on these fishes.

Urban Ecologies: Governing Nonhuman Life in Global Cities. Supported by a Horizon 2020 grant from the European Research Council, Brussels and conducted in collaboration with Cambridge University, this study focuses on a range of wild, feral and cultivated species in the Indian cities of Delhi and Guwahati and provides insights into what urbanisation might entail for these other than-humans. The data collection and analysis for the study has been completed, and team members were engaged in the final phase of writing up the main findings of the project for publication.

Prof Anindya Sinha and his collaborators completed their studies on elephant-mahout relationships in southern India and initiated studies on the vegetational relationship of the Puroik people of Arunachal Pradesh with the sago palm, and traditional ecological and health systems in South Asia. Prof Anindya Sinha and collaborators received two grants. The research grant from Rufford Foundation supports the study of the impacts of monkey-proofing on human-macaque conflict in the southern Western Ghats. The South-North Mobility Grant 2024 of the French National Institute for Research in Sustainable Development (IRD) and the National Natural History Museum will allow Prof Sinha to visit France and Morocco to jointly develop projects and conduct preliminary research.



Outreach

Programme members and their collaborators presented seven posters and papers at two international conferences and published four research articles, four book chapters and one book review. Prof Anindya Sinha delivered six lectures at various fora – at the NIAS–DST Training Programme, Second Conference of the Association of Indian Primatologists, Assam University, Cotton University, Canopy Collective and at the University of Science and Technology in Meghalaya. He was also joint coordinator for a workshop on ‘Coexistence, not Conflict – New Ways to Think about Primate Lives and Human–Primate Interfaces’, at the Joint Meeting of the International Primatological Society and Malaysian Primatological Society 2023, held at Kuching, Malaysia in August 2023 and participated in two roundtable discussions at the Second Conference of Association of Indian Primatologists.

Prof Sindhu Radhakrishna was invited to deliver a talk on crop raiding and animal innovation at the Symposium on Evolutionary and Organismal Biology, in JNCASR, Bengaluru in February 2024. She also presented a talk on SDGs 14, 15 and 16 for the SDG workshop on Tamil Nadu, Kerala, Karnataka, co-organised by NIAS and Loyola College in August in Chennai. She was invited to submit a paper to a special issue in the *International Journal of Primatology*, and to collaborate on a book project with Dr Erin Riley from San Diego University and Dr Katherine Jack from Tulane University. The book will be published by OUP and will be on the topic ‘Primates in a Changing World’. She also acted as jury member for the Green Literature Festival in November 2023.

Dr Binoy conducted a workshop on Animal Cognition and Conservation Biology at SCCS in Bangalore in October 2023. Prof Sinha and Dr Binoy taught a two-credit Programme Core Course on Foundations of Animal Behaviour and Cognition for the NIAS Doctoral Programme. Ms Kruthi N Raj from Bengaluru City University, Bengaluru completed her MSc dissertation project titled ‘Behavioural syndromes and the responses towards an alien invasive heterospecific tilapia in shy juvenile of a megafish Deccan Mahseer (Tor kudree)’ under the supervision of Dr VV Binoy. Two doctoral students from the programme were awarded their PhD degrees from Manipal University.

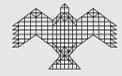
Sindhu Radhakrishna, *Professor & Head*

Anindya Sinha, *Professor*

VV Binoy, *Associate Professor*

DBT-BioCARE Fellow: Vani Kulkarni

Doctoral Students: Athira Balakrishnan, Sayan Banerjee, Anmol Chowdhury, Ashni Kumar Dhawale, Sneha Gutgutia, Shruti Ragavan, Shubhangi Srivastava, Vignesh S, Ashisha Kannadasan, Abhijit Konwar, Ankita Sharma and Zakhya P C



COMPLEX SYSTEMS PROGRAMME

Introduction

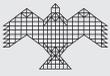
In nature, various systems show diverse nonlinearities in interactions between their constituting elements. These produce very complex behaviour that manifest themselves as an enormous variety of everyday phenomena in nature and in daily life. The Complex Systems Programme aims to make useful predictions of how diverse systems behave and thereby determine how some control over their behaviour can be achieved. Since its inception in July 2012, the Programme has made pioneering contributions to various fields, ranging from ecology and geosciences to acoustic research and climate change. Some of the work carried out by the Programme include predicting location of ocean carbon sinks, developing a systematic method to determine and predict climatic tipping points, modelling animal movement in human modified landscapes, novel bursting mechanisms in neurons, novel nonlinear oscillations in coupled Josephson junction models, and dynamics and acoustic cavitation of charged microbubbles.

Research Activities

Dynamics of Complex Systems: Supported by a SERB POWER Grant, this project aimed at understanding the dynamical mechanisms that translate changes in the physical environment to changes manifested in living systems. During 2023-24, work carried out under the project addressed two main aspects: (1) Locating ocean carbon sinks and their spatio-temporal evolution, and (2) Modelling impact of environmental changes on fragile ecosystems: In the carbon sink study, an ocean box model was constructed to capture the evolution of carbon dioxide and salinity of each of these boxes. The temporal evolution for CO₂ absorbed by the oceans was computed. The change of salinity of the oceans was also captured, with the North Atlantic evolving into the most saline ocean with time and increasing temperatures. The location of the oceanic carbon sinks and sources showed how major freshwater flows critically control the climate. The findings of the study were published in the journal CHAOS. In the impact of environmental changes study, a mathematical model was constructed to mimic the varying densities of two mutually competing plant species across a two-dimensional surface in a semi-arid region under the influence of changing environmental parameters. A paper reporting the findings of the study is under preparation.

Janaki Balakrishnan, *Honorary Visiting Professor & Head (Professor till June 8, 2023)*

Junior Research Fellow: Abhishek Dodda



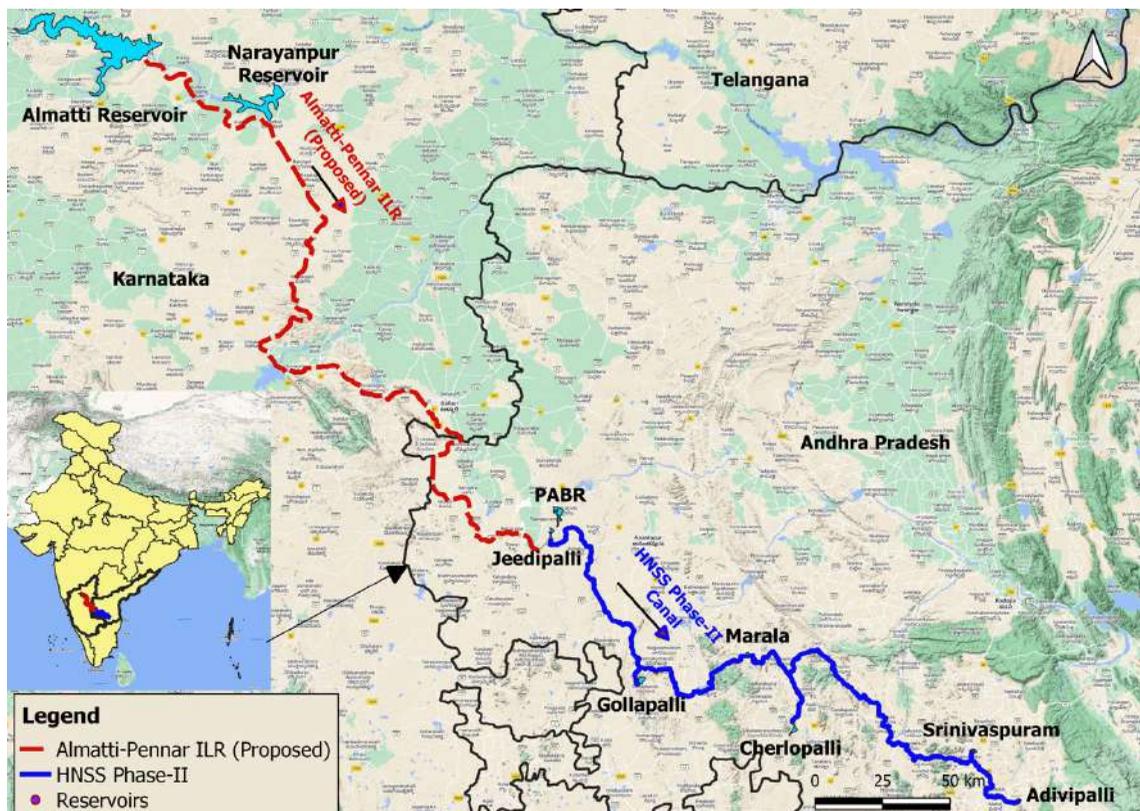
ENERGY AND ENVIRONMENT AND CLIMATE CHANGE PROGRAMME

Introduction

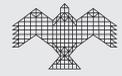
The Energy, Environment, and Climate Change Programme (EECP) conducts research, outreach, and policy advocacy on critical problems connected to the Sustainable Development Goals, especially, SDG 3 (Good Health and Wellbeing), SDG 6 (Clean water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action).

Research Activities

EECP faculty have completed a very productive year during which two PhD students were awarded their PhD degrees and a number of papers were published in high-quality research journals. During the year 2023-24, faculty members received nine research and communication grants. These include: (1) The Modern Energy Cooking Services Programme in the Loughborough University, UK awarded the first phase of the Project entitled 'An Evidence-based Approach towards Assessing Energy Transition in the Residential Cooking Sector in India'. (2) GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) GmbH awarded a project entitled 'Industry Sector Energy Modelling'. MoEFCC awarded three communication grants for (3) Preparation of material on mitigation actions for India's 1st Biennial Transparency Report (BTR-1), 4th Biennial Update Report (BUR-4), and 4th National Communication (NC-4), (4) Providing inputs on GHG Emission Estimates from Aviation, Navigation, and Railways for Chapters 2 and 3 of India's BTR1, and (5) Preparation of material on emission of HFCs, PFCs, etc. from industrial processes and product use sector for BTR1, BUR4 and NC4 Communications to UNFCCC. (6) NTPC Limited signed an MOU with NIAS and awarded a one-year research project to assist them in their entry into nuclear energy in India. (7) Nuclear Power Corporation of India Limited (NPCIL) signed an MoU with NIAS



Optimal Alignment of Almatti-Pennar Inter-Linking Project.



and awarded a research project on Site Selection for Nuclear Power Plants in India. (8) Jindal Renewable Power Private Limited also signed an MOU with NIAS and awarded a research project for selecting sites for the Bharat Small Reactor (BSR) in India. (9) Tata Consulting Engineers (TCE) also awarded a CSR Grant to conduct research on India's Transition to Net Zero by 2070.

Besides conducting focused and collaborative, interdisciplinary research, the faculty members were also involved with guiding six PhD students in their ongoing dissertational research. Two PhD students were awarded their PhDs by the Manipal Academy of Higher Education (MAHE) after successfully defending their PhD dissertations. Two more PhD students also presented their dissertation research at pre-thesis colloquiums in preparation for their final submission.

Outreach

Dr Tejal Kanitkar was a member of the Government of India's official delegation to COP 28 and IPCC. Prof Srikanth and Dr Tejal are also members of the Technical Advisory Committee constituted by the Ministry of Environment, Forest and Climate Change (MoEFCC) for guiding the implementation of GEF-UNDP-MoEFCC projects. NIAS's policy brief on Small and Modular Reactors (SMRs) was well received by NITI Aayog. NIAS's policy recommendations are under consideration by the DAE for implementation of Bharat Small Reactors (BSRs) to decarbonise the steel and aluminium sectors. The revised configuration of the Almatti-Pennar river interlinking project recommended by Mr Aariz Ahmed, EECP doctoral student, in his study report, has been adopted by the National Water Development Agency (NWDA) for preparing their detailed project report. This is a major policy contribution of EECP's research.

R Srikanth, *Professor & Head*

Gufran Beig, *Sir Ashutosh Mukherjee Chair Professor*

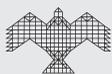
AV Krishnan, *Raja Ramanna Chair Professor*

DK Srivastava, *Honorary Visiting Professor*

Tejal Kanitkar, *Associate Professor*

Rudrodip Majumdar, *Assistant Professor*

Doctoral Students: Aariz Ahmed, Karshita Bharathi, Soumya Deep Das, Tanmay Ghosh, Joan Shilpa Kiran, Lavanyaa VP, Rakesh G Nannewar, Ankita Ranjan, Kumar Saurabh



SCIENCE COMMUNICATION PROGRAMME

Introduction

The Science Communication Programme (SCP) studies the dynamics of the science communication ecosystem present in India and develops strategies for the effective dissemination and education of scientific information using conventional platforms and social media. Communicating science with society and promoting bidirectional communication between researchers and non-expert public is key to ensuring a healthy science-society relationship and hence achieving conflict-free sustainable development in any nation. Risk communication is one of the focal themes pursued by the SCP and a research project examining the linkage between risk communication strategies practiced during the time of natural calamities such as cyclones and landslides and protective action decision-making by the general public is progressing. The past year the SCP launched two externally funded projects. The first project titled Student-Scientist: A network of students for monitoring the impact of climate change and communicating the risk of natural disasters in the coastal regions of Kerala and Karnataka is supported by National Council for Science and Technology Communication (NCSTC), Government of India, and the second one 'Kalarippayattu and Wellbeing' by UL Research Centre (ULRC), Kozhikode, Kerala.

Research Activities

Student-Scientist and Climate Change: This goal of this project is to build a network of students in the coastal regions of Kerala and Karnataka and train them to scientifically monitor and report changes in their environment and society due to global warming and climate change. Empowering students to communicate the risk of natural disasters in the coastal regions of these states is a secondary objective of this project. A related study explores the interplay between perceptions and mental models of climate change widespread amongst the adolescents from different states of south India.

Risk Communication: This study aims to understand how people make sense of the scientific information that is publicly broadcast at the time of natural disasters and utilize it for taking protective action decisions. By following an approach that integrates the results of social media analysis, surveys, and stakeholder interviews, this project aims to develop effective communication strategies to ensure protective action decision-making during natural disasters.

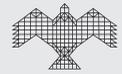
Conservation Communication: Conservation of animals living in human-dominated ecosystems is not possible without making people aware of the importance of such species. This study integrates methodologies of conventional ecology and ethology with iecology and conservation culturomics in order to trace out the knowledge, attitude, and behaviour of different stakeholders towards mahseers, a group of megafishes inhabiting freshwater ecosystems in India.

Citizen Science and Science Communication: This study aims to understand the motivations and experiences of scientists who initiate citizen science projects. A study of 24 currently active ecology-based citizen science projects was completed and the coordinators were interviewed to know the motivation behind starting a citizen science project and the challenges they faced at different phases of its implementation.

Human Reliability Programme: Human Reliability is widely used in fields requiring high safety standards, such as aviation, petroleum and chemical processes and nuclear industries. Research on the human reliability in industries of national importance is being pursued as part of the NIAS-Texas A&M University collaborative programme. A core group of subject matter experts from India and the US was formed, and deliberations continued during the periodic meetings.

Outreach

SCP organised a Students Scientist Interaction on October 16, 2023. More than 250 students pursuing postgraduation attended this programme and interacted with resource persons. SCP and Kristu Jayanti College,



Students Scientist Interaction (SSI) at NIAS, October 16, 2023.

Bengaluru jointly organised a national conference titled ‘Intelligence – In Animals, Humans and Machines’ on April 18 and 19, 2023. A hands-on training programme titled ‘Developing and Implementing Public Involved Water and Soil Analysis Programmes’, was conducted for BSc and MSc students at Christ University Bengaluru on February 14, 2024.



Faculty also conducted two courses – ‘Analyzing Science Communication through the Lens of Behaviour Science’ and ‘Conservation Psychology’ for MSc and PhD students.

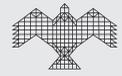
VV Binoy, *Associate Professor & Programme in Charge*
M Sai Baba, *Honorary Visiting Professor*
Doctoral Students: Sreshtha Mondal, Anjali Bharati,
Hashim Mohammed, Mahendra Singh Rawat

*Training Programme on Developing and Implementing
Public Involved Water and Soil Analysis Programmes, Christ
University, Bengaluru, February 14, 2024.*

SCHOOL OF SOCIAL SCIENCES

Programmes

- Education
- Inequality and Human Development
- Urban and Mobility Studies

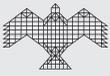


SCHOOL OF SOCIAL SCIENCES

The School of Social Sciences is home to programmes that take a transdisciplinary approach to understanding three domains: education, mobility, and inequality. The methodological consistency across the three programmes allows them to address diverse issues and the specific problems they bring. The issues raised by the Education Programme range from the concerns of the gifted in school education to the challenges faced by women in the STEM disciplines. The Urban and Mobility Studies Programme provides insights into the continuing and growing links between village, town, and city, as well as the conditions in each of them. The Inequality and Human Development Programme explores the dynamics of difference, distinguishing between aspirational differences and the responses to inequality. Together, research in the three programmes provide insights into the rapidly changing dynamics of Indian society, even as these ideas influence public discourse through lectures and interventions in the media.

Programmes

- **Education**
- **Inequality and Human Development**
- **Urban and Mobility Studies**



EDUCATION PROGRAMME

Introduction

The Education Programme is an interdisciplinary programme that draws on the broad disciplines of sociology, psychology, technology and history among others. The research work of the faculty of the programme is built around the concerns for equity, quality and excellence at all levels of education. The challenges are multiple: how to provide equal and quality education to all? What models and practices of education are suitable for a diverse population? How can local and national priorities be matched with the pressures of global regimes? Attempting to address these challenges, the focus is on connecting research with teaching, advocacy and policy.

Research Activities

Education for the Gifted and Talented: The project aims to identify the gifted and talented from grade 6 and 7 and provide mentorship to the children for a period of 5 years. Jawaharlal Navodaya schools, Kendriya Vidyalaya, Army Public schools and small budget schools represent different school environments. The hybrid model of school partnership of the NIAS Advanced Learning Centres was piloted in 15 Army Welfare Education Society Public schools across India. To build a sustainable model of school partnership of NIAS Advanced Learning Centres, NIAS will be working with 30 Army Public schools across the country as a paid service. In the next phase of research, the NIAS ALC hybrid model will be rolled out in different school environments and a learning rubric will be developed to capture the progress of the gifted children in the programme. Baseline tests have been conducted and over 33 sessions were organised online for 10 schools in Karnataka, Kerala and Tamil Nadu the project.

Vocational Skill Policy, Dropout Reduction and Employability among Adolescent Youth: Built on the premise of NEP 2020, the research project on vocational skill policy, dropout reduction and employability among adolescent youth explored linkages between education, emerging vocational skill opportunities and sustainable livelihoods among disadvantaged adolescent youth in Odisha, Assam and Manipur. The study completed quality survey interviews of the school community comprising 800 students, 80 school teachers from 40 schools, and focus group discussions with 200 parents. Specific recommendations based on the research will be submitted to the state and national governments.

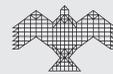
Education for Sustainability: This study focuses on ways to accelerate climate change education as well as understanding the challenges accompanying climate change. This includes strengthening the understanding of social inequalities and vulnerabilities which are precipitated due to climate change, and research the possibilities to transform educational practices for a sustainable society.



EGT Team Administering the Baseline Test Across Schools.



General Orientation Training June 23 and 24, 2023.



One day state level workshop organised on 20 August, at a relief camp, Girl's Ideal College, Imphal east district

Learning Analytics in Higher Education: During the last year, a national study of 3 universities (2 public and 1 private) and colleges (1 autonomous and 4 affiliated colleges) were carried out to understand the interface of technology with higher education institutions with reference to student learning, pedagogic practices, assessment reforms. The study aims to provide the status of learning analytics in India and its potential to enhance the overall quality and experience of learning in higher education institutions by leveraging technology and generating data on student learning, pedagogic practices, and assessment parameters.

Published NIAS Research Report, Vocationalization of School Education: Prospects and Challenges.

Outreach

NIAS Education for the Gifted and Talented (EGT) team trained over 20 school leaders and 522 teachers across schools in southern India. In addition, the programme provided advanced training to 226 teachers of grade 6 and 7 from all the 10 schools. A total of 20 facilitators were provided online training to be able to train the gifted children in their respective schools.

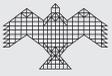
Anitha Kurup, *Professor & Head*

Shalini Dixit, *Assistant Professor (till August 21, 2023)*

Jeebanlata Salam, *Assistant Professor*

Malavika Kapur, *Honorary Visiting Professor*

Doctoral Students: Aishwarya T, Shaima Amatullah, Anoop M, Tirthankar Chakravorty, Subroto Das, Navaindu Joshi, Surachita Lal, Souri Majumder, Ekasmayi Naresh, Megha Poonia, Sabna ES, Shashank SR, Shruti Shankar, Varun Sudhakaran



INEQUALITY AND HUMAN DEVELOPMENT PROGRAMME

Introduction

The Inequality and Human Development Programme (IHDP) was set up in 2015 to develop policy options based on a multidisciplinary and empirically consistent conceptualisation of inequality, and to contribute towards public discourse to enable more informed policy choices. The programme conceptualises inequality as differences that are ethically unacceptable and suggest policy interventions to help mitigate the adverse effects of inequality. The programme received support from Tata Consultancy Services (TCS) to study five interconnected transformations prompted by the larger rural change in India: i) The Left Behind in the Rural Transformation, ii) Technology and Inequality, iii) Inequality and Autonomous Adaptation to Climate Change, iv) Gender and Intra-Personal Inequality, and iii) Inequality of Aggregation. In each case, members of the programme first explored the transformation, identified the associated inequalities, and then pointed to specific interventions to help remove the unacceptable effects of inequalities. This phase of the Programme concluded on 31 March 2024, with submission of the reports accompanied by substantial research output spread across scholarly publications, working papers and policy briefs, conferences, and public outreach.

Research Activities

The Left Behind: This study looks at the relationship between inequality and migration amidst the process of rural transformation in India. The focus is on the process of being left behind. Rural transformation, while creating new opportunities, can leave people and places behind. Being left behind in a transformation has multiple dimensions. Using three studies of gender-based negotiation of women in migration, the role non-migrants play in supporting migration, and migration-led-migration from India, this study makes the case for viewing migration as a process that is shaped by and shapes inequality.

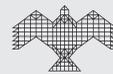
Experience of Technologies: A technological enquiry into inequality is crucial in the context of social and economic transition processes in India. The focus here was on the instrumentality of technology on the lived experience of inequality during these transitions, and, in turn, of the instrumentality of inequality on the technological condition. Two studies of the relationship between technology and transformation formed the enquiry, one from a village in Jharkhand and the other from Bengaluru.

Autonomous Adaptation to Climate Change: The long-term effects of the relationship between technology and nature include climate change. A district-wise analysis of exposure to multiple climatic events, like temperature and rainfall and associated extreme events like floods and heatwaves, pointed to the two districts of Cachar in Assam and Kozhikode in Kerala as the most exposed. The analysis involved a mix of qualitative and quantitative data generated through 769 household surveys and ethnographies of three villages in Kozhikode, one on the coast, one in the internal plains, and one in the hills. The data is currently being analysed.

Personal Transformation of the Indian Woman's Experience of Gender Discrimination:

Transformations in the socio-political conditions are experienced through the individual. There is variation in gender inequality best understood through a woman's experience of gender discrimination at various stages of life. This study tracked this through the changing stages of a woman's life by age and the corresponding relationships with her family. To identify the turning points, sex ratios at 5-year intervals from Censuses 2001 and 2011 were calculated and to determine the consistency of local patterns with the national data, a micro survey was done in 360 households spread equally across the Bishnois, Jains, and Gardiya Lohars communities in Jaipur, Rajasthan. The data is currently being analysed.

Inequalities of Aggregation: Processes of transformation tend to have their own unique local features. Aggregating these local transformations into a national, or even regional, picture involves a process of aggregation. To understand these processes this project looks at two districts, Yadgir and Dakshina Kannada. Second, using macro data it looks at inequality in terms of who is required to sacrifice consumption the most to generate savings for higher growth. Finally, this research also looked at the impact of aggregation in shaping dominant policies of poverty and inequality.



Outreach

A noteworthy outreach effort included the conference on Women Entrepreneurship in Natural Resources, organised in collaboration with the National Commission for Women (NCW), Delhi. The conference effectively brought together stakeholders in the development of women's entrepreneurship in natural resources, serving as a platform for government, industry, grassroots groups, and academia to share challenges and ideas on this important issue.

The programme organised a two-day deliberation with eminent scholars from across the country in January to disseminate the findings of the research in all five areas. This event brought together scholars from diverse disciplines, creating a platform for exchanging ideas and debating key inequality issues within each project.

A podcast series was delivered, exploring what inequality does in the country and conveying what it finds to a variety of audiences from academics to the listeners of this podcast. The three podcasts were on the topics (i) An interview on the perspectives on inequality, (ii) Farmers' Suicides in India, and (iii) Inequalities and migration. A photo exhibition on autonomous adaptation to climate change was held at Chitrakala Parishath on July 21, 2023.



Exhibition on Autonomous Adaptation to Climate Change in Chitrakala Parishath, Bengaluru.

Narendar Pani, *Professor & Head*

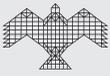
Debosree Banerjee, *Assistant Professor*

Chetan Choitani, *Assistant Professor*

Anant Kamath, *Assistant Professor*

Post-Doctoral Associates: Nisar Kannagara, Mahima Upadhyay

Doctoral Students: Anjali Anil, Ajit Kumar Babu, Chandana Rajsekharan Bindu, Joyeeta Dey, Vishal George, Arslan Wali Khan, Shilajit Sengupta



URBAN AND MOBILITY STUDIES PROGRAMME

Introduction

The Urban and Mobility Studies Programme explores the social and economic reverberations of urbanisation, migration, economic development and related social transformations in India's cities, towns and villages, drawing on diverse disciplinary perspectives. Recent research has examined the social and economic impacts of real estate-led development in Bengaluru and the Amaravati greenfield city project in Andhra Pradesh; informal labour in Bengaluru's construction and readymade garments industries; and climate change induced migration in the Sundarbans. Other research projects focus on sexual and gender minority communities in urban spaces and the interconnections between stigma, mental health and health inequity and kinship practices and gender relations among matrilineal Muslim communities in South and Southeast Asia.

Research Activities

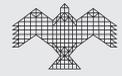
Labour Supply Chains in the Construction Industry: Supported by Azim Premji University and the Indian Council of Social Science Research (ICSSR), the study aims to trace the contracting networks that enable the circular migration of workers from Jharkhand and Bihar in the construction industry in Bengaluru. The research has also investigated the implementation of government policies and welfare schemes that were formulated for the support of migrant workers following the Covid-19 lockdown migrant worker crises. The project will be completed by mid-2024.

Gender and Labour in Karnataka's Ready-Made Garments industry: Supported by STICH, The Netherlands, and CIVIDEP, Bengaluru, this study was completed. The findings from a survey of 185 workers highlighted the positive impact of the industry as a generator of employment for unskilled urban women, while at the same time drawing attention to low wages and coercive working conditions. The study ties into critical research on the functioning of global supply chains in developing countries, as well as to social reproduction theories of the intersection of gendered labour within the workplace and the household that continuously produce the conditions for capitalism.

Speculative Urbanism: Funded by the National Science Foundation (USA), and carried out in collaboration with the University of Minnesota and UCLA (USA), this study was completed in June 2023. A comparative study of changes in land use, property relations, livelihoods and urban ecologies in Bengaluru and Jakarta, the project produced significant publications in international journals. A volume co-edited by Vinay Gidwani, Michael Goldman and Carol Upadhyay, *Chronicles of a Global City: Speculative Lives and Unsettled Futures in Bengaluru* is forthcoming from the University of Minnesota Press in November 2024.

Climate Change and Migration in the Sundarbans: The aim of this study is to (1) develop a geospatial understanding of agricultural and non-agricultural land in the villages and changing land use over time; (2) investigate the consequences of loss of land and aquatic resources on households; (3) understand the experiences of migrant labour from Sunderbans in other states and the dynamics of their temporary or permanent return. The domain of unskilled employment in both rural and urban areas in other states where workers from these villages typically find work constitutes an important element of the conceptual framework for understanding the cyclical migrant experience.

Health Disparities Among Sexual and Gender Minority Communities in India: This was explored through two projects: (i) Influence of Minority and COVID-19 Stressors on HIV Risk and Access to Services among MSM and Transgender Women. Supported by the International AIDS Vaccine Initiative and Indian Council of Medical Research, this study examined pathways to HIV risk among men who have sex with men (MSM) and transgender women, and the mechanisms by which minority and COVID-19 stressors, and psychosocial conditions influence HIV risk. The study was completed in June 2023 and the findings were presented at the Vaccination Acceptance Research Network (VARN) 2023 conference in Thailand in June 2023. (ii) 3HP Linkages Project. Supported by



*Dr V Govindan Nair Memorial Award 2023 awarded to Dr Aleena Sebastian
(Photo credit: ASTICON 2023 <https://www.iasstdaids.org/>).*

Gilead Sciences, the project aims to develop and implement a community-led model to integrate prevention education, screening, and vaccination and treatment referral services for hepatitis (HBV, HCV and HAV) and PrEP-related services within existing HIV prevention interventions in Chennai.

Outreach

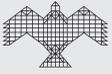
Dr Aleena Sebastian was awarded the Dr V Govindan Nair Memorial Prize 2023 for the best scientific presentation at ASTICON Conference held at Kolkata in September 2023.

Carol Upadhyya, *Honorary Visiting Professor & Head*

Supriya RoyChowdhury, *Honorary Visiting Professor*

Aleena Sebastian, *Assistant Professor*

Doctoral Students: Chaithanya K, Julian Lambolem Roy Jyrwa, Himangshu Kalita, Snehashish Mitra



INTERSCHOOL PROJECT

Early Fusion Music: Cross-cultural Musical Exchanges in Colonial India from the Late 18th to the Early 20th Century

This project, spanning three Programmes and two Schools of NIAS, formally came to an end on March 31, 2024. The study objective was to examine cross-cultural exchanges in the domain of classical and popular music in colonial India. It had three distinct components: (1) Examining instances of cross-cultural musicological exchanges in (a) Bengal and northern India, (b) in southern India, and (2) tracing the phylogeny of select compositions through computational analysis of acoustic signals. It is currently in the production of digital inventories of certain compositions, having traced the history of these tunes by identifying the original song and by including musical samples for illustration from the best of renditions available in recorded media. An exhaustive literature review and archival studies have already been undertaken under the aegis of the project.

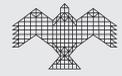
In this interdisciplinary project, Mr Preeth Khona, Dr MB Rajani and Prof Anindya Sinha examined cross-cultural exchanges, and the development of a new genre of compositions in south Indian classical music: *Noṭṭusvara*, wherein devotional words in Indian languages (mainly Sanskrit or Telugu) were set to popular tunes, played by European bands during the period. Dr Nithin Nagaraj, in contrast, investigated the phylogeny of tunes through computational analysis of acoustic signals to characterise their complexity and identify patterns in the notations that may reveal specific signatures of the composers, especially in south Indian classical music.

Anindya Sinha, *Principal Investigator*

Nithin Nagaraj

MB Rajani

Senior Research Fellow: Preeth Khona



POLICY BRIEFS

Air Quality Forecasting and Resource Framework

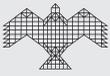
Gufran Beig and Shailesh Nayak
NIAS/NSE/EECP/U/PB/22/2023

In recent times, many Indian cities are experiencing frequent and extreme pollution events where natural factors also play an important role. Air pollution and climate change are closely interlinked as both share common emission sources. In this policy brief, NIAS proposes a specific framework for air quality forecasting and resource management. This resource framework should have information on sources of emissions and air quality forecast, extreme event alerts, translating data into information, communication strategies, health advisories with precautions, and mitigation planning on short-, medium- and long-term basis to help local, state, and national governments. High-resolution gridded emissions with precision, airshed mapping and proper validation network for air quality forecasting for Indian cities to be accomplished before embarking on air quality forecasting. Data collection methodology and database for the emission inventory should be standardized. A dedicated advisory group or a consortium consisting of domain experts in air quality, health science, and policy experts combined with communicators and outreach group should be formed for air quality management.

Cooperative Federalism and Local Governance in India

Anshuman Behera and Pratyush Pran Sarma
NIAS/CSS/CRPR/U/PB/17/2023

The much-desired call for cooperative federalism in India often does not factor in the implications of the relationship between the state and union governments on local governance. Local governance is substantially influenced by the nature of the relationship (read either conflictual or cooperative) that a state shares with the centre. As the nature of federalism in India keeps evolving with changing political dynamics, critical issues affecting and interacting with the local governance merit discussion. This policy brief addresses these issues and offers a set of policy recommendations that would help ensure local governance.



TRAINING PROGRAMMES

NIAS conducts training programmes to develop leadership to address various societal issues through multidisciplinary approaches. In 2023-24, NIAS conducted total of six training programmes on various themes.

36th NIAS Programme for Senior Executives (January 8 to 13, 2024)



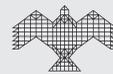
Theme: Leadership in a World in Transition

Inaugural Address: Shri R Gopalakrishnan, Former Director, Tata Sons set the tone of the programme with his inaugural address.

About the Programme: The speakers included Shri G Padmanabhan, Shri Anil Swarup, IAS (Retd), Dr G Sateesh Reddy, Shri Arun Maira, Prof SS Meenakshisundaram, Prof Narendar Pani, Prof PS Goel, Maj Gen Yashpal Singh Mor (Retd), Amb DB Venkatesh Varma, IFS (Retd), Dr Tejal Kanitkar, Shri Pankaj Rai, Dr Nigam Nuggehalli, Dr Shankar M Venugopal and Lt Gen SL Narasimhan (Retd).

A total of thirty-five participants from various organisations such as Indian Space Research Organisation, Indian Air Force, Indian Navy, Tata Steel Limited, Cochin Shipyard Limited, Defence Research and Development Organisation, National Environmental Engineering Research Institute, Aeronautical Development Establishment, Tata Consultancy Services, Mahindra and Mahindra Limited and Aeronautical Development Agency, participated in this flagship programme of NIAS. A Public Lecture by Shri AS Kiran Kumar, Former Chairperson of ISRO, a cultural programme by Shree Ramana Maharishi Academy for the Blind, Bengaluru and a visit to UR Rao Satellite Centre, Bengaluru was organised during the programme. The valedictory address was delivered by Dr R Chidambaram, Former Principal Scientific Advisor, Government of India.

Coordinators: The programme was coordinated by Prof R Srikanth and Dr Nithin Nagaraj. Ms V Girija assisted in the coordination of the programme.



NIAS-DST Training Programme on Transformational Leadership in Science: Re-imagining Science in Indian Society (February 5 to 9, 2024)

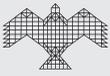


Theme: Transformational Leadership in Science: Re-imagining Science in Indian Society

Inaugural Address: The training programme was inaugurated by Prof Rishikesh T Krishnan, Indian Institute of Management-Bangalore. The speakers included Prof VS Ramamurthy, Prof Deepti Navaratna, Dr Aleena Sebastian, Prof Anindya Sinha, Prof R Srikanth, Prof Raghu Ananthanarayanan, Prof Shekhar P Seshadri, Prof Narendar Pani, Prof PG Diwakar, Prof Tarun Souradeep, Dr Geetha Ramanujam and Dr R Balasubramaniam.

The programme was attended by twenty-five senior scientists from government R&D organisations. A visit was organised to Nehru Planetarium in Bengaluru during the programme. The valedictory address was delivered by Prof R Balasubramaniam, Capacity Building Commission, Government of India.

Coordinators: The programme was coordinated by Prof Deepti Navaratna and Dr Aleena Sebastian. Ms JN Sandhya assisted in the coordination of the programme.



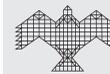
Training Programme on Emerging Defence Technologies and Applications for BEL Academy for Excellence (January 22 to 25, 2024).



Theme: Emerging Defence Technologies and Applications for BEL Academy for Excellence

This training programme was conducted for BEL Academy for Excellence. The programme was attended by thirty officers from BEL. The highlights include topics such as: Next Generation Hunter-Killer Drones; Cognitive systems and Cyber Warfare Technologies; Advanced Strategic Material; Augmented/Virtual/Mixed Reality; Advances in Torpedoes; Hypersonic Missile Detection Technologies; MEMS System based Sensors; Quantum Technologies and Sensors; Internet of Things and Medical Things; Video Synthetic Aperture Radars.

Coordinator: The programme was coordinated by Dr Prakash Panneerselvam.



NIAS-DST Training Programme on Science and Technology: Global Developments and Perspectives (November 20 to December 1, 2023)



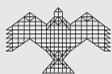
Theme: Science and Technology: Global Developments and Perspectives.

Inaugural Address: The training programme was inaugurated by Prof P Balaram, Former Director, Indian Institute of Science, Bengaluru.

Speakers: The eminent speakers included former Secretaries in the Government of India including Prof VS Ramamurthy, Dr Shailesh Nayak, Prof SS Meenakshisundaram, and Dr Mrutyunjay Mohapatra. Other speakers included Prof Anil Gupta, Dr Anil Bharadwaj, Prof Narendar Pani, Dr Prakash Chauhan, Dr Ashish Verma, Dr Kuruvilla Joseph, Prof LS Shashidhara, Dr Anindya Sinha and many more. The objective of this programme was to impart training to mid-level and senior scientists working in various departments on appraise them of scientific and technological advances at the global level, and the opportunities and challenges for India to reap the benefits of these developments. Given that many of the participants in the programme will go on to occupy important positions in science management, administration and policy formulation, the course also sought to promote lateral thinking and leadership qualities.

The programme was attended by twenty-three mid-level and senior scientists from premier institutions of India including DAE, KSCSTE, DOS/ISRO, DRDO, ICMR, ARCI, MoES, GSI, ICAR, IITK. A visit was conducted to the archaeological sites of Shravana Belagola, a 10th century Jain temple, and Belur and Halebeedu. The valedictory address was delivered by Prof Annapurni Subramanian, Director, Indian Institute of Astrophysics, who also distributed certificates.

Coordinators: The programme was coordinated by Prof VK Dadhwal and Dr Chetan Choithani. Mr KS Rama Krishna assisted with the coordination of the programme.



NIAS-DST Training Programme on Policy for Science and Science for Policies (September 11 to 15, 2023)



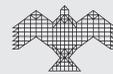
Theme: Policy for Science and Science for Policies.

Inaugural Address: The programme was inaugurated by Prof Rishikesh T Krishnan, Director, Indian Institute of Management Bangalore.

About the Programme: The speakers included Prof B Ananthanarayan, Prof Rohini M Godbole, Dr Urvakhsh M Mehta, Prof Sudhir Krishnaswamy, Prof LM Patnaik, Prof R Srikanth, Dr Anant Kamath and Dr Kajoli Banerjee Krishnan. Multidisciplinary perspectives on topics such as the joy of scientific discovery and beauty in science, mental health policy, law and society, AI and society, climate change, women in STEM etc. helped to highlight the varied aspects of policy-making, and its societal embeddedness.

Twenty-six senior scientists from the government R&D organisations attended the programme. A visit to The University of Trans-Disciplinary Health Sciences and Technology (TDU) was organised during the programme, which provided a bird's eye view of documentation and scientific practises in interdisciplinary areas such as ayurveda biology, and ethnomedicine. The valedictory address was delivered by Dr Maneesha Inamdar, Director, Institute for Stem Cell Science and Regenerative Medicine.

Coordinators: The programme was coordinated by Prof Sangeetha Menon and Dr Anant Kamath. Ms V Girija assisted with the coordination of the programme.



Training Programme for DRDO Scientists on Leadership in Defence Manufacturing Technology (August 7 to 12, 2023)



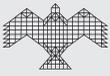
NIAS conducted a training programme on Leadership in Defence Manufacturing Technology Programme for DRDO Scientists in two modules.

Module 1: This was conducted in NIAS from August 7 to 12, 2023. The programme was jointly inaugurated by Dr Shailesh Nayak, Director, NIAS and Mr Chandru Iyer, British Dy High Commissioner, Bengaluru.

Module 2: This was conducted at Cranfield University, UK from March 4 to 23, 2024.

Module 3: In NIAS from June 3 to 4, 2024.

Coordinators: The training programme was coordinated by Dr V Bhujanga Rao, NIAS, Dr Amaresh Chakrabarti, IISC and Dr AS Srinivasa Gopal, DRDO.



DOCTORAL PROGRAMME

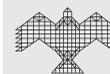


NIAS is recognised as a research institute and its doctoral students are awarded the doctoral degree by the University of Mysore, Manipal Academy of Higher Education (MAHE), the University of Trans-Disciplinary Health Sciences and Technology (TDU), Defence Institute of Advanced Technology (DIAT) and Indian Maritime University (IMU).

For the academic year 2023-2024, NIAS conducted its online written examination and two sets of online interviews for admission to its Doctoral Programme in May and June 2023 respectively. A total of 244 applications were received across the four Schools, out of which eight candidates have joined the Programme.

The academic year in the Institute began in August 2023 with the first semester of coursework ending in December. All teaching was conducted offline, with the fresh cohort of students attending two mandatory courses: Research Methodology – consisting of two modules, Qualitative Research Methods and Quantitative Research Methods, and Research and Publication Ethics. The other twelve optional courses, offered by the faculty in this semester, included: Global Politics: The World Order and Contemporary International Relations; GIS for spatial data visualization and analysis; Analysing Science Communication Through the Lens of Behavioural Science; Introduction to Inequality; Introduction to the Philosophy of Method; Doing Urban Studies: Themes and Approaches; Foundations of Animal Behaviour and Cognition; Climate Responsive Architecture: An Introduction; Major Conventional and Non-conventional Pathways to Harness Energy; Introduction to Education Research; Research Canons in Culture & Heritage Studies; Theoretical Constructs of Conflict and Concord Research. All courses offered at NIAS were open to students from other institutions as well.

The NIAS Annual Students' Colloquium was organised between January 2 to 5, 2024. Sixty doctoral students presented the progress of their research to the larger NIAS community. Additionally, nine first-year students, presented posters, giving an overview of their proposed work. The Colloquium, as in every year, allowed the student community to directly interact and have discussions with the faculty, postdoctoral researchers, and the other academic staff of the Institute. Several members of the Doctoral Advisory Committees of the respective students also attended the Colloquium and this facilitated critical discussions, not only on the achievements of the research scholars, but also on the directions that their work could take in the future.



The coursework for the second semester, January to April 2024, commenced with the following courses being offered by different faculty: Mathematical Foundation for Neuroscientists; Introduction to Maritime Security: Concept, Principles and Practices; Advanced Energy Systems and Futuristic Solutions; A Primer to Reconstructing Climatic and Environmental History; Perspectives on Technology; Methods in Heritage Studies; Debates in Climate Policy and Sustainability Studies; Urbanization, Development, and Exclusion; Basic Primatology; Reimagining Gender; Energy and Environment Programme.

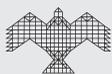
The Qualifying Examination for the cohort of 2023-24 was held on March 7, 2023. All eight students successfully qualified in this examination enabling them to register for their doctoral degree in the university of their choice.

The following students were awarded the doctoral degree between April 1, 2023 and March 31, 2024.

No.	Date	Name	Supervisor	School	University
1.	April 6, 2023	Snehashish Mitra	Carol Upadhya	Social Sciences	TDU
2.	May 11, 2023	Niharika Sharma	Sangeetha Menon	Humanities	TDU
3.	July 19, 2023	S Vignesh	Sindhu Radhakrishna	Natural Sciences	MAHE
4.	August 7, 2023	Ashni K Dhawale	Anindya Sinha	Natural Sciences	TDU
5.	October 6, 2023	Shaima Amatullah	Shalini Dixit	Social Sciences	TDU
6.	January 5, 2024	Soumya Deep Das	R Srikanth	Natural Sciences	MAHE
7.	February 12, 2024	Subrato Dey	Shivali Tukdeo	Social Sciences	MAHE
8.	February 16, 2024	Meera Kumar	Sangeetha Menon	Humanities	MAHE
9.	February 22, 2024	Lavanyaa VP	R Srikanth	Natural Sciences	MAHE

The following students have submitted their final thesis to the University for evaluation by external examiners.

No.	Name	School	Date of Submission	University	Thesis Title
1.	Vijayashree CS	Social Sciences	November 27, 2023	MAHE	Bhutas at Lare: Recasting Regional Heritage in Museums and Markets
2.	Sherin Ajin	Social Sciences	November 27, 2023	MAHE	From Beyul to Frontier: The Dynamics of Border Making in Tawang
3.	Ajit Kumar Babu	Social Sciences	December 20, 2023	TDU	Inequalities in the Process of Former Agriculturists Learning Non-Agricultural Skills

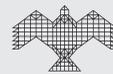


The following students have given their final PhD Colloquium and are due to submit their theses for evaluation to the University.

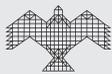
No.	Name	Date of Colloquium	Thesis Title	Supervisor	University
1.	Shilajit Sengupta	January 29, 2024	Political Consequences of Intra-village Inequalities in Rural Transformation: A Study of Two Villages in West Bengal	Narendar Pani	TDU
2.	Zarnain Manzoor	March 4, 2024	Discourses around the Kashmiri Pandits: Engaging with the Fractured Identity and the Polices of Deadlock	Anshuman Behra	TDU
3.	Tanmay Ghosh	March 26, 2024	Sustainable options for city transport based on first and last mile connectivity	R Srikanth	MAHE
4.	Rakesh Gomaji Nannevar	March 28, 2024	Assessment of Socio-economic impact of Agrometeorological Advisory Service (AAS) in Kalyana-Karnataka Region	Tejal Kanitkar	MAHE

The following students are currently pursuing their doctoral studies at the Institute.

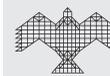
No.	Name	Supervisor	Date of Joining	Title of Thesis	University
1.	Vijayashree CS	Carol Upadhya	August 1, 2016	Bhutas at Large: Recasting Regional Heritage in Museums and Markets	MAHE
2.	Sherin Ajin Jose	Shivali Tukdeo	August 1, 2016	Spatialising Nation-State through the Discourses of Development and Security at the Borderland: A Case Study of Tawang	MAHE
3.	Chandana R Bindu	Narendar Pani	August 1, 2017	Patterns of Response to Inequality in Relation to the Development Process: A Study of Two Villages in Gujarat and Kerala	TDU
4.	Shilajit Sengupta	Narendar Pani	August 1, 2017	Political Consequences of Intra-village Inequalities in Rural Transformation: A Study of Two Villages in West Bengal	TDU
5.	Ajit Kumar Babu	Narendar Pani	August 1, 2017	Inequalities in the Process of Former Agriculturists Learning Non-Agricultural Skills	TDU
6.	Aparupa Bhattacharjee	D Suba Chandran	August 1, 2018	Role of Religion in Contemporary Nation-Building: A Case Study of Sri Lanka, Myanmar, and Thailand	TDU
7.	Sreshtha Mondal	VV Binoy	August 1, 2018	Determinants of the Protective Action Decision Making during Floods and Cyclones: A Study of Kerala	MAHE



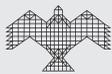
No.	Name	Supervisor	Date of Joining	Title of Thesis	University
8.	Zarnain Manzoor	Anshuman Behera	August 1, 2018	Discourses around the Kashmiri Pandits: Engaging with 'Fractured Identity' and the 'Politics of Deadlock'	TDU
9.	Hrudaya Chandana K	Anshuman Behera	August 1, 2018	Discursive Formulations of Violence in Ethnic Conflict: Generation and Transmission of Values	MAHE
10.	Shruti Ragavan	Anindya Sinha	August 1, 2018	Of Cash Cows and Piggy Banks? Natures, Cultures and Politics of the Cultivated Animal in Urban India	TDU
11.	Anmol Chowdhury	Anindya Sinha	August 1, 2018	Rethinking the Urban 'Wild' Animal: Ethnologies and Ethnographies of Nonhuman Primates in Indian Cities	TDU
12.	Sneha Gutgutia	Anindya Sinha	August 1, 2018	Life at the Urban Margins: Human-Animal Relations and Precarity in Indian Cities	TDU
13.	Shubhangi Srivastava	Anindya Sinha	August 1, 2018	A Tail of Two Cities: Ecological, Socioeconomic and Political Dynamics of Human-Dog Relations in Urban India	MAHE
14.	Sayan Banerjee	Anindya Sinha	August 1, 2019	Encountering More-than-Human Lifeworlds: Behavioural and Political Ecologies of Human-Elephant Relations in Northeast India	MAHE
15.	Preeth Khona	MB Rajani	August 1, 2019	Early Fusion Music: Cross-Cultural Musical Exchanges in Colonial India from the Late 18 th to the Early 20 th Century	MAHE
16.	Anna George	Smriti Hariharan	August 1, 2019	Reverberations of Cilapatikaram and the Worship of Kannaki in Caste, Gender and Regional Identities of Kerala and Tamil Nadu	MAHE
17.	Megha Poonia	Shalini Dixit	August 1, 2019	Collective Memory and Social Identity: A Study of Denotified Tribes in Rajasthan	TDU
18.	Sabna ES	Anitha Kurup	August 1, 2019	Understanding Practices Related to Menstrual Health among Women in Rajasthan	MAHE
19.	Athira Balakrishnan	Sindhu Radhakrishna	August 1, 2019	From Wild to Vermin: A Study on Human-Wild Pig Conflict in India	MAHE
20.	Rakesh G Nannewar	Tejal Kanitkar	August 1, 2019	Assessment of Socio-Economic Impact of Agromet Services in Hyderabad-Karnataka Region	MAHE
21.	Tanmay Ghosh	R Srikanth	August 1, 2019	Assessing Public Transit Integration with Special Focus on First and Last Mile Connectivity	MAHE



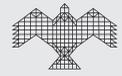
No.	Name	Supervisor	Date of Joining	Title of Thesis	University
22.	Aariz Ahmad	R Srikanth	August 1, 2019	Interlinking of Rivers: Case Study of the Almatti-Pennar Link	MAHE
23.	Rashmi B R	D Suba Chandran	August 1, 2019	Arctic Governance: The Role of Institutions with Special Reference to the Arctic Council, Saami Council and Arctic Circle	TDU
24.	Harini Madhusudan	D Suba Chandran	August 1, 2019	Militarisation in Outer Space: A Case Study of India, Japan, and France	TDU
25.	Shruti Shankar	Shivali Tukdeo	August 1, 2019	The Many Meanings of Work in Bengaluru's Schools: Histories, Cultures and Practices	MAHE
26.	Akriti Sharma	D Suba Chandran	September 1, 2020	Climate Change and the Himalayas: A Case for Regional Governance	TDU
27.	Lokendra Sharma	D Suba Chandran	September 1, 2020	Technology and International Relations: India's Approaches to Cyberspace and Internet Governance	TDU
28.	Anand Ganesh	Nithin Nagaraj	September 1, 2020	Recursion, Dynamics and Causality: Topics in Model Analysis	MAHE
29.	Pushya A Gautama	Sangeetha Menon	September 1, 2020	Situating the Correlates of Wellbeing through an Ayurvedic Approach to the Concepts of Consciousness, Self and Life-Purpose	MAHE
30.	Ankita Ranjan	Tejal Kanitkar	September 1, 2020	Exploring the Various Axes of Equity in Climate Change	MAHE
31.	Abhijit Konwar	Sindhu Radhakrishna	September 1, 2020	Distribution and Ecology of Scaly Anteaters in India	MAHE
32.	Ashisha K	Sindhu Radhakrishna	September 1, 2020	Ecological Flexibility and Gut Microbial Dynamics in the Gray Slender Loris <i>Loris Lydekkerianus</i>	MAHE
33.	Joan Shilpa Kiran	Tejal Kanitkar	September 1, 2020	Energy Dependence and Just Transitions: A Study of Developing and Developed Countries	MAHE
34.	Kumar Saurabh	Rudrodip Majumdar	September 1, 2020	Energy Transition Pathway for the Indian Road Transport Sector	MAHE
35.	Shashank S R	Anitha Kurup	September 1, 2020	Higher Education as a Site of Investments: A Case Study of Institutions run by Lingayat and Veerashaiva Mathas in Karnataka	MAHE
36.	Souri Majumder	Anitha Kurup	September 1, 2020	Role of Mythology in the Learning and Identity Formation among Adolescents: A Study of Two Schools in West Bengal	MAHE



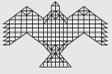
No.	Name	Supervisor	Date of Joining	Title of Thesis	University
37.	Varun Sudhakaran	Jeebanlata Salam	September 1, 2020	Aspiration and Higher Education among the OBCs: A Study among the Thiyyas and Vannathan	TDU
38.	Ankit Singh	D Suba Chandran	August 2, 2021	Political Economy of External Public Debt of Pakistan	TDU
39.	David Jangminlien	Anshuman Behera	August 2, 2021	Ethnic Identities and Conflicts: The Case of Kuki and Naga Conflict in Manipur 1992-2020	MAHE
40.	Hema S Karnam	Nithin Nagaraj	August 2, 2021	Defending System Integrity	TDU
41.	Varun Mohan	Prakash P	August 2, 2021	Conceptualizing and Assessing Political Salience of the United Nations' Role in Addressing Climate Security Discourse	TDU
42.	Meera Vishwanath	Srikumar Menon	August 2, 2021	The Influence of External Temple-Building Traditions on the Indigenous Laterite-Timber Tradition on the West Coast of India	MAHE
43.	Anjali Bharati	Binoy VV	August 2, 2021	Impact of Citizen Science Engagement on Participants' Scientific Knowledge, Scientific Sense making and Trust in Science	MAHE
44.	Ankita Sharma	Anindya Sinha	August 16, 2021	The Arthropod City: Taxonomic and Functional Diversity of Ant and Spider Species Assemblages across an Urban Gradient in Guwahati, Assam, Northeastern India	TDU
45.	Zakhiya P C	Anindya Sinha	August 2, 2021	Primate Worlds: Demographic Structure and Dynamics, Social Networks and Life-History Strategies in Wild Bonnet Macaques	TDU
46.	Aiswarya T	Shivali Tukdeo	August 2, 2021	Life and Learning on the Move: A Study of Murshidabad-Perumbavoor Migration Corridor and Family Strategies for Education	MAHE
47.	Navaindu Joshi	Jeebanlata Salam	August 2, 2021	Symbolic Violence in Schools and its Impact on the Social Identity and Aspiration of Students	TDU
48.	Surachita Lal	Anitha Kurup	August 2, 2021	Traveling through the Portals of Engineering Colleges: Experiences of Dalit Girls in India	MAHE
49.	Tirthankar Chakravorty	Jeebanlata Salam	August 2, 2021	The "Self" in Classrooms – Exploring Identities through Narratives from Teaching of Social Sciences	TDU



No.	Name	Supervisor	Date of Joining	Title of Thesis	University
50.	Vishal George	Anant Kamath	August 2, 2021	Youth, Sport and Urban Spaces	MAHE
51.	Ramkumar KG	Prakash Paneerselvam	August 1, 2022	Maritime Security of India: Study of Deployment Patterns by Extra-Regional Powers in the Indian Ocean Region	MAHE
52.	Virain Mohan	Prakash Paneerselvam	August 1, 2022	Assessing Chinese Maritime Diplomacy in Southeast Asia from 2012-2022	TDU
53.	Nitin Rawat	Anshuman Behera	August 1, 2022	Interrogating Security Situations in Jammu and Kashmir: A Human Security Perspective	MAHE
54.	Aishwarya P Mhaske	MB Rajani	August 1, 2022	Settlement Archaeology of Kutch Harappan using Geospatial Analysis	MAHE
55.	Divya Anupama Hoskere	Deepti Navaratna	August 1, 2022	Deconstructing Choreography in Performances of the Nāṭya Tradition: A Practical Criticism in the Context of Indian Aesthetics	MAHE
56.	Hashim Mohammed	Binoy VV	August 1, 2022	Landslide Risk Perception Communication in Kerala, India: Understanding Public Awareness and Community Response Strategies	MAHE
57.	Karshita Bharathi	Rudrodip Majumdar	August 1, 2022	Living with the Enemy? Parasite Networks in Alloprimate Communities in the Lowland Rainforest Fragments of the Upper Brahmaputra Valley, Assam, India	TDU
58.	Titir Debnath	MB Rajani	August 1, 2022	The Mountain Primates: Distribution, Ecology and Human – Relationships of the Macaques of the Eastern Himalayas, Arunachal Pradesh, North-eastern India	TDU
59.	Ekasmayi Naresh	Shalini Dixit	August 1, 2022	Understanding the Experience of 'Psychotherapy' Among Sexual and Gender Minorities in India	MAHE
60.	Joyeeta Dey	Anant Kamath	August 1, 2022	Tracing the Digital Transformation of Education Governance: India as a Case Study	MAHE
61.	Anoop M	Jeebanlata Salam	August 1, 2022	Social Exclusion and Ghettoisation of Manual Scavengers in Coimbatore City: The Case of Arunthathiyar Community	TDU
62.	Chaithanya K	Aleena Sebastian	August 1, 2022	Transnational Migration and Motherhood: A Study of Experiences of Malayali Nurses in the Gulf Countries	TDU



No.	Name	Supervisor	Date of Joining	Title of Thesis	University
63.	Anjali Anil	Anant Kamath	August 1, 2022	Examining the Heteronormativity in Indian Education: Perspectives from the Transgender Community	MAHE
64.	Saransh Kumar	Anshuman Behera	August 1, 2023	Towards Integrated Impact Assessment Studies: Interrogating the impacts of <i>Char Dham</i> Project in Uttarakhand.	MAHE
65.	Jenish Anil Trivedi	Anshuman Behera	August 1, 2023	Contours of Conflict: Exploring Dynamics of Development and Democracy in India.	MAHE
66.	Rohini Reenum	D Suba Chandran	August 1, 2023	The idea of Ocean Governance and the High Seas Treaty	IMU
67.	Pornima Rajkarne	Deepti Navaratna	August 1, 2023	Understanding religious transmission in the Varkari Sampradaya: A cognitive Approach	MAHE
68.	Himangshu Kalita	Aleena Sebastian	August 1, 2023	Rethinking Human-Wildlife interface from a Feminist Political Ecology Approach: A Study of Three Communities in Assam, North-Eastern India	MAHE
69.	Mahendra Singh Rawat	Binoy VV	August 1, 2023	Out of Sight, Out of Mind: Communicating Mahseer Conservation for Positive Behaviour Change	MAHE
70.	Arslan Wali Khan	Chetan Choithani	August 1, 2023	Negotiating for Space: Violence, Segregation and Urban Social Movements in Contemporary India	MAHE
71.	Julian Lambolem Roy Jyrwa	Aleena Sabastian	August 1, 2023	In the Shadows of Fetishization: Examining the Intersections of Race, Desire, and Masculinities in the Lives of Migrant Queer Men from North-East India	MAHE



ANNUAL MEMORIAL LECTURES

Five annual memorial lectures were organised in the Institute:

Twentieth MN Srinivas Memorial Lecture

Prof Janaki Nair

Former Professor, Modern History, Centre for Historical Studies, JNU

Can 'A Poem Show Direction Where There is None?' Querying Karnataka's Historical Imaginaries

January 23, 2024

Fifth Lakshmi Nizamuddin Memorial Lecture

Ms Uma Mahadevan

Additional Chief Secretary, Panchayat Raj and Skill Development, Entrepreneurship and Livelihoods,
Government of Karnataka

Leveraging Public Participation in Service Delivery: The Success of Rural Public Libraries as Democratic Spaces in the Indian State of Karnataka

October 26, 2023

Seventeenth Raja Ramanna Memorial Lecture

Ambassador Nirupama Rao

Formerly Foreign Secretary to the Government of India

A New India for the World

July 12, 2023

Ninth RL Kapur Oration

Dr Om Prakash

Distinguished Physician and a Humorist

Humour in Our Lives

June 23, 2023

K Subrahmanyam Memorial Lecture

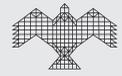
HE Amb Hans Jacob Frydenlund

Norwegian Ambassador to India and Bhutan

Norway's Arctic Policy: Geopolitics and Cooperation in the High North

June 8, 2023

Dr MB Rajani is the Coordinator of Annual Memorial Lectures.



PUBLIC PROGRAMMES

Dr Brian Grim

President, Religious Freedom & Business Foundation & Global Chairman, Dare to Overcome, USA

Unity in Diversity: Daring to Overcome the Barriers that Divide

February 23, 2024

Ms Anupama Hoskere

Founder Director, Dhaatu Puppet Theater, Bengaluru

Puppet Show – Mooshikaa Katha

February 8, 2024

Prof Anthony P D'Costa

Eminent Scholar, Global Studies and Professor of Economics, The University of Alabama, Huntsville, USA and Honorary Professor, University of Melbourne

The Evolutionary Boundaries and Business – Economic Dynamics of the “New” Space Economy

January 19, 2024

Dr Ian McDonald and Dr Geetha J

Film@CultureLab, Newcastle University UK

Freedom and Algorithms – Films Screening and Discussion

January 17, 2024

Shree Ramana Maharishi Academy for the Blind

JP Nagar, Bengaluru

Bharatanatyam

January 12, 2024

Shri AS Kiran Kumar

Former Chairperson, ISRO

Leadership in a World in Transition

January 9, 2024

Prof SN Sridhar

Professor of Linguistics and India Studies

Director, Mattoo Center for India Studies, Stony Brook University, New York

Reimagining the Indian Literary Canon:

Kumaravyasa's Kannada Bharata as a World Classic

December 22, 2023

Vid Vivek Sadasivam

Carnatic Singer

Carnatic Classical Vocal Concert

November 30, 2023

Prof MK Surappa

INSA Senior Scientist and Adjunct Professor, NIAS

Data Driven Insights on India's Research

Productivity/Research Excellence/Research Impact and Its Comparison with Selected Countries of Asia, Europe, North America, and Africa during the period 1980-2023

August 30, 2023

Dr Shivendra Kumar

Chief Technology Officer, Chiplogic Tech, Bengaluru

Drone, Artificial Intelligence: Infinite Opportunities

August 16, 2023

Ms Rami Niranjana Desai, Former Founding Director, Northeast Policy Institute

Dr Arambam Noni, Assistant Professor, DM University, Imphal

Lt Gen L Nishikanta (Retd)

Prof Bhagat Oinam, JNU, New Delhi

Mr Ashang Kasar, Convenor, Forum for Restoration of Peace, Manipur

Mr Chongtham Bijoy Singh, Political Analyst

Panel Discussion on Discourse on the Kaleidoscopic Understanding of Conflict and Peace in Manipur

August 11, 2023

Ms Haseena

Instructional Designer

Awareness Session on Alternative Menstrual Aid

May 25, 2023

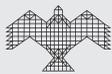
Dr James Madaio

Fellow, Oriental Institute of the Czech Academy of Sciences, Prague

The Lila of Communication and

Consciousness: Thinking with Ramchandra Gandhi's Philosophy of Non-dualism

April 24, 2023

**Mr Prakash Belawadi**

Indian Theatre Artist, Film Director, Television and Media Personality
Media Semiotics: Cinema and Indian Culture
April 21, 2023

DR RAJA RAMANNA BIRTH CENTENARY CELEBRATION**Prof CNR Rao**

Honorary President, JNCASR, Bengaluru
Inaugural Address

Mr Shadrach Solomon, Dr Deepti Navaratna, Dr Ananth Kamath, Mr Arun Siva G

Tribute Concert to Dr Raja Ramanna – Paramanu and Paramatma
January 25, 2024

NIAS-ASIA CENTRE BOOK DISCUSSION**Prof SD Muni**

Professor Emeritus, School of International Studies, Jawaharlal Nehru University, New Delhi
Dabbling in Diplomacy
February 26, 2024

NIAS URBAN LECTURE SERIES (ONLINE)**Dr Vinay Sankar**

Fellow in Residence, ATREE, Bengaluru
Institutionalizing Justice: Commons, Communities and Cities
March 18, 2024

Ms Shruta Rawat

Associate Director (Research), The Humsafar Trust, Mumbai
Respect, Fulfill, Protect – Supporting Inclusion and Representation of LGBTQ+ Communities in Health and Research
December 19, 2023

Dr Anoop S Kumar

Assistant Professor, Gulati Institute of Finance and Taxation, Thiruvananthapuram
Rural Urban Inequality: The COVID-19 Experience
November 29, 2023

Dr Syed Mohammed Faisal

Assistant Professor, School of Liberal Arts and Humanities, OP Jindal Global University
Vasco Da Gama's Gifts: Anthropology of a Colonial Moment
October 18, 2023

Dr Aparajith Ramnath

Associate Professor, Ahmedabad University
Who's in Charge of the Howrah Bridge? Engineering Expertise and the Political Economy of Late-Colonial India
September 25, 2023

Dr Suraj Beri

Assistant Professor, Department of Sociology, Nagaland Central University
Reconfiguring Privilege and Social Inequalities: Understanding Elite Strategies in Bikaner Town in India
August 8, 2023

Dr Sayantan Datta

Faculty Teaching Associate, Krea University
(Trans)forming Community – Building in Indian Science Institutions
July 10, 2023

Dr Ritika Jain

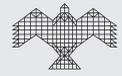
Assistant Professor, Centre for Development Studies, Trivandrum
The Road to Safety – Examining the Nexus Between Road Infrastructure and Crime in Rural India
July 4, 2023

Dr Sipoy Sarveswar

Assistant Professor of Anthropology, Visva-Bharati Central University, Shantiniketan
Neo-Kinship: Understanding the Transcendence of Group Formation in the Urbanity
May 30, 2023

Dr Shahul Ameen KT

Assistant Professor, School of Livelihood and Development, Tata Institute of Social Sciences, Hyderabad Campus
The Making of a 'Heritage City': Predicaments of Development Practices in Ahmedabad
April 27, 2023



NIAS NEIGHBOURHOOD LECTURES

Dr Nishchal N Pandey

*Director, Centre for South Asian Studies, Kathmandu
Nepal: Internal Politics and its Consequences on
External Relations*
December 21, 2023

CONSCIOUSNESS CONVERSATIONS

Dr Anisha Koshy, Mr Ranjith Jaganathan, Mr Arun Dev, Ms Raghav R and Ms Meera Menon in Conversation with Prof Sangeetha Menon and Mr Ritvick Khanna

The New Self
January 3, 2024

Mr Ritvick Khanna, Ms Anna Goodman, Prof Sangeetha Menon

The Poetic Self
October 27, 2023

DEBATING HERITAGE (FRIDAY LECTURE)

Dr Sharmistha Chatterjee

Assistant Professor, SRM University, AP
*Remapping the Nalanda Hinterland: A Landscape
Approach*
October 13, 2023

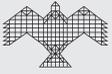
Dr Tanashree Redij

Assistant Professor, Amrita Vishwa
Vidyapeetham, Bengaluru
*Creating Sacred Memories and Heritage of Gomati
Parikrama*
October 6, 2023

MANORAMA IYENGAR MEMORIAL DISTINGUISHED SPEAKER SERIES (In Association with Iyengar Foundation)

Prof Puneeth Iyengar

Sloan Kettering Cancer Center, New York, USA
Inaugural Lecture – Diet and Cancer Prevention
April 12, 2023



WEDNESDAY DISCUSSION MEETINGS

NIAS Wednesday Discussion Meetings is one of the outreach events that has continued since the inception of the Institute. The faculty of the Institute meet every Wednesday for academic discussions after a lecture delivered by a member of the faculty. These Wednesday meetings also serve as a forum for invited guest speakers to deliver lectures on subjects of their choice.

Dr Sanjal Shastri

Assistant Professor of International Studies, FLAME University, Pune

Understanding the different trajectories of the Tamil language movement in India and Sri Lanka

March 27, 2024

Dr Robbin Jan van Duijje

Postdoctoral Research Scientist, Columbia University's Climate School, New York

On The Move: Drought, Agrarian Distress, and Labour Migration in India

March 20, 2024

Prof Vinay Kumar Dadhwal

Indira Gandhi Chair Professor of Environmental Sciences, NIAS

Role of Biosphere in Atmospheric CO2 Rise: Concepts, Indian Response and Scientific Challenges

March 6, 2024

Dr Shatarupa Bhattacharyya

Faculty, Srishti Manipal Institute of Art, Design and Technology, Bengaluru

Transforming a Syncretic Deity – Stories from the Sundarbans

February 28, 2024

Prof D Suba Chandran

Dean, School of Conflict and Security Studies, NIAS

Dr Anshuman Behera

Associate Professor, School of Conflict and Security Studies, NIAS

State of Regional and Global Conflicts: Major Developments to Watch in 2024

February 21, 2024

Mr Ashvij Narayanan

Business Development Department, Berlin Space Technologies

Space Systems Engineering Introduction and Current Trends

February 14, 2024

Prof D Suba Chandran

Dean, School of Conflict and Security Studies, NIAS

State of Global Politics: Major Developments to Watch in 2024

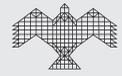
January 31, 2024

Dr Neethi P

Senior Consultant – Academics and Research, IIHS

Memory, Identity and Deindustrialization Reflections from Bygone Mill-scapes of Bangalore, India

January 24, 2024

**Ms Arya S Pradeep**

Conservation Architect (formerly Project Associate, NIAS)

Ancient Valabhi: A Remote Sensing Perspective

January 17, 2024

Prof BN Patnaik

Former Professor of English and Linguistics, IIT Kanpur

The Dharma of Knowledge, Power and Responsibility: An Analysis of the Ekalavya Gurudakshina Episode in Sarala Mahabharat

December 27, 2023

Mr Raghu Ananthanarayanan

Behavioural Scientist, Yoga Teacher and An Author

What is Citta Vidya?

December 20, 2023

Dr DN Gupta

Adjunct Professor, NIAS

Complexity Science – Exploring an Alternative Paradigm

December 13, 2023

Dr Sunil Chirayath

Director, Texas A&M University Center for Nuclear Security Science and Policy Initiatives

Role of Small Modular Reactors in Nuclear Energy Expansion and Importance of HRP

December 6, 2023

Dr Sudhanshubala Sahu

Assistant Professor, Christ University, Bengaluru

Everyday Challenges of Employed Mothers: Why Employed Mothers Need Feminism?"

November 29, 2023

Prof V Krishnappa

Head, Philosophy Programme, School of Liberal Arts and Sciences

RV University, Bengaluru

Quests for Happiness and Meaning in Russian Literature

November 15, 2023

Prof NS Prasad

Former Scientist/Engineer, ISRO

Bengaluru

Consciousness is Truth

November 8, 2023

Dr Sindhujaa Iyengar

Deputy Director, Centre for National Security Studies, MS Ramaiah University of Applied Sciences, Bengaluru

Call for Caste Census: Welfare Measure or Sophisticated Gerrymandering?

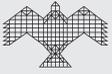
October 25, 2023

Dr Gayithri Jayathirtha

Computing Innovation Fellow, University of Oregon, Eugene (USA)

Teaching and learning of computing in high school classrooms: Simple, Social, and towards Social Justice

October 18, 2023



Col Kevin A Desouza (Retd)

Balancing India's Defence expenditure with investments needed for Economic Development
October 11, 2023

Prof D Suba Chandran

Dean, School of Conflict and Security Studies, NIAS
The War in Ukraine: Twenty Months Later
October 4, 2023

Dr Pournamy

Assistant Professor, Department of International Studies, Political Science and History,
Christ Deemed-to-be-University
Political Representation of Women in Parliament
September 27, 2023

Prof PS Goel

Honorary Visiting Professor, NIAS
Whither Indian Science and Technology
September 13, 2023

Ms Hrudaya C Kamasani

PhD Scholar, Conflict and Security Studies, NIAS
Community Victimization in Ethnic Conflict: Narratives on victimhood and Violence
September 6, 2023

Mr Bedartha Goswami

Research Group Leader, University of Tübingen
Cluster of Excellence - Machine Learning in Climate Science
August 30, 2023

Prof PG Diwakar

ISRO Chair Professor, NIAS
Virtual Satellite Constellation for Disaster Risk Management – Focus on Asia-Pacific Region
August 23, 2023

Ms Aishwarya Prashant Mhaske

PhD Scholar, School of Humanities, NIAS
Seven Islands and the Fort of Bombay: A Geospatial Perspective
August 16, 2023

Dr R Ranganath

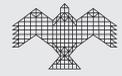
Adjunct Professor, NIAS
Small Satellites
August 9, 2023

Mr Soumya Deep Das

PhD Scholar, Energy, Environment and Climate Change Programme, NIAS
A Balanced Scorecard to Enable Electricity Distribution Sector Reforms in India
August 2, 2023

Dr Chetan Choithani

Assistant Professor, Inequality and Human Development Programme, NIAS
Rural-Urban Transition and Food Security in India
July 26, 2023



Dr Srikanth Radhakrishna

Poornaprajna Institute of Scientific Research, Bengaluru

Dr BVK Sastry

Adjunct Faculty, NIAS

Mr SR Sunder

Independent Researcher

Mr Posina Venkata Rayudu

Independent Researcher

Discussion on E-Book on 'The Varieties of Contemplative Experiences and Practices'

July 19, 2023

Ms Rashmi Ramesh

PhD Scholar, School of Conflict and Security Studies, NIAS

Impact of Russia Ukraine Conflict on the Arctic

July 12, 2023

Mr David Jangminlien

PhD Scholar, NIAS

Understanding Entire Ethnic Conflict dynamic in Manipur

July 5, 2023

Dr D Jeevan Kumar

Former Professor, Bangalore University

Prof SS Meenakshisundaram

Visiting Professor, NIAS

Cooperative Federalism and Local Governance in India

June 28, 2023

Prof AV Krishnan

Raja Ramanna Chair Professor, NIAS

Journey of Thermal Power Plants in India

June 21, 2023

Dr P Ramya Bala

DST-INSPIRE Faculty, NIAS

Dating – The Radiocarbon Way

June 14, 2023

Prof D Suba Chandran

Dean, School of Conflict and Security Studies, NIAS

The Rise and Fall of Imran Khan: Contextualizing the Political Turmoil in Pakistan

June 7, 2023

Dr Anshuman Behera, Associate Professor, School of Social Sciences, NIAS

Mr Saransh Kumar, Project Associate, NIAS

Mr Jenish Trivedi, Project Associate, NIAS

Conducting Large-Scale Surveys: Insights from the Field

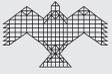
May 31, 2023

Ms Sabna ES

PhD Scholar, NIAS

Unveiling Menstrual Politics in Rural Rajasthan: An Intersection of Caste and Class

May 24, 2023



Prof Narendar Pani

Dean, School of Social Sciences, IAS
Is Inequality Holding Back India's Economic Growth?
May 17, 2023

Prof R Srikanth

Dean, School of Natural Sciences and Engineering, IAS
Small Modular Reactors for India's Energy Transition: Challenges and Way Forward
May 3, 2023

Dr Rudrodip Majumdar

Assistant Professor, Energy, Environment and Climate Change Programme, IAS
Habitat Monitoring for TB Risk Mitigation and an Integrated Information-based Decision-Making Framework for Dense Urban Settings: An Approach
April 26, 2023

Dr Shaik Vazeed Pasha

Post-doctoral Associate, IAS
Some Science Application of e-Governance Enabled Transparency Efforts in India: Geospatial Perspective on Vegetation Dynamics
April 19, 2023

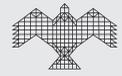
Dr BVK Sastry

Founder –President of Yoga-Samskrutham University, Florida, USA
Consciousness – Matter- Relations: Sharing perspectives on Chitta-Praktui Model by Gita (7-4)
April 12, 2023

Prof Vinay Kumar Dadhwal

Indira Gandhi Chair Professor of Environmental Sciences, IAS
Forest Area and Deforestation in India: A Walk through the Fog of Definitions, Methodology and Data
April 5, 2023

Dr Anshuman Behera and Mr KS Rama Krishna are the Coordinators of the Wednesday Discussion Meetings.



LITERARY, ARTS AND HERITAGE FORUM

The Literary, Arts and Heritage Forum aims to be an innovative platform for occasional lectures on diverse topics of cultural interest including literature, the arts and aspects of heritage. Two public lectures were held over the past year.

Mr Ganesh V Shivaswamy

Advocate and Author

Raja Ravi Varma: An Everlasting Imprint

July 19, 2023

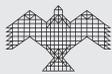
Prof Shivanand Kanavi

Adjunct Faculty, NIAS and Former Vice President, TCS

Lecture and Discussion on 'Lingayata'

July 7, 2023

Prof Sharada Srinivasan and Prof Sangeetha Menon are the Coordinators of the NIAS Literary, Arts and Heritage Forum.



LIBRARY



Prashantha SC
Asst. Library and
Information Officer

Joined NIAS on: November 23, 2022

Room No. Library
Tele: 080-22185022
Fax: 080-22185028
Email: prashantha@
nias.res.in

Resources

The NIAS library collection includes patron driven acquisitions and donations that support research needs of scholars. The primary objective of collection development has been to acquire books of immediate needs for research and teaching, strengthening core areas of ongoing research with seminal works and fulfilling broader mission of interdisciplinary research. Acquisition during the year included 52 books and 214 donations. Print resources include 21595 books (18580 books, 2395 donations, 601 Kannada books), 37 print subscriptions and 2733 bound volumes. Electronic subscriptions include Taylor and Francis Special Collection of 1500 journals, Sage Social Science Collection of Indian Journals, JSTOR, Harvard Business Review, EPW, Philosophy Now, Journal Consciousness Studies, The Economist, EPW India Times Series in 33 modules (30+3 new additional modules), indiastats.com. and a few individual journal titles.

Publications and Website Activities

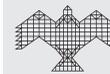
The library continued to support publication activity by disseminating faculty and student publications on the website and institutional repository. The library has been responsible for maintaining and updating the NIAS website since 1998. The webpages were updated daily throughout the year.

Plagiarism Software

The library continues to provide plagiarism detection services using *Turnitin*. New faculty and students were provided with Turnitin accounts.

Institutional Repository

The Institutional Repository of NIAS runs on Eprints software and has 2686 records. The repository content includes formal and informal publications, doctoral theses and institutional documents. Consent is obtained from graduated students before uploading full text of their theses into the repository. The role of the repository has been extended to preserve and curate digital scholarship in different formats such as archiving audio recordings of talks and performances, in addition to datasets shared by faculty and students.



Remote Access

The NIAS Library provides a Remote Access facility through OpenAthens for faculty and students. Remote access to the library's digital resources typically requires authentication, such as a login through the institution's portal, to ensure that only authorized users can access subscription-based services, digital journals, e-books, and research databases. Remote access functionality supports academic and personal research, providing users with the flexibility to access information and conduct research anytime and anywhere, if they have an internet connection.

Archives

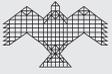
The library has been archiving publications, institutional documents (annual reports, brochures, newsletters, policy documents), newspaper clippings, photographs and audio recordings of lectures since inception. The library introduced a formal arrangement for using the materials from NIAS archives and repository with an *archives request form*.

Inter library Loans and Memberships

NIAS Library has interlibrary loan arrangements with the libraries of Ashoka Trust for Research in Ecology and the Environment (ATREE), Srishti School of Art, Design and Technology, International Centre for Theoretical Sciences-TIFR, Raman Research Institute, Jawaharlal Nehru Centre for Advanced Scientific Research, and National Centre for Biological Sciences. In addition, membership arrangements with libraries of Indian Institute of Science, Institute for Social and Economic Change, Indian Institute of Management Bengaluru, National Aerospace Laboratories, Indian Space Research Organisation, Headquarters, Bengaluru also help the NIAS community to make use of a broader range of library facilities.

Indian Research Information Network System (IRINS): A Library Initiative.

IRINS instance for the National Institute of Advanced Studies is fully set up, and can be accessible at the link - <https://nias.irins.org/>



PROFESSORS EMERITUS



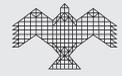
Dr K Kasturirangan

Dr K Kasturirangan was the Director of the National Institute of Advanced Studies during 2004-2009. He is presently Chairman, Inter-University Centre for Astronomy and Astrophysics (IUCAA), Chancellor, Central University of Rajasthan, Chairman, Public Affairs Centre, Bengaluru, Chairman, Karnataka Knowledge Commission and Member, Atomic Energy Commission.



Prof VS Ramamurthy

Prof VS Ramamurthy was the Director of the National Institute of Advanced Studies during 2009-2014. His current research interests span the areas of managing public perceptions for public good and public risks associated with emerging technologies, identification and mentoring of children with unusual learning capabilities and science and technology communication.



CHAIR PROFESSORS

SCHOOL OF CONFLICT AND SECURITY STUDIES

International Strategic and Security Studies Programme



S Chandrashekar

JRD Tata Chair Visiting
Professor (*till June 30,
2023*)

Room No. F 08

Tele: 080-22185084

Fax: 080-22185028

Email: schandra@nias.
res.in

Joined NIAS on: July 2, 2004

Research Areas: Space, Corporate, and National Strategies, Strategic Studies, Missiles, Nuclear Weapons, War and Deterrence, Technology and Development, Technological Competitiveness, Game Theory and Applications, Social Networks and Applications, Technology and Business, Innovation, Competitive Benchmarking, Crisis Management in Complex Systems.

Research Contributions

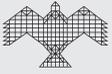
The book titled "China's Space Programme – From the Era of Mao Zedong to Xi Jinping" that had been published under an Agreement between NIAS and Springer in May 2022 has achieved over 8200 accesses from various institutions in India and abroad.

Lectures

- Expectations and Innovations in the Commercialization of Space, Centre for Contemporary China Studies, New Delhi, October 18, 2023.
- What India needs to do in Space, Indian Space Conclave 2023, Indian Space Association (ISpA), Delhi. October 13, 2023.
- The Structure of World Power – An Evolutionary Perspective, Orientation Programme, Department of Geopolitics and International Relations, MAHE, Manipal, August 16, 2023.
- The Militarization of Space and Its Implications, Astronautics Society of India, Bengaluru, July 22, 2023.
- Space Power and China's Military Strategy, Indian Defspace Symposium, Indian Space Association, New Delhi, April 11, 2023.

Memberships

- Member, Board of Trustees, RBANMS Group of Educational Institutions.
- Member, Board of Governors, MVJ College of Engineering.
- Member, Academic Council, Chennai Centre for China Studies (C3S).



Other Activities

- Co-conducted a Science and Technology Quiz (with Professors N Ramani and Sindhu Radhakrishna) for participants in the DST Training Programme, NIAS, November 30, 2023.
- Panelist, Session on 'Deep Tech Startup Policy' Indian Space Conclave 2023, Indian Space Association (ISpA), Delhi, October 9, 2023.
- Participated in Brainstorming Session on Decadal Vision and Strategy for Development of the Indian Space Ecosystem, IN SPACE, Bengaluru, July 22, 2023.

SCHOOL OF HUMANITIES



Shailaja D Sharma
S Radhakrishnan Chair
Visiting Professor

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Joined NIAS on: July 1, 2020

Research Areas: Computation, Mathematics and Information Science in Indian Knowledge Systems.

Research Contributions

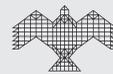
A book titled *The Computation Meme: Computational Thinking in the Indic Tradition* (eds) K Gopinath and Shailaja D Sharma was published by IISc Press, in April 2024.

Lectures

- Paticca Samuppada: In a Computational Light, IIT Mandi Mind-Brain-Consciousness International Conference, December 2023.
- Faculty Masterclass on The Secrets of the Cord: Geometry in Ancient India, Azim Premji University, November 2023.

Membership

- Member, IKS Wiki Editorial Board set up by AICTE.



SCHOOL OF NATURAL SCIENCES AND ENGINEERING



Vinay Kumar Dadhwal
Indira Gandhi Chair
Professor

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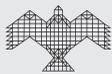
Joined NIAS on: March 16, 2020

Research Areas: Terrestrial Carbon Cycle of India; Earth Observation Data – Analysis Techniques and Applications; Agriculture-Crop Yield Assessment and Crop Insurance; Land Science – Land Use, Land Transformations and Land Surface Processes; Space Economy of India.

Research Contributions

Major research contributions are summarized under five themes:

- Mapping and monitoring land cover and land use change with remote sensing at annual to decadal scales.
- Prepared national-scale spatial database of annual tree removal and new plantation areas for two decades 2000-2020.
- Spatial depiction of expansion in tea and rubber plantations for Assam, West Bengal and Kerala was carried out.
- Assessment, quantification and modelling of the terrestrial carbon cycle of India using EO and field data and geospatial and process models.
- Estimation of trends in standing carbon stock in forests.
- Developed a geocoded database of forest biomass measurements and its use in assessing bias in global data sets on forest biomass in India.
- Expansion of rubber plantation in Tripura during 1991-2021
- Developed models of carbon transfer from trees to soil through litterfall.
- Dataset of Soil Health Card totaling 39.5 million records was analyzed for mean soil organic carbon (g/kg) and geospatially visualized.
- Measurements of CO₂ and CO₂ fluxes and inferences on CO₂ balance.
- Analysis and modeling to estimate net carbon exchange in forests sites, mangroves and agricultural land
- Modelling of net C emissions for the Indian biosphere
- Forest Natural Biomass/C fluxes and anthropogenic disturbances of fuelwood extraction and tendu leaf collection.
- A forest growth model using 3-PG approach was calibrated for India.
- Meta-analysis of published studies on fuelwood utilization was carried out.



- Other Environmental and Remote Sensing Studies.
- Mapping and modelling human-wildlife conflicts in Karnataka.
- Satellite and drone-based hyperspectral data was been analyzed for un-mixing algorithms evaluation for crop studies
- Published a database of hyperspectral description of 606 angiosperm species of Kerala.

Outreach

A total of 12 trainee interns from 6 universities in MTech/ MSc level were provided research internship-cum training (1-4 months) in use of RS & GIS in land transformation and carbon cycle studies.

Lectures

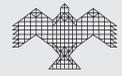
- Understanding Terrestrial Carbon Cycle of India using Earth Observation Data, IIRS, Dehradun, March 21, 2024.
- Research Gaps in EO-based Studies on Sustainability and Disaster Resilience, IIRS Academic Meet, 2024, Dehradun, March 19, 2024.
- Role of Biosphere in Atmospheric CO₂ Rise: Concepts, Indian Response and Scientific Challenges, NIAS, March 6, 2024.
- Journey in Space and Lessons in Multi-Disciplinary Research and Leadership, EDP Programme, NAARM, Hyderabad, February 15, 2024.
- Use of Space technology in land surface processes and carbon cycle, IITM, Pune, February 12, 2024.
- Briefing on Space Activities of India, NIAS, visiting delegation from John Hopkins University, January 9, 2024.
- Eddy Covariance Studies in India – Next Challenges. One Day Workshop on Eddy Covariance, IIRS Dehradun, December 22, 2023.
- Inaugural Address. National Conference on Climate Resilience and Sustainable Development, Karnataka Science and Technology Academy, Bengaluru, November 22, 2023.
- Space Technology in India, NIAS-KAS Indo-German Dialogue, November 6, 2023.
- Convocation Address, Departmental Convocation at Center of Studies in Resource Engineering, IIT Bombay, Chief Guest, August 18, 2023.
- Century Scale Dynamics of Forest Area, Biomass and Carbon Pool in Indian Forests – Integration of Remote Sensing and Multisource Data, International Conference on Sustain Mother Earth, Dr DS Kothari Institute, Udaipur, April 22, 2023 (Online).
- Space Technology for Environmental Monitoring and Development Planning, National Conference on North East Sustainable and Inclusive Development (NESID-2022), Climate Resilient Bio-Economy for Sustainable and Inclusive Development, Kaziranga University and IFSA, Guwahati. April 10, 2023.

Honours

- Lifetime Achievement Award, Geospatial Media, for contributions to Geospatial Technology.
- Listed in Top 2% of Global Scientists based on career publications of Stanford Univ. in Version 6, Oct 2023.

Memberships

- Chair, Research Advisory Committee of National Bureau of Soil Science and Land Use Planning, Nagpur under Indian Council of Agricultural Research (ICAR), New Delhi.
- Chair, Expert Committee on National Geospatial Programme, Department of Science and Technology (DST), Government of India, New Delhi.



- Member, Project Management and Monitoring Committee of National Centre of Geodesy, IIT Kanpur funded by DST, Government of India.
- Member, External Peer Review of Centre of Studies in Resource Engineering, 2013-2023, IIT Bombay.
- Member, Scientific Review and Monitoring Committee of Monsoon Mission Phase III of Ministry of Earth Science, Government of India, New Delhi.
- Member, Expert Committee on Sensors and Technology, National Agricultural Science Foundation, ICAR, New Delhi.
- Member of Jury, Geospatial Awards, Association of Geospatial Industry Awards, 2024
- Member, International Expert Council, Russia Programme on Carbon Control Technologies, Russia.
- Member, International Advisory Committee of UN Centre for Space Science and Technology Education (in the Asia Pacific (UN-CSSTE-AP).
- Member, Governing Board, IITM, Ministry of Earth Sciences, Pune.
- Member, Research Advisory Committee of IITM, MoES, Pune.
- Chair, Expert Committee on METFLUX Programme of IITM, Pune.
- Member, International Editorial Advisory Board, Journal of the Indian Society of Remote Sensing, ISRS, Dehradun.



PG Diwakar
ISRO Chair Professor

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Joined NIAS on: November 4, 2020

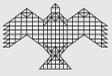
Research Areas: Digital Image Processing and Geospatial Technology, Geospatial Policy; Time Series Geospatial Analysis; Use of IOT, Drone Technologies; Innovative Use of Space and Terrestrial Data for Urban and Environmental Studies, including Air Pollution and Urban Sprawl.

Research Contributions

Successfully carried out a research consultancy for UN-ESCAP, Bangkok on setting up of Virtual Satellite Constellation (VSC) for Asia-Pacific Region. The purpose was to equip Asia-Pacific countries to process satellite data using cloud-based methods for Disaster Risk Management.

Awards

- Karnataka Rajyotsava Award 2023 for the contributions in Science and Technology, Federation of Karnataka Chambers of Commerce and Industries (FKCCI) and Rotary Club, Bengaluru, November 14, 2023.
- Rotary Vocational Service Award 2023–24 in recognition of outstanding service in Chosen Vocation of Science and Innovation, Rotary Club, Lalbagh, Bengaluru, January 17, 2024.

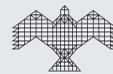


Lectures

- Technical sessions on geospatial tools, workshop, PIXEL Softech Private Limited, January to February 2024.
- Space Leadership, NIAS-DST Training Programme on Transformational Leadership in Sciences: Re-imagining Science in Indian Society, February 8, 2024.
- Remote Sensing Applications for Development and Governance, IEEE APSCON 2024, Goa, January 23, 2024.
- The Use of Satellite Images and Geospatial Technologies, Deshpande Foundation and Startups, Hubballi, North Karnataka, December 29, 2023.
- Keynote Address, Applications of IOT and Space Technology, Workshop, Department of Instrumentation and Mechatronics, Manipal Institute of Technology (MAHE-MIT), November 2, 2023.
- Satellite Image Fusion and Applications, Training programme for BEL Engineers, NIAS, October 28, 2023.
- Keynote Address, Symposium on Space Technology and Applications, School of Health Science and Technology (SOHST), University of Petroleum and Energy Studies (UPES), Dehradun, October 11, 2023.
- The Space and Geospatial Technology Usage for Urban Development with Future Planning Perspectives (Online), Transforming Technology, Transforming Life workshop, Israel Government, FICCI and Rotary Club, Bengaluru, October 11, 2023.
- Diverse Applications of Geospatial technology, IEEE GRSS Conference on Remote Sensing and GIS Applications, Symbiosis, Pune, October 10, 2023.
- Keynote Address, Indo-German Workshop on Open Spatial Data Infrastructure for Sustainable Urban Development, Center for Applied Geomatics, Ahmedabad, October 3 2023.
- Keynote Address, National Summit on India Clean Air Summit – 2023, CSTEP, Bengaluru, August 14, 2023.
- Keynote Address, Use of Space Technology for Applications Seminar, Institute of Cost Accountants of India, Bengaluru, November 1, 2023.
- Indian Space Policy, Public Policy Programme, MS Ramaiah College, Bengaluru August to October 2023.
- YouTube discussion on ARTEMIS mission. StratNews Global, June 10, 2023.
- TEDx talk on Unfold the manifold – Geospatial technology for sustainable development, TEDx/YouTube, June 2023.
- Digital Image Processing, Computer Science Department, Dayananda Sagar University, April to June 2023.
- Remote Sensing Applications and Disaster Management, Technology Vision 2047, IISc, Bengaluru (jointly organised by IISc and NIAS), April 2023.

Memberships

- Member, TIFAC national level committee, Preparation of 'Technology for the Future' vision document for submission to the Government of India.
- Chair, Advisory Committee on Space and Defense Strategies for Future, TIFAC.
- Member, Research Advisory and Monitoring Committee (RAMC) Visvesvaraya Technological University.
- Member, Advisory Board, School of Health Science and Technology (SOHST), University of Petroleum and Energy Studies (UPES), GoUk, Dehradun.
- Member, Advisory Committee, Sri Sri Ravishankar Ashram.



Energy and Environment Programme



Gufran Beig
Ashutosh Mukherjee
Chair Professor

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Joined NIAS on: October 18, 2021

Research Areas: Air Quality Management, Policy and Public Outreach; Designing the Air Quality Forecasting Framework; Development of Emission Inventory of Air pollutants and Greenhouse Gases; Air Quality and Human Health; Climate Change and Upper Atmosphere.

Research Contributions

Current R&D Focus:

- Drone-based Artificial Intelligent Technology for the inventory development of air pollutants.
- Development of national inputs for emissions of HFCs, PFCs, SF6, mix, and ammonia to be submitted for UNFCCC (United Nations Framework for Climate Change).
- Development of National Air Quality Resource Framework -Transforming Energy, Climate and Health (NARFI-TECH).

Awards

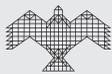
- Foundation Day Samman-2023, National Institute of Research in Environmental Health (NIREH), Indian Council of Medical Research (ICMR), Ministry of Health and Family Welfare, Government of India.

Honorary Positions

- Member, Project Assessment and Advisory Committee, SERB, DST, New Delhi.
- Member, Expert Group Meeting, Indian Council of Medical Research (ICMR), MoHFW, Government of India.
- Honorary Professor, Amity University, India.

Other Recognitions

- Editor, Aerosol and Air Quality Research (AAQR), AAGR Aerosol and Air Quality Research, Taiwan.
- Editor, Journal of Atmospheric and Solar Terrestrial Physics (JASTP), Elsevier, United Kingdom.
- Editor, Indian Journal, Radio and Space Physics, CSIR, India.
- Associate Editor, Journal of Geophysical Research, American Geophysical Union, Washington, DC.



Lectures

- Exploring Sources of Air Pollution Using Advanced Ai-Based Drone Technology, Valedictory Address, Second Aerosol Winter School MANTHAN-2024, Jammu Central University, Jammu (J&K), March 1, 2024.
- Implementation Strategies for Climate Change Mitigation, Karnataka Government Stakeholder Workshop, EMPRI, Bengaluru, October 5, 2023.
- Chaired Panel Discussion on Sahajeevanam, TIFAC, Technology Vision 2047, Indian Institute of Science, Bengaluru, April 2023.

Other Activities

- Mentor, Praveen Kumar, doctoral candidate, MLSU, Udaipur.
- Mentor, Summer Intern, Indian Academy of Sciences.
- Mentor, Graduate Trainee, Ms Uzma Hussain, Bennett University, Greater Noida (UP).
- Mentor, MSc Student Ms Sakshi Rajbhog, ASAR, Bengaluru.



AV Krishnan
Raja Ramanna Chair
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Joined NIAS on: May 15, 2019

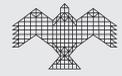
Research Areas: Energy Transition, Thermal Power Plants, Nuclear Power Plants, Clean Coal Initiatives, Urban Water-Energy Nexus.

Research Contributions

- BNRS funded project on Identification of Potential Sites for Nuclear Power Plants for a Sustainable Energy Mix. The study was completed and the final report was submitted in December 2023.
- NTPC funded project on Developing strategies and action plans for growing the share of nuclear energy in its overall generation mix, thereby contributing to the National goals of reducing the emission intensity of India's GDP
- Jindal Renewable Power Private Limited (JRPPL) funded project on De-carbonization of Steel Sector
- NPCIL funded project for identification of potential greenfield sites using remote sensing and geospatial techniques.
- PSA funded project on Estimation of CO₂ Emissions and SO₂ Emissions for Thermal Power Plants

Memberships

- Member, Jury for BHEL EXCEL Awards.
- Chairman, Board of Governors, TREC-STEP.
- Member, Review and Monitoring Committee for Mission Project on Development of Advanced Ultra Super Critical Power Plants.



SCHOOL OF HUMANITIES



Deepti Navarathna
TV Raman Pai Chair
Professor

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Research Areas: Neuroscience of Music, Music in Education, Cognitive Musicology, Musical Hermeneutics.

Research Contributions

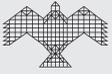
- IKS supported study on Unlocking the 'Sanskrit Effect'. The study examines the cognitive impact of chanting in Sanskrit in children aged 5-7 years.
- The Music, Brain and Creativity Laboratory: The laboratory will focus on interdisciplinary research initially along three major lines: (i) Cognitive Hermeneutics of Indian Musicological Texts, (ii) Creativity Studies with Musicians, and (iii) Cognitive enhancement through music, and (iv) Neurotheology: Cognitive Denominators of Religiosity
- Centre for Citta Vidya and Indian Psychology: In collaboration with Mr Raghu Ananthanarayan, Ritambhara Centre, 'Citta Vidya and Indian Psychology Initiative' at NIAS was launched, towards creating a premiere centre for interdisciplinary research in Citta Vidya/Yoga neurocognition.
- Organised the inaugural ceremony of Raja Ramanna Centenary celebrations proposal. A concert "Paramanu and Paramatma" inspired by the writings of Raja Ramanna on Indian Philosophy was organised.
- Organised three lectures in NIAS:
 - Anurag Trivedi, India's Cultural Diplomacy 101, April 29, 2023.
 - Prakash Belavadi, Media Semiotics: Indian Culture and Cinema, April 21, 2023
 - Pranava Sharma, Connecting Science to Society, April 15, 2023.

Teaching and Guideship

- Taught a two-credit course titled Research Methods in Heritage and Cultural Studies, NIAS doctoral programme, August to December 2023.
- Guiding two PhD Scholars Ms Pornima Rajkarne and Ms Divya Hoskere
- Mentored Harshini Anand, Master's student, Jiwaji University Mentored two interns, Ms Mahimna Vyas and Ms Gauri Anjana

Lectures

- Your Brain on Music, Indian Institute of Science, Bengaluru, February 18, 2024.
- Mysore and Heritage Units of Indian Army, Keynote Address, International Armistice Day, Para-Regiment Training Centre, Bengaluru, November 15, 2023.
- Neuroaesthetics in South Indian Classical Music, Keynote Address, National

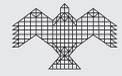


Seminar on Interdisciplinary Perspectives in Music Education and Research, Government Arts College, Trivandrum, November 13, 2023.

- Raaga Engineering and Neuroaesthetics, Keynote Address, National Symposium on Emerging Frontiers of Indian Knowledge Systems, Plaksha University, Mohali, November 4, 2023.
- Carnatic Cadenzas, Lecture-Demonstration on East-West Musical Encounters in India (along with Dr MB Rajani and Prof Anindya Sinha), EDM 2023, JN Tata Auditorium, IISC, Bengaluru, July 13 2023.
- Cultural Diplomacy and Soft Power Strategies for India, 'India@75, Journey of a Young Nation, sponsored by the Ministry of Culture, Government of India, JRD Tata Auditorium, NIAS, May 7, 2023.

Membership

- Member, Advisory Committee for Doordarshan and All India Radio, Prasar Bharati, Government of India.



FACULTY MEMBERS

Conflict Resolution and Peace Research Programme



D Suba Chandran
Professor and Dean
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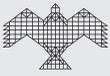
Joined NIAS on: November 18, 2015

Research Areas

Pakistan, Contemporary Conflicts, Peace and Conflict Forecasts, India and the Neighbourhood, Maritime and Science Diplomacy.

Lectures

- Arctic: Why it matters to India and what it can do with Russia, ICWA Track-II Dialogue on India-Russia, February 9, 2024.
- India-Russia S&T Collaborations, RIAC, Moscow, February 2, 2024.
- State of Conflicts, University of Calicut, December 13, 2023.
- South Asia: Analysing Through Conflict Theories, Jain University, Bengaluru, September 7, 2023.
- India and the Neighbourhood, Kristu Jayanti College, Bengaluru, August 25, 2023.
- Idea of Pakistan, Air War College, Secundrabad, July 18, 2023.



Anshuman Behera
Associate Professor
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Joined NIAS on: January 31, 2014

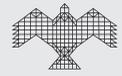
Research Areas: Democracy, Development and Conflict in India; Formal and Informal Decentralisation in Northeastern States in India (Special focus on Manipur and Mizoram); Cooperative Federalism and Local Governance in India; Socio-Economic Impact Assessment of Development projects and Corporate Social interventions; Political violence and conflict in South Asia; Maoist Conflict in India; Ethnic Conflict in Northeast India.

Lectures

- Ties that Bind: India's Cultural Diplomacy in Southeast Asia, International Conference on India's Culture-based Foreign Policy in South and Southeast Asia, Department of Political Science, University of Delhi, March 10, 2024.
- Impact Assessment Studies for Sustainable Development, Department of Commerce, Tumkur University, March 6, 2024.
- 'The Manipur Question: Geopolitics and Social Justice', One Future Collective, March 4, 2024.
- Gandhi and Participatory Democracy in India', Chanakya National Law University, Patna March 4, 2024.
- Negotiating Development at the Margins, Ravenshaw University, Odisha, January 21, 2024.
- On Fraternity: Conflict and Conflict Resolution in India, National Conference organised by Department of Social Work, Karnataka Central University, January 11, 2024.
- Research Methodology, CMR University, Bengaluru, November 25, 2023.
- Jihadist Militancy in Bangladesh: Implications on India, Indic Researchers Forum, November 17, 2023.
- In the Search of Fraternity: Vertical Solidarity, Majoritarianism and Ethnic Conflict in India, Centre for Contemporary Economics, RV University, Bengaluru, October 13, 2023.
- The Social and the Political of Ethnic Conflicts in India: The Case of Kuki-Meitei Conflict in Manipur, Department of Sociology and Social Work, Christ University, Bengaluru, September 1, 2023.
- Searching Fraternity in India, Department of Social Sciences, Fakir Mohan University, Balasore, July 27, 2023.

Memberships

- Life member, Indian Social Science Association.
- Associate Member, Manohar Parrikar Institute for Defence Studies and Analyses, New Delhi.



International Strategic and Security Studies Programme



Rajaram Nagappa
Honorary Visiting
Professor
School of Conflict and
Security Studies

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Joined NIAS on: February 1, 2007

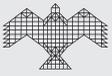
Research Areas: Weapon Systems and Advances in Weapon Systems.

Memberships

- Fellow, Aeronautical Society of India.
- Fellow, Indian National Academy of Engineering.
- Fellowship of High Energy Society of India.
- Life Member, FRP Institute.
- Life Member, Indian Society for Advanced Materials and Process Engineering.

Other Activities

- Talk on Autonomous Systems, AI and Cyber security threats to critical systems, NIAS-CISAC Dialogues, May 2023
- Talk on Assessing the drivers of modernization of nuclear forces, NIAS-CISAC Dialogues, July 2023.
- Coordinator, NIAS-CISAC in person meeting on Strategic Security Threats of the 21st Century, September 25 to 27, 2023.
- Panelist, Defence Technology Transfer and Production, Indo-US Cooperation Meeting, March 20, 2024.
- Talk on HRP in Emerging Space Programmes, NIAS-TAMU collaboration on Human Reliability Programme, December 7, 2023.
- Reviewer, International Journal of Energetic Materials and Chemical Propulsion.
- External Expert Member for the PhD comprehensive, Department of Management Studies, Defence Institute of Advanced Technology, Pune.



PM Soundar Rajan
Visiting Professor
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Security Studies

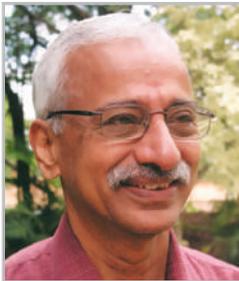
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Joined NIAS on: May 17, 2017

Research Areas: Advanced Weapon Systems; Fifth Generation Avionics Systems; Cyber Security; Defence Applications of AI; Air Power Assessment; Chinese Defence Technology Assessment; Lethal Autonomous Weapon Systems; Science Diplomacy; Hypersonic Weapon System Avionics and Vetrionics Systems for Battle Tanks.

Lectures

- AI Applications in Defence, Keynote Address, Workshop on AI, Centre for Airborne Systems, DRDO, Bengaluru, November 29, 2023.
- Global Strategic Landscape, NIAS-KIAS Dialogue, November 6, 2023.
- Information Assurance in the Age of Net-Centricity, IW School, Air Force Station – Jalahalli, Bengaluru, July 10, 2023
- Avionics Cyber Security – Threat and Mitigation, Airforce Station, Pune, June 2, 2023.

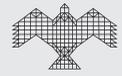


N Ramani
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Joined NIAS on: November 1, 2007

Research Areas: Development of Tools for Missile and Space Asset Capability Assessment.



**Prakash
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Joined NIAS on: December 1, 2015

Research Areas: Maritime Security, International Relations (Japanese Studies), Defence and Strategic Studies.

Academic Course

- Introduction to Maritime Security: Concepts, Principles and Practices (Elective Course), NIAS PhD Scholars.

Award

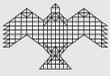
- Japan Foundation Indo-Pacific Partnership Programme (JFIPP) Research Fellowship for 2023-2024.

Lectures

- Conference on Future and the Roles of Japanese Studies in India," Japan Foundation, New Delhi, February 25, 2024.
- A Roundtable Discussion on the Indo-Pacific Partnership, Indian International Centre (IIC) and Japan Foundation, New Delhi, February 26, 2024.
- India - Australia Strategic Cooperation in Underwater Domain Awareness, Indo-Pacific Conference, Australian Ministry of Defence, Sydney, November 9, 2023.
- Speaker at Roundtable Conference on India – Australia Defence Cooperation, Australia-India Institute, University of Melbourne, Melbourne, November 3, 2023.
- Resource Person, Capacity-Building Workshop for Doctoral Scholars, Christ University, Bengaluru, September 25, 2023.
- Resource person, orientation programme for IR Students, Christ University, July 24, 2023.
- Panel Discussion on North Korea's Nuclear/Missile Proliferation and its Geostrategic Impact, Christ University, Bengaluru, August 11, 2023.
- Speaker at the India – Japan Relations Conference, NIAS and Christ University, Christ University Campus, Bengaluru, April 12, 2023.

Memberships

- NAAC Representative, Board of Studies, Department of South and Central Asian Studies, Central University of Punjab.
- Member, Board of Studies, Department of Defence and Strategic Studies, Tiruvallur University, Vellore.
- Member, Board of Studies, Department of Defence and Strategic Studies, Gurunanak College (autonomous), Chennai.



Consciousness Studies Programme



Sangeetha Menon
Professor and Dean
School of Humanities

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Joined NIAS on: January 8, 1996

Research Areas: Consciousness Studies, Experiential Self, Self-identity and Self-transformation, Psychological Health and Wellbeing; Medical Humanities; Indigenous Philosophies and Healing Traditions.

Lectures

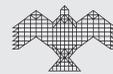
- Common Sense, Logic and Intuition (Online), Senior Tata Steel Alumni Leadership Group, March 25, 2024.
- Philosophical Anthropology, and the Evolution of Consciousness and Self, Dr LK Ananthakrishna Iyer Endowment Lecture, School of Social Sciences, University of Madras, March 8, 2024.
- Binding the Elusive Consciousness with the Self: Why AI will not Become Sentient, Keynote Lecture, International Conference on Investigating Consciousness beyond Reductionism, University of Padua – Padua, Italy, February 21, 2024.
- Consciousness and Health Humanities: Exploring the Foundations of the Self and Wellbeing, Keynote Address, International Conference on Health Humanities, Kristu Jayanti College, Bengaluru, January 24, 2024.
- Indian Metaphysics and its bedrock of Consciousness”. Orientation Lecture, Department of Philosophy, MAHE, August 21, 2023.
- Indian Philosophy and Its Ethical Frameworks for Narrative Methods in Health Humanities, National Seminar on Ethics and Higher Learning in Indian Universities, University of Kashmir, July 27, 2023.

Other Activities

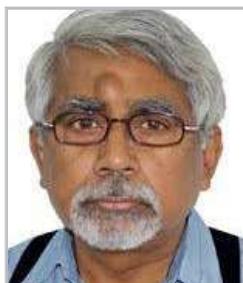
- Organised one day workshop on Creating Safe Work and Academic Spaces, December 18, 2023.
- Member, Institutional Review Committee, Dept of Humanities and Social Sciences, IIT-Bombay.
- Podcast Interview on From Biology to Philosophy: Quest to Understand Consciousness by The Brand Called You.

Memberships

- Advisor, Board of Studies, School of Liberal Arts, Bennett University.
- Member, National Task Force for Cognitive Science Research Initiative, DST.
- Member, Institutional Stem Cell Ethics Committee of NCBS, InStem, JNCASR.



- Member, Board of Studies in Philosophy of Somaiya Vidyavihar University, Mumbai.
- Advisory Council Member, METI International, San Francisco.
- Fellow, International Society for Science and Religion, Cambridge.
- Honorary Fellow, College of Humanities, University of Exeter, UK.



Sisir Roy
Honorary Visiting
Professor
School of Humanities

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Joined IAS on: November 5, 2014

Research Areas: Contemplative practices and Modern Science; Quantum Physics and Consciousness; Data Analysis and Cosmological Redshift.

Lectures

- Keynote Speaker, Conference on Quantum Physics and Buddhist Philosophy, Tibet House, New Delhi, November 25, 2023.
- Ontological Reality: Perspective of Quantum Physics, Lead Speaker, Lamdon Golden Jubilee cum Lamdon Yarchos Chemo, Ladakh, Leh, August 8, 2023.
- Stages of Meditation and Traditional Wisdom: Challenges to Neuroscience, SP Jain Institute of Management and Research, July 21, 2023.



Nithin Nagaraj
Associate Professor
School of Humanities

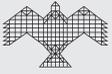
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Joined IAS on: October 15, 2015

Research Areas: Causality Testing and Its Applications; Brain-Based Network Causal Activity Measure of Consciousness; Brain-Inspired Artificial Intelligence; Indic Approaches to Mathematics, Information and Computation.

Academic Courses

- Two Credits Course on Qualitative Methods: Module on Philosophy of Science in IAS doctoral programme, August to December 2023.
- Two Credits Course on Introduction to Mathematical Methods and Its Applications, IAS doctoral programme, January to May 2024.

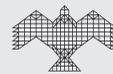


Lectures

- AI and Indian Economy, Keynote Address, Young Economist Competition, Department of Economics, Christ University, Bengaluru, March 26, 2024.
- Research Methodology for Computer Scientists, Refresher Course in Computer Science/Computer Application, UGC – Malaviya Mission Teacher Training Centre, University of Calicut (Online), March 19, 2024.
- An Introduction to Artificial Intelligence, Refresher Course in Computer Science/Computer Application, UGC – Malaviya Mission Teacher Training Centre, University of Calicut (Online), March 14, 2024.
- Research Methodology: How to Do Innovative Research Effectively?, 16th Faculty Induction Programme, Malaviya Mission Teacher Training Centre, University of Calicut, Kerala (Online), March 8, 2024.
- The AI Revolution, Sri Saraswathi Vidya Nikethan (for 10th class students), Dommasandra, Bengaluru, February 10, 2024.
- The AI Revolution: From Turing to ChatGPT and Beyond, Refresher Course in Computational Sciences, UGC-Malaviya Mission Teacher Training Centre, Goa University (Online), January 19, 2024.
- Prime Numbers, Secret Sharing and Visual Cryptography, Harate@Ganitha Mela 2023, Vishwa Vidyapeeth, Yelahanka, Bengaluru, December 18, 2023.
- Brain-Inspired Computing, Communication and Machine Learning, Tutorial Session, Fifth International Conference on Computing and Network Communications, PES University, Bengaluru, December 19, 2023.
- Research Methodology, 14th Faculty Induction Programme (Guru Dakshita), UGC-HRDC University of Calicut (Online), October 4, 2023.
- How to do Innovative Research Effectively?, Amrita Vishwa Vidyapeetham, Amritapuri Campus, September 20, 2023.
- Machine Learning: Trends and Opportunities, Department of Electronics and Communications Engineering, Amrita Vishwa Vidyapeetham, Amritapuri Campus, September 18, 2023.
- Keynote Lecture, Significance of Mathematics, Inauguration of Madhava Ganitha Kalakshetra, Vishwa Vidyapeeth, Bengaluru, September 9, 2023.
- Chaos Theory, Fractals & Machine Learning, ACM Student Chapter and Department of Computer Science and Engineering, Ramaiah Institute of Technology, Bengaluru, August 18, 2023.
- Research Methodology, 13th Faculty Induction Programme, UGC-HRDC University of Calicut (Online), July 22, 2023.
- Some Tips on Research, Department of Electrical and Communication Engineering, TKM College of Engineering (Online), July 12, 2023.

Membership

- Senior Member, IEEE (October 2019-).



Heritage, Science and Society Programme



Sharada Srinivasan
Professor
School of Humanities

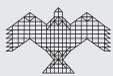
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Joined NIAS on: June 10, 2001

Research Areas: Archaeometallurgy.

Lectures

- Madhava History of Science Lecture Series, International Centre for Theoretical Sciences, Bengaluru, March 12, 13 and 14, 2024.
- Guest of Honour, Karnataka Chitrakala Parishath, International Women's Day, March 8, 2024.
- Kosambi: A Revolutionary Scientist for Our Times, National Centre for Biological Sciences, Bengaluru, March 7, 2024.
- Invited Delegate, Brainstorming Session on Art Conservation 2024, CSMVS Art Conservation Department, February 28, 2024.
- Faces and Phases: Insights on High-tin Bronzes in South Indian Antiquity, Consortium for History of Science, Technology and Medicine, February 24, 2024.
- Intertwinings of Nature and Culture in Nilgiri Material Culture, Bangalore International Centre, February 23, 2024.
- Prospects of Early Indian Iron and Steel, Keynote Address, International World of Iron Conference in Nairobi, British Institute of Eastern Africa, November 6, 2023.
- Performing Prehistory: Exploring Ringing Rocks', NIAS Stone Tool Workshop, November 2 and 3, 2023.
- Navigating Multiple Forms of Heritage, Distinguished the Nalanda Lecture, Ahmedabad University, October 11, 2023.
- Pottery as Archaeomaterial, NIAS Pottery Workshop, August 24, 2023.
- Nilgiris as a Cultural and Archaeological Landscape, NilgiriScapes, RTPC Conference Hall, Gorden Road, Ooty, August 17, 2023.
- Music, Materials and Iconography, Indian Music Experience Museum, Bengaluru, August 3, 2023.
- Women in Art and Patronage in the Mediaeval Metropolis, Museum of Art and Photography, Bengaluru, July 21, 2023.
- Representation of Women and Patronage in Chola Art (Online), The History Enthusiasts, Conference on HerStory; May 14, 2023.
- Hampi 'Musical' Pillars: Acoustics and Dance, International Conference of Women in Physics for TIFR. ICWIP 2023, July 12, 2023.



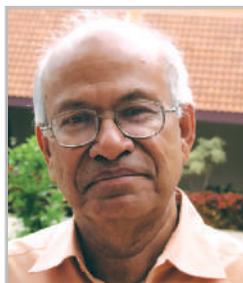
- Materials for Designers: Insights from Archaeometallurgical Research, Department of Design and Innovation, RV University, Bengaluru, April 2, 2023.

Memberships

- Advisory Board Member, University of Hamburg, Centre for Studies of Manuscript Cultures
- Committee Member, S20 Science for Culture and Society, INSA.
- Committee Member, CSIR NIScPR Svastik.
- Standing Committee, International Conference of the Beginning of the Use of Metals and Alloys.
- International Honorary Member, American Academy of Arts and Sciences.

Other Activities

- Invited delegate, Ministry of Culture, Roundtable on Conservation for International Museum Expo 2023, New Delhi, May 18 to 20, 2023.
- S20 Committee Member, Science for Culture and Heritage, INSA
- Contributor, S20 Position Paper on Connecting Science to Society and Culture, INSA

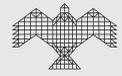


S Ranganathan
Honorary Visiting
Professor
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Joined NIAS on: July 2, 2004

Research Areas: Materials Heritage.

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Srikumar M Menon
Associate Professor
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menon@nias.res.in

Joined NIAS on: March 1, 2016

Research Areas: Megalithic Monuments of India, Indian Temple Architecture, Archaeoastronomy.

Academic Course

Two Credits Course on Climate Responsive Architecture, NIAS doctoral programme, August to November 2023.

Lectures

- The Intrepid Artisans of Vatapi, Khaki Labs, Mumbai, December 8, 2023.
- Monuments of Memory: From Megaliths to Temples in the Malaprabha Valley, Tamil Heritage Trust, Chennai, December 2, 2023.
- Sun-facing Structures in India, NIAS-DST Training Programme on Science and Technology, November 22, 2023.
- The Intrepid Artisans of Vatapi: The Stone Monuments of the Chalukyas, Faculty Development Programme, MIT School of Architecture, Pune, May 8, 2023.
- Megalithic Stone Alignments and their Possible Connections with Astronomy, IIT Gandhinagar, May 6, 2023.

Membership

- PhD Committee, Martin Luther Christian University, Shillong.



MB Rajani
Associate Professor
School of Humanities

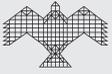
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Joined NIAS on: January 1, 2015

Research Areas: Cultural Landscape Research; Landscape Archaeology; Geospatial Analysis of Cultural Heritage; Musicology and Music Heritage.

Academic Courses

- Two Credits Course on GIS for Spatial Data Visualization and Analysis, NIAS doctoral programme, August to December 2023.



- Two Credits Course on Research Canons in Culture and Heritage Studies, NIAS doctoral programme, August to December 2023, jointly offered with Prof Deepti Navaratna.

Lectures

- Digital Archaeology Workshop, Department of History and Archaeology, Nagaland University, March 15 to 23, 2024.
- Patterns from the Past, Tamil Heritage Trust, January 6, 2024.
- Geospatial Analysis for Understanding Context of Built Heritage, BMSCE, Bengaluru, December 21, 2023.
- Two Sessions on Archaeology and Science, Ashoka University, November 4, 2023.
- Patterns in Past Settlements: Geospatial Analysis of Imprints of Cultural Heritage on Landscapes, Indian Institute of Space Science and Technology, Thiruvananthapuram, September 29, 2023.
- Archaeological Investigations Using Remote Sensing Techniques, Special Lecture, Department of Archaeology, University of Kerala, September 27, 2023.
- Patterns in Past Settlements: Geospatial Analysis of Imprints of Cultural Heritage on Landscapes, IIRS Distance Learning Programme on Geospatial Technology for Archaeological Studies, August 11, 2023.
- Cultural Landscape Research: Archives and Collaborations, Sonic and Visual Cultures of South Asia- Kandy, Sri Lanka, Organised by University of Chicago, July 7, 2023.



S Udayakumar
Assistant Professor
School of Humanities

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Joined NIAS on: January 1, 2018

Research Areas: Archaeology, Experimental Archaeology, Archaeometallurgy, Material Culture and Ethnoarchaeology.

Award

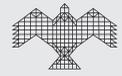
- Visiting Scholar Scholarship Award, SRS–Interuniversity Development Cooperation Project, Ghent University, Belgium.

Academic Course

- Methods in Heritage Studies, Elective Two-Credit Course, NIAS doctoral programme, January to May 2024.

Lectures

- South Indian Bronze Casting, Indian Institute of Technology, Gandhinagar, March 2, 2024.
- Experimental Archaeology and Ethnoarchaeology – Pottery Techniques Perspective, 3rd International Conference on History, Science and Technology of South Asian Ceramics, IIT Madras, January 5 to 9, 2024.



- Methods in Heritage and Archaeology, MES College of Science, Arts and Commerce, Bengaluru, November 9, 2023.
- Experimental Archaeology Perspectives of Pottery Making Techniques in South India, Mannu: Pottery Workshop, NIAS, August 24, 2023.



Diya Mukherjee
Post-Doctoral
Associate
School of Humanities

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Joined NIAS on: May 31, 2021

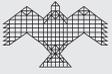
Research Areas: Harappan Studies, Archaeo-metallurgy, Ethnography, Ethno-archaeology and Experimental Archaeology.

Award

University of Liverpool Virtual Fellowship for the research entitled 'Terracotta Crafts of West Bengal (Bankura horses) with special reference to Panchmura, Bankura'.

Lectures

- Forgotten Tradition: Pottery, Mannu: Pottery Workshop, NIAS, August 24, 2023.
- Cire Perdue: Ancient Lost Wax Casting, Lost Wax Workshop, Indian Institute of Technology, Gandhinagar, March 2 and 3, 2024.



Animal Behaviour and Cognition Programme



Sindhu Radhakrishna
Professor
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Engineering

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Joined NIAS on: September 1, 2001

Research Areas: Animal Behaviour and Cognition, Primate Behavioural Ecology, Human-Animal Studies, Environmental Decision-Making, Human-Wildlife Conflict, Conservation Biology, Environmental Education.

Academic Course

Offered 2 credit course on Basic Primatology, NIAS doctoral programme, January to April 2024.

Lectures

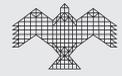
- Why All Individuals Don't Raid Crops?, Invited talk at the Symposium on Evolutionary and Organismal Biology, JNCASR, Bengaluru, February 16, 2024.
- Kerala and SDGs 13-16, NIAS-IPRI Workshop Achieving SDGs: Experiences from Kerala, Karnataka and Tamil Nadu, Loyola College, August 4, 2023.

Memberships

- Associate Editor, *Frontiers in Conservation Science* (2022 -).
- Associate Editor, *Resonance* (2023 -).
- Commission Member, IUCN SSC Primate Specialist Group – S. Asia, (2013 -).

Other Activities

- Invited to submit a paper on human-macaque interactions to a special issue in the *International Journal of Primatology*
- Invited to co-author a primatology textbook *Primates in a Changing World* with Dr Erin Riley from San Diego University and Dr Katherine Jack from Tulane University. The book will be published by OUP.
- Jury member, Green Literature Festival, Bengaluru, November 2023.



Anindya Sinha
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Joined NIAS on: November 15, 1996

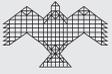
Research Areas: Mammalian Behavioural Ecology and Cognitive Psychology, Animal Population and Behavioural Genetics, Evolutionary Biology, Conservation Studies, Urban Ecologies and Human–Nonhuman Relationships, Other-than-Human Studies, Cultural Heritage and Performance Studies, and Philosophy of Biology

Academic Courses

- A three-credit course on Animal Behavioural Ecology, Postgraduate Programme in Wildlife Biology and Conservation, National Centre for Biological Sciences, Bengaluru, March to May 2023.
- A two-credit course on Foundations of Animal Behaviour and Cognition, NIAS doctoral programme, August to December 2023.

Lectures

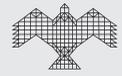
- Philosophy of Science and Biology, Coexistence Consortium, University of Trans-Disciplinary Health Sciences and Technology, Bengaluru, October 2023.
- An Anthropogenic History of the Bonnet Macaque, Coexistence Consortium, University of Trans-Disciplinary Health Sciences and Technology, Bengaluru, October 2023.
- Human–Macaque Coexistence in Urban and Urbanising India, Canopy Collective, Tezpur, March 22, 2024.
- The Urban Macaque, University of Science and Technology Meghalaya, Ri-Bhoi, Meghalaya, March 21, 2024.
- Complex Human–Macaque Lifeworlds in the Anthropocene, Cotton University, Guwahati, March 13, 2024.
- Our Complex Coexistence with Macaques, Assam University, Silchar, March 1, 2024.
- How to Deal with the Abuse of Primates, Roundtable, Second Conference, Association of Indian Primatologists, Mysore University, February 10, 2024.
- Engendered Primatology: Of Female Primates and Feminist Primatologists, Plenary Talk, Second Conference, Association of Indian Primatologists, Mysore University, February 10, 2024.
- Ethics in Primatological Research, Roundtable, Second Conference, Association of Indian Primatologists, Mysore University, February 9, 2024.
- Coexistence: The Great Elephant Migration, A Collective of Institutions Promoting Coexistence, Bengaluru, February 6, 2024.



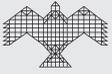
- NIAS and Its Leadership: Personal Reflections, NIAS–DST Training Programme, NIAS, February 1, 2024.
- My Life with Monkeys! Disappearing Dialogues Collective and Wipro Earthian Programme, Kolkata, December 18, 2023.
- Social Cognition and Interspecies Communication in an Other-than-Human Primate, NIAS–DST Training Programme, NIAS, December 1, 2023.
- The Economics of Biodiversity, Panel Discussion, Ashoka Trust for Research in Ecology and the Environment, Bengaluru, November 30, 2023.
- Methods in Animal Behaviour Studies, Workshop, Student Conference in Conservation Science Bangalore 2023, October 12, 2023.
- Composing Worlds with Elephants, NIAS, October 6, 2023.
- Academic Integrity and Ethics in the Use of AI Tools in Research, Panel Discussion, Workshop on AI Tools for Research and Writing, NIAS, September 14, 2023.
- New Ways to Think about Primate Lives and Human–Primate Interfaces, IPS–MPS Joint Meeting 2023, Kuching, Malaysia, August 23, 2023.
- Artistic Representations of Bonnet Macaques in Mediaeval Vijayanagara Sculpture from Southern India, IPS–MPS Joint Meeting 2023, Kuching, Malaysia, August 23, 2023.
- Phenotypic Flexibility, Behavioural Inheritance, Cultural Traditions and Gene– Culture Coevolution in Macaque Societies, IPS–MPS Joint Meeting 2023, Kuching, Malaysia, August 20, 2023.
- An Anthropogenic History of Primate Commensalism in a Synurbising Forest of Southern India, Workshop on Commensality and the City, Cambridge University, Cambridge, UK, May 25, 2023.
- Reflections on the Macaque Mind, Keynote Lecture, Animal Consciousness Conference, Dharamsala, May 2, 2023.
- A Love for the Lively Urban, Center for Metropolitan Studies, Technische Universität Berlin, Germany, April 27, 2023.
- Becoming Urban and Being Urban: Nonhuman Agency, Knowledge and Decisions, Keynote Lecture, PAWS Web Kickstart Hybrid Conference, Oxford University, April 19, 2023.

Memberships/Honorary Appointments

- Professor of Practice, University of Trans-Disciplinary Health Sciences and Technology, Bengaluru, December 2023 onwards.
- Member, Executive Committee, International Advisor and SubJury Member, International Biology Olympiad, Al Ain, United Arab Emirates, June–July 2023.
- External Member, Combined Undergraduate and Postgraduate Board of Studies for Environmental Biology and Wildlife Sciences, Cotton University, Guwahati, March 2022 onwards.
- Member, Governing Board, The Lion-Tailed Macaque Project, Odense, Denmark, November 2021 onwards.
- Member, IUCN/SSC Primate Specialist Group (2021-2025).
- Member, Governing Board, Institute of Public Health, Bengaluru, July 2021 onwards.
- Member, Subsection Urban Primates, IUCN/SSC Primate Specialist Group (2020 -).
- Member, Subsection Primates in Human Culture, IUCN/SSC Primate Specialist Group (2020 -).
- Affiliate Senior Scientist, Centre for Wildlife Studies, Bengaluru (July 2020 -).
- Member, Conservation Committee, International Primatological Society, (2019 -).



- Adjunct Faculty, Nature Conservation Foundation, Mysore (2017 -).
- Honorary Research Fellow, School of Humanities, University of Exeter, Exeter, United Kingdom, August 2015 onwards.
- Vice President, Association for Teachers in the Biological Sciences, Mumbai (2015 -).
- Scientific Advisor and Research Coordinator, Dhole's Den Research Foundation (2012 -).
- Adjunct Faculty, Centre for Neuroscience, Indian Institute of Science, Bengaluru (2011 -).
- Adjunct Teaching Faculty, Postgraduate Programme in Wildlife Biology and Conservation, National Centre for Biological Sciences, Bengaluru (2010 -).



Complex Systems Programme



Janaki Balakrishnan
Professor
School of Natural
Sciences and
Engineering

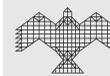
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Joined NIAS on: July 10, 2012

Research Areas: Nonlinear Dynamical Systems, Complex Systems, Nonlinear Oscillations, Stochastic Processes, Ecological Modelling.

Other Activities

Reviewer for Physical Review E, Scientific Reports, Europhysics Letters, Physica D: Nonlinear Phenomena, Physics Letters A, Chaos, and Nonlinear Dynamics.



Energy and Environment Programme



R Srikanth
Professor and Dean
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Joined NIAS on: August 22, 2016

Research Areas: Energy and Environment, Minerals, Sustainable Development, Public Policy.

Lectures

- Coal for Sustainable Development, Global Summit on the Life Economy, Research and Information System for Developing Countries, New Delhi, November 27, 2023.
- Small Modular Reactors for India's Net Zero Goals, Indian Nuclear Society International Conference, Mumbai, December 12, 2023.

Membership

- Member, Technical Advisory Committee, MoEFCC for guiding the implementation of GEF-UNDP-MoEFCC projects.



DK Srivastava
Honorary Visiting
Professor and INSA
Senior Scientist

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Joined NIAS on: August 5, 2019

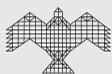
Research Areas: Science Outreach

Award

GN Ramchandran Award of SASTRA University.

Lectures

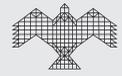
- How Long is the Long Path to Developed India?, DAE Symposium on Nuclear Physics, IIT Indore, December, 2023.
- How Long is the Long Path to Developed India?, Raja Ramanna Centre for Advanced Technology, Indore, December, 2023.



- How Long is the Long Path to Developed India? Indore Institute of Technology and Management, Indore, December, 2023.
- How Long is the Long Path to Developed India?, Tata Institute of Fundamental Research, Mumbai, December, 2023.
- How Long is the Long Path to Developed India?, Megh Nad Saha Memorial International Conference on Frontiers of Physics, University of Allahabad, November, 2023.
- Bikash Sinha: A Life for Physics, Jammu University, November, 2023.
- How Long is the Long Path to Developed India?, Variable Energy Cyclotron Centre, Kolkata, September, 2023.
- How Long is the Long Path to Developed India?, Ramaiah University of Applied Sciences, Bengaluru, August, 2023.
- Climate Change and Energy Options for a Sustainable Future, Social Leadership Development Programme for Environment and Sustainable Development (Public Event), MIT World Peace University, Pune, September 26, 2023.
- TV Programme: Panel Discussion, Sagar Manthan, Taaza TV, August 26, 2023.

Memberships

- Member, Raja Ramanna Fellowship Programme Review Committee, DAE, Mumbai.
- Editorial Board Member, Scientific Reports, UK.
- President, Indian Physical Society.
- Member, Research Advisory Committee, Indian Institute of Technology, Ropar.
- Member (VC's Nominee), Faculty Council Department of Physics, University of Delhi.
- Member, National Advisory Committee, 67th DAE Symposium on Nuclear Physics, Bhabha Atomic Research Centre, Mumbai.
- Member, International Advisory Committee, International Conference on Physics and Astrophysics of Quark Gluon Plasma, Puri, February 2023.
- Member, International Advisory Committee, "4th Heavy Flavour Meet", IIT Goa, November 2023.
- Member, Peer Committee for Assessment of Promotion to Senior/Principal Scientist, CSIR.
- Member, Promotion Committee, National Institute of Science Education and Research, Bhubaneswar.
- Member, Council of Indian Science News Association, Kolkata.
- Editorial Board Member, Physics, MDPI Journals.
- Member, Organizing Committee, Workshop on Hardon Physics 2022, Dr BR Ambedkar NIT.



Tejal Kanitkar
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Joined NIAS on: June 14, 2019

Research Areas: Climate Change Mitigation, Climate Policy and Negotiations; Energy Modelling, Renewable Energy Transitions and Energy Policy; Energy-Environment-Economy Linkages; Energy, Irrigation and Agriculture.

Academic Courses

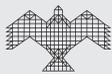
Two Credits Course on Contemporary Debates in Sustainable Development and Climate Change, NIAS doctoral programme, January to May 2024.

Lectures

- Pathways to Equitable and Climate Compatible Futures, Tyndall Seminar, University of Manchester, UK, March 2024.
- COP-28 and the Way Forward for India's Low Carbon Development, 36th NIAS Programme for Senior Executives, January 11, 2024.
- Deconstructing the Global Mitigation Targets, TWN-Bolivia Pavilion, COP-28, Dubai, December 2023.
- The IPCC and Challenges for Climate Policy, NIAS-DST Programme on Science and Technology, November 23, 2023.
- Climate Policy Challenges for the Global South, Divecha Centre, Bengaluru, November 2023.
- A New Scenarios Framework for Equitable and Climate-compatible Futures, Sciences PO, Paris, November 2023.
- Socio-Economic Futures in Climate Modelling, Yale University, November 2023.
- Just Transitions: Global and National Challenges, TWN, Malaysia, October 2023.
- Equity and Justice in the Science of Climate Change, Scientist Rebellion, UK, August 2023.

Memberships

- Member, Government of India Delegation to the 58th Session of the Subsidiary Bodies under the UNFCCC, Bonn, Germany, June 2023.
- Member, Government of India Delegation to the 28th Conference of Parties (COP-28) and the 59th Session of the Subsidiary Bodies under the UNFCCC, Dubai, December 2023.
- Member, Government of India Delegation to the 60th Session of the Intergovernmental Panel on Climate Change (IPCC), Istanbul, February 2024.
- Government of India nominated member for participation in the Global BTR Dialogue held in Belgium, March 2024.
- Member, Steering Committee, Bengaluru Sustainability Forum.



Rudrodip Majumdar
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Joined NIAS on: August 23, 2019

Research Areas: Modeling of the Solar Thermal and other Renewable Energy Systems; Modeling of Energy Transition in Indian Road Transport Sector; Water-Energy Nexus in Water-stressed Regions in India; Techno-Economic Analysis for Advanced Energy Systems; Evaluation of resource security for critical energy materials for green energy products; Mitigation of the Plastic Waste problem in the dense urban settings of India; Waste-to-Wealth.

Academic Courses

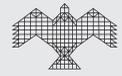
- Advanced Energy Systems and Futuristic Solutions, NIAS doctoral programme, January to April 2024.
- Major Conventional and Nonconventional Pathways to Harness Energy, NIAS doctoral programme, August to November 2023.

Lectures

- Solid Waste Management, Round Table Discussion, Greater Bengaluru Parisara Foundation and NIAS, March 1, 2024.
- Societal Impact through eCooking, Panel Discussion, International Energy Festival of Kerala (IEFK) 2024, Thiruvananthapuram, February 8, 2024.
- Mindful Horizons: Interdisciplinary Dialogues on Sustainable Future. Keynote Address, Academicia-2024 Fest, Mount Carmel College, Bengaluru, January 11, 2024.
- Engaging Youth for eCooking, Virtual Talk Series Phase III on Transitioning to Modern Energy for Cooking, Finovista, and Loughborough University, December 21, 2023.
- Evaluation of North Korea's Nuclear Program: Is It for Energy Security?, Panel Discussion, Christ University, Bengaluru, August 11, 2023.
- India's Energy Scenario – Position of Hydrogen and A Pragmatic Future Trajectory in Connection with India's Development, Inaugural Conference India@75 – Journey of a Young Nation, NIAS, May 8, 2023.

Membership

- Review Editor, Frontiers in Energy Research-Energy Storage Section (2024-).



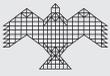
Jithin Jose
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Joined NIAS on: October 18, 2023

Research Areas: Air Quality, Emission Inventory, Receptor Modeling, Dispersion Modeling, Health Risk Assessment.

Membership
Air Quality Management Association.



Science Communication Programme



VV Binoy
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Joined NIAS on: September 2, 2010

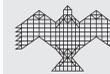
Research Areas: Social Cognition, Animal Cognition, Science of Science Communication.

Academic Courses

- Two Credit Course on Analysing Science Communication through the Lens of Behavioural Science, NIAS doctoral programme, August to December 2023.
- Two Credit Course on Animal Behaviour and Cognition (with Prof Anindya Sinha), NIAS doctoral programme, August – December 2023.
- Introduction to research and publication ethics (with Prof Sharada Sreenivasan) NIAS doctoral programme, August 2023.
- Two Credit Course on Conservation Psychology, ATREE and TDU Masters Course, August 2023 to January 2024.

Lectures

- Students – The Agents of Science-Driven Societal Transformation, Inaugural Address, Christ University, Bengaluru, February 14, 2024.
- Building Science Communicators from the ground Up: Why and How, Panel Discussion, University of Hyderabad, December 6, 2023.
- Achieving Sustainability Development of Goals – Harnessing the Power of Collectives for Innovation, Inaugural Lecture, International Conference on Back to Nature, Jugent Ein Welt Austria, SAVE Foundation Belgium, and Skills for Progress (SKIP) India, Bengaluru, November 25, 2023.
- Science of Science Communication, NIAS-DST Programme on Science and Technology, November 30, 2023.
- Animal Cognition and Conservation, Students Scientist Interaction, NIAS, October 16, 2023.
- Passion – A Catalysis in Research, Students Scientist Interaction, Institute for Social and Economic Change, Bengaluru, September 23, 2023.
- Understanding Intelligence: Why We Need to Follow a Transdisciplinary Approach, Conference on Intelligence in Animals Humans and Machines, Kristu Jayanti College, Bengaluru, April 18, 2023.

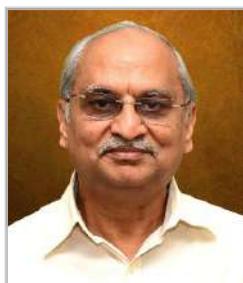


Memberships

- Fellow, Intercontinental Academia: University-Based Institutes for Advanced Study.
- External Affiliate, Krasnow Institute of Advanced Study, George Mason University, USA.
- Representative, UNESCO UniTwin Complex Systems Digital Campus (CS-DC).
- Member, IUCN Freshwater Specialist Group, South Asia.
- Member, IUCN Fish Conservation Network, South Asia.
- Member, Executive Committee, Ethological Society of India.

Other Achievements

- Scientific Observer and Mentor for the Indian team that won top position in the medal tally and Jury member, 34th International Biology Olympiad – (IBO) 2023, Al Ain, UAE.



M Sai Baba

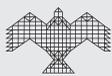
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Joined NIAS on: October 6, 2017

Research Areas: Science and Risk Communication; Human Reliability Programme.

Lectures

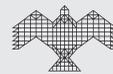
- Technology, Research and Innovation, Chaitanya Bharathi Institute of Technology, Hyderabad, March 28, 2024.
- Technology, Research and Innovation, Loyola-ICAM College of Engineering and Technology, Chennai, March 1, 2024.
- Human Reliability Programme and Industries of National Importance, HP Green Research Centre, Bengaluru, February 12, 2024.
- Innovation: Scaling Up and Making it a Reality, Saveetha University, Chennai, January 29, 2024.
- New Education Policy @3: The Way Forward, Chaitanya Bharathi Institute of Technology, Hyderabad, January 23, 2024.
- Policy and Regulations Related to Startup Ecosystem in India, GINSERV, Bengaluru, January 10, 2024.
- Learn, Equip and Get Ready to Contribute, CMR University, Bengaluru, December 27, 2023.
- Energy Security for India, Sriperumbudur, Tamil Nadu, December 18, 2023.
- Innovation: Making It a Reality, Expert Lecture, FMC, RUAS and Right Edge, December 13, 2023.



- Transforming the Landscape of Doing Research and The Role Information Centres and Information Managers Can Play, Valedictory Address, PSG College of Technology, Coimbatore, December 9, 2023.
- Emerging Trends in Academic Libraries Aligning with Industry 5.0, PSG College of Technology, Coimbatore, December 9, 2023.
- HRP in Indian Context: A Moderated Discussion, Core-Group Meeting on Human Reliability Programme (HRP) in Industries of National Importance, NIAS, December 7, 2023.
- Self-motivation for enhanced performance, Indira Gandhi Centre for Atomic Research, Kalpakkam, November 23, 2023.
- New Education Policy 2020@3: Opportunities and Challenges, 2nd International Conference on Recent Advances in Information Technology (READIT-2023), IGCAR, Kalpakkam, November 22, 2023,
- Innovation Strategies for Scaling up, Expert Lecture, FMC, RUAS and Right Edge, October 18, 2023.
- Valedictory Address, National Workshop on Science Communication and Journalism, Kannada University, Hampi, September 30, 2023.
- Insights into Science Communication, National Workshop on Science Communication and Journalism, Kannada University, Hampi, September 30, 2023.
- Energy Security for India and the Challenges, VIT, Vellore, September 20, 2023.
- In Pursuit of Excellence, Gayatri Vidya Parishad College of Engineering for Women, September 4, 2023.
- Artificial Intelligence, Society and Possibilities, Gayatri Vidya Parishad College of Engineering for Women, September 5, 2023.
- Access to the Information Resources in the Digital Era, Berhampur University, Berhampur, Odissa, August 12, 2023.
- Preparing for Doing Research and Communicating, Ramaiah University of Applied Sciences, Bengaluru, August 7, 2023.
- NEP2020@3, RUAS Master Trainer Series on NEP-2020, Ramaiah University of Applied Sciences, August 4, 2023.
- Doing Research and Communicating it Well: The Challenge, VIT Vellore, July 24, 2023.
- Self-motivation for enhanced performance, Ramaiah University of Applied Sciences, Bengaluru, July 22, 2023.
- Doing Research and Getting Funding: The Challenge, Grant-Writing Workshop for Faculty, Ramaiah University of Applied Sciences, Bengaluru, July 14, 2023.
- Approach to Quality Higher Education and Professional Development, Texas A&M University, Texas, USA, May 8, 2023.
- Providing Quality Higher Education, Texas A&M University, Texas, USA, May 15, 2023.

Memberships

- Editorial and Scientific Committee, International Journal of Nuclear Knowledge Management
- Advisory Board, Governing Council of Hindustan Institute of Maritime Training Group of Educational Institutions, Chennai.
- External Research Recognition Committee (RRC), MIT-World Peace University, Pune, Maharashtra, India.
- Incubator Seed Management Committee (ISMC), GINSERV.

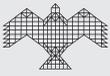


V Bhujanga Rao
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Joined NIAS on: April 20, 2016

Research Areas: Medical Implants/Devices; Grassroots Innovation; Defence Manufacturing Technologies; Acoustics, Science, Technology and Innovation.



Other Members



**Ramya Bala
Prabhakaran**
DST-INSPIRE Faculty
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Joined NIAS on: August 16, 2021

Research Areas: Paleoecology, Paleoclimatology and Paleofires, Environmental Sciences, Methods in Paleoecology, Environmental Archaeology.

Academic Course

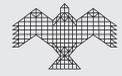
A Primer to Reconstructing Environmental and Climatic History, NIAS doctoral programme, January to March 2024.

Awards

- Invited by the Australian Consulate for Women in Tech Luncheon with the Melbourne India Postgraduate Academy.
- Invited as a Panelist Representing Women in Science for Career Day, First Steps School, Bengaluru.

Lectures

- Forests and Fires, Humans and Climate, Ibaraki University, Ibaraki, Japan (Virtual), March 28, 2024.
- Forest, Savanna, or Both? Using Paleoecology for Landscape Conservation in the Nilgiris, Laboratory for the Conservation of Endangered Species, Hyderabad, January 31, 2024.
- Reconstructing Environmental History of the Nilgiris Biosphere Reserve, Georg-August-Universität, Göttingen, Germany, August 28, 2023.
- Settling the Debate on Anthropogenic Origins of High-elevation Grasslands in the Nilgiris, Southern India, INQUA XXI Congress, Roma, Italy, July 13, 2023.
- Field-based Challenges in Mudumalai Tiger Reserve for Reconstructing Environmental History, Inter-University Accelerator Centre, New Delhi, May 16, 2023.



Kripa MK
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Joined NIAS on: October 1, 2021

Research Areas: Terrestrial Carbon Cycle, Remote Sensing, Spatial Modelling, Ecology, Functional Aspects of Plants.



Shaik Vazeed Pasha
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Joined NIAS on: September 16, 2021

Research Areas: Terrestrial Carbon Cycle, Forestry, Remote Sensing, Spatial Modelling, Ecology, Human-Wildlife Conflicts.

Award

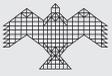
- BRICS Young Scientist-2023, Indian Delegation at BRICS YS Forum.

Lectures

- Harnessing Remote Sensing for sustainable resource management: Opportunities and challenges, SRM University, January 22, 2024.
- The Future of India's Biodiversity: Challenges and Opportunities for Youth, Sustainable Sapiens NGO, Pune (Online), December 9, 2023.
- Panellist, Indo-German and Europe Dialogue, NIAS and KAS-India Office, Bengaluru, November 7, 2023.

Memberships

- Life Member, Indian Society of Geomatics.
- Full member, Science-i community.



Vani Kulkarni
DBT BioCARE Fellow
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Engineering

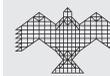
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Joined NIAS on: January 1, 2024

Research Areas: Animal Behaviour, Gut Microbiome Studies, Phylogenetics, Bioinformatics.

Award

- DBT-BioCARE Fellowship 2024 from Department of Biotechnology, India.



Education Programme



Anitha Kurup
Professor
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Joined NIAS on: January 2, 1995

Research Areas: Sociology of Education, Education Leadership, Gender and Science, Education of the Gifted and Talented, Learning Analytics and Education Technology

Academic Courses

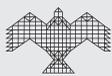
- Two modules in course on Foundations and Perspectives in Education, NIAS doctoral programme, August - September, 2023.
- Education, Culture and Society, NIAS doctoral programme, January to May 2024.

Lectures

- Integrating Conceptual and Theoretical Framework in Research, ESB Board Room, RIT, February 29, 2024.
- Gender Science and Technology: The Indian Perspective, Winter School Programme on Gender Sensitisation, Anand Agricultural University, Gujarat, January 19, 2024.
- Women in Agriculture, Sustainability and Climate Change, Winter School Programme on Gender Sensitisation, Anand Agricultural University, Gujarat, January 19, 2024.
- Lead Presenter for the Theme on Diversity, Equity, Inclusion and Accessibility in Science and Technology, G20 Chief Scientific Advisers' Roundtable, Gandhinagar, August 28, 2023.
- Women's Role in Climate Resilience and Action, G20 Ministerial Conference on Women's Empowerment, Gandhinagar, August 3, 2023.

Other Activities

- Contributed to the finalized Policy Communique on the theme Diversity, Equity, Inclusion and Accessibility in Science and Technology.
- Subject Expert on Selection Committee for posts of Director (Procurement and Co-ordination), Director (General) and Associate Director (Co-ordination Training, Internship and Action Taken Reports), Karnataka Evaluation Authority, Government of Karnataka, June 21, 2023.
- Special Invitee, Symposium on Redefining Teaching in a Transforming Educational Landscape, Bengaluru, June 6, 2023.
- Invited to the Consultation Meeting with Stakeholders on Draft Guidelines of PML-P- Dhruv' Programme for the Education of the Gifted and Talented launched by Government of India, June 5, 2023.



- Subject Expert, Technical Evaluation of Project Proposals on Evaluation of SCSP/TSP Scheme to Increase Enrolment and Access to Quality Education to SC/ST Students in Karnataka, June 2, 2023.

Memberships/Recognitions

- Expert Member, for Literacy and School Education and Higher Education, Government of Karnataka (2018 -).
- Member, Expert Committee on Learning Science, Vidyashilp University (2021 -).
- Member, PhD Committee, Christ University (2023 -).
- Expert Member, STRIDE Research Project, Mahatma Gandhi University (2018 -).
- Subject Matter Expert Member, Public Affairs Centre preparing for SDG- Goal 4 (2021 -).
- Member, Ethics Committee, Centre for Brain Research (2018 -).
- Member, Ethics Committee, NIMHANS (2021 -).
- Member, Stem Cell Research Committee, Centre for Brain Research (2023 -).
- Member, Academic Council, Christ University, Bengaluru (2013 -).
- Member, Academic Council, Bhagat Phool Singh Mahila Vishwavidyalaya, Sonapat, Haryana, (2014 -).
- Member, Expert Committee for Sustainable Development Goals, Planning Department, Government of Karnataka, 2017 onwards.
- Member, Technical Committee, Karnataka Evaluation Authority, Government of Karnataka.
- Advisor, Research and Innovation Council, Vidyashilp University, Bengaluru.
- Education Expert, Committee to draft the Education chapter, Karnataka Human Development Report (2015-23).
- Member, Sectoral Committee on Education, GoK-FICCI-McKinsey collaboration
- Expert Member, DIEA, to prepare a position paper for India as a follow up of the first Chief Scientific Advisers Roundtable held in March 2023.

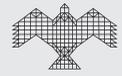


Jeebanlata Salam
Assistant Professor
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Joined NIAS on: February 22, 2016

Research Areas: Sociology of Education, Social Exclusion and Education, Education Policies Vocational Skill Education, Ethnicity and Identity.

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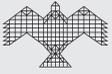
Joined NIAS on: May 1, 2003

Lectures

- Pune Psychiatrists Oration Award, 17th Biennial Conference of Child and Adolescent Mental Health, National Institute Mental of Health and Neurosciences, Bengaluru (ICAMCON), November 16, 2023.
- Counselling Parents, Children and Adolescents from the Perspective of Indian Indigenous Health Systems, NIMHANS, Bengaluru, November 3, 2023.

Memberships

- Member, Steering Committee, SAMA Project, National Institute of Mental Health and Neurosciences, Bengaluru.
- Member, 4th G20 Expert Panel on Multilingualism, Savithri Bai Phule University, Pune, June 2023.



Inequality and Human Development Programme



Narendar Pani
Professor and Dean
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Joined NIAS on: April 9, 2007

Research Areas: Causes and Consequences of Inequality, Neo-Gandhian Approach to the Economy as a Process, Conceptualisation of Sustainability; Theorisation of Conflict.

Academic Courses

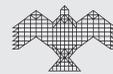
- Philosophy of Method, NIAS doctoral programme, August to December 2023.
- Module in the Inequality and Human Development Programme Course, NIAS doctoral students, August to November 2023.

Lectures

- Leadership for Sustainability, NIAS-DST Training Programme on Transformational Leadership in Science, February 7, 2024.
- Science and Society, NIAS-DST Programme on Science and Technology, November 20, 2023.

Memberships

- Member, Advisory Committee to Determine Karnataka's Representation to the Sixteenth Finance Commission.
- Member, Task Force for Teacher Research and Funding of Karnataka's State Education Policy Commission.



Anant Kamath
Assistant Professor
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Joined NIAS on: September 1, 2020

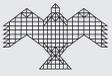
Research Areas: Technological Change, Political Economy of Development, Economic-Sociology

Academic Courses

- Perspectives on Technology, Elective Course, NIAS doctoral programme, January to March 2024.
- Introduction to Inequality, co-taught with Dr Chetan Choithani, NIAS doctoral programme, August to December 2023.

Lectures

- Chaired Two Sessions on Technology and Modernity, GITAM International Conference on Modernities Redefined, February 22 and 23 2024.
- Science and Technology: A Critical Perspective, NIAS-DST Workshop on Science and Technology, November 20, 2023.
- Panel Discussion on Indian Cities, Livelihoods, and Politics, Bangalore International Centre, August 29, 2023.
- Book Presentation on 'Urban Undesirables', Institute for Social and Economic Change, Bengaluru, August 10, 2023.
- Demographic Dividend and Development, Mount Carmel College, Bengaluru, August 4, 2023.
- Discussion on Knowledge, Technology and Reflections on the Functional Dynamics of Relationships between the Three Key Actors – State, Scientific Organisations and CSOs, Institute for Social and Economic Change, Bengaluru, May 28, 2023.
- Live Online Interview for the *Economic and Political Weekly's* (EPW's) Digital Engagement titled '#EPWConversations' on Technology and Inequality.



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Joined NIAS on: October 1, 2020

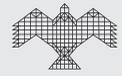
Research Areas: Development, Livelihoods, Migration and Urbanization, Food and Nutritional Security, Gender, Population and Health.

Academic Courses

- Migration, Urbanization and Exclusion, Elective Course, NIAS doctoral programme, January to May 2024.
- Introduction to Inequality, co-taught with Dr Anant Kamath, NIAS doctoral programme, August to December 2023.

Lectures

- Importance for Food Security for Human Development in India, Christ University, Bengaluru on February 2, 2024.
- Podcast Interview on the Book 'Migration, Food Security and Development: Insights from Rural India', December 9, 2023.
- Migration, Food Security and Development: Insights from Rural India, invited book talk in the Mi-Food Webinar Series, Balsillie School of International Affairs (BSIA), Canada on December 5, 2023.
- Migration, Food Security and Development: Insights from Rural India, invited book talk in the seminar series of IIT-Hyderabad's Liberal Arts Department, April 26, 2023.



Debosree Banerjee
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res.in

Joined NIAS on: November 2, 2020

Research Areas: Growth, Inequality, Poverty, Human Development

Academic Course

Quantitative Research Method, NIAS doctoral programme, August to December 2023.

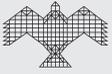


Nisar Kannangara
Post-Doctoral
Associate
School of Social
Sciences

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Joined NIAS on: February 25, 2021

Research Areas: Climate Change, Human Development



Mahima Upadhyay
Post-Doctoral
Associate
School of Social
Sciences

Joined NIAS on: August 1, 2022

Research Areas: Public policy and institutions, gender inequalities, local governance and natural resource management

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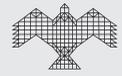
SS Meenakshisundaram
Visiting Professor
School of Social
Sciences

Joined NIAS on: December 10, 2004

Lectures

- Documenting the Reforms of Local Democracy (1993-2023), Consultation Workshop, New Delhi, January 19, 2024.
- Public Employment Programmes in Developing Countries – The MGNREGA in India, webinar, ILO, Geneva for Developing Countries, December 5, 2023.
- Valedictory Address, Seminar on New Paradigms for Development of Karnataka, Kannada Sahitya Parishad, Bengaluru, November 26, 2023.
- Fiscal Federalism in India and the Impact of 15th Finance Commission Recommendations on Karnataka, Fiscal Policy Institute, Government of Karnataka, Bengaluru, October 17, 2023.
- Understanding Institutional Designs and Structures – The Case of Local Governments in India, Tata Institute of Social Sciences, September 29, 2023.
- Valedictory Address, Round Table Conference on Strengthening Panchayatiraj in Karnataka, Government of Karnataka, September 27, 2023.

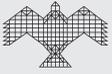
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com



- Keynote Address, Annual Conference on New Social Order, Dhan Foundation, Madurai, Tamil Nadu, September 23, 2023.
- Role of Gram Sabhas and the Standing Committees in the Convergence of Development Functions, National Institute for Rural Development and Panchayatiraj (NIRDPR), Hyderabad, September 4, 2023.
- Constitutional Implications of the 73rd Amendment, Karnataka State Rural Development and Panchayatiraj University, Gadag, September 1, 2023.
- Participatory Governance, Panchayatiraj and Service Delivery, Grass Roots Research and Advocacy Movement (GRAAM) Mysore, August 10, 2023.
- Changing needs of Old Age Parents in India, The Nest, Canara Bank Employees Association and Gandhi Old Age Home, Kadabgere, Bengaluru Rural District, April 7, 2023.

Memberships

- Chairman, India Wash Forum, New Delhi.
- Chairman, MYRADA, MYKAPS.
- Chairman, Academic Council for the Green Skills Academy, Bengaluru.
- Chairman, Expert Committee for Formulation of a Model Rural Transformation Act by the Government of India.
- Member, Board of Management, Centre for Sustainable Development, Bengaluru.
- Member, Board of Management, Institute of Social Sciences, New Delhi.
- Member, Board of Management, IIPA, Karnataka Regional Branch, Bengaluru.
- Member, Board of Management, DHAN Panchayat Development Foundation, Madurai.
- Member, Academic Council, Karnataka State Rural Development and Panchayat Raj University, Gadag.
- Member, Technical Advisory Group, UNICEF sponsored Research Project, FPI, Bengaluru.
- Member, Project Advisory Group, Centre for Multi-Disciplinary Research, Dharwad, Karnataka.
- Member, Guidance Committee to the School of Local Governance at NIRD & PR, Hyderabad.
- Member, Interface Committee for the Programme on Science, Technology, Research and Applications, Department of Space, Government of India.
- Member, Advisory Group, Indian Administrative Fellowship Programme, Nudge Foundation for the Government of Karnataka and the Government of Punjab.
- Member, Editorial Advisory Board, Aarthica Charche: The FPI journal of Economics and Governance.



Urban and Mobility Studies Programme



Carol Upadhya
Honorary Visiting
Professor
School of Social
Sciences

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Joined NIAS on: September 1, 2003

Research Areas: Urbanization, Labour Mobilities, Rural-Urban Transformations, Local Economies, Circular Labour Migration.

Academic Course

Doing Urban Studies: Themes and Approaches, co-taught with Dr Aleena Sebastian and Prof Supriya RoyChowdhury, NIAS doctoral programme, August to December 2023.

Awards

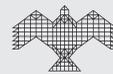
- Visiting Fellow, Swedish Collegium for Advanced Studies (SCAS) during Spring Term 2022-23.
- In-Residence Fellow, Uppsala University (January-June 2023) to work on book project, Forging New Futures: The Rise and Fall of a World-City Project in Rural South India.
- Co-authored academic article was selected for the Ashby Prize by the Journal: Vinay Gidwani and Carol Upadhya, Articulation work: Value chains of land assembly and real estate development on a peri-urban frontier. *Environment and Planning A: Economy and Space* 55(2): 407-427, 2023.

Lectures

- Assetizing the Future: The Politics of Land and Development in an Indian New City Project, Swedish Collegium for Advanced Study, Uppsala, May 16, 2023.
- Podcast: 'The Rise and Fall of the Amaravati Greenfield City Project, SCAS Talks Podcast Series, Swedish Collegium for Advanced Study, Uppsala in January 2024.

Membership

- Co-editor, Journal of South Asian Development (SAGE)



Supriya RoyChowdhury
Honorary Visiting Professor
School of Social Sciences

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Joined NIAS on: February 1, 2021

Research Areas: Gender and Labour, Climate Change and Migration, Urbanization, Livelihoods.

Lectures

- Exploring Worker-Centred Industrial Relations in India's Garments Sector, Annual Conference of the Indian Society of Labour Economics, Central University of Hyderabad, March 29-31, 2024.
- Why Conduct Field Research, Training Programme for Formulating Research Proposal, IIT Kharagpur, December 7, 2023.
- Research Methodology focussing on Case Study for Qualitative Research, Ramaiah Institute of Management Bengaluru, December 6, 2023.
- What is the Value of Research?, International Workshop on Operationalizing Labour Rights, Colombo, Sri Lanka, October 5 and 6, 2023.
- An India Then, An India Now, Symposium on In Conflict and Conversation: Indian Cities, Livelihood and Politics, Bangalore International Centre, August 29, 2023.
- Climate Change and Migration in the Sundarbans, Annual Conference of the Development Studies Association, University of Reading, UK, June 28, 2023.



Aleena Sebastian
Assistant Professor
School of Social Sciences

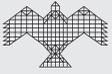
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Fax: 080-22185028
Email: aleena.sebastian@nias.res.in

Joined NIAS on: June 1, 2021

Research Areas: Urban Studies; Gender and Sexuality; Health Policy Concerning At-Risk/Key/Hard to Reach Population; HIV/AIDS; Mental Health.

Academic Courses

- Doing Urban Studies: Themes and Perspectives (co-taught with Prof Carol Upadhyay and Prof Supriya RoyChowdhury, NIAS doctoral programme, August-December 2023.



- Re-imagining gender, Elective course, NIAS doctoral programme, January-April 2024.
- Certificate Course on Research and Publication Ethics for Young Faculties and Doctoral Students in India, January 8-12, 2024.
- Guest lectures, National Faculty Development Programme on Research and Publication Ethics (RPE), Christ College Autonomous, Irinjalakuda, Kerala, October 9-13, 2023.

Awards

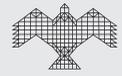
- Prof MN Srinivas Memorial Prize 2023 by the Indian Sociological Society for the best paper in sociology and social anthropology: Aleena Sebastien (2023) Matriliny, merchandise and Islam: A study of the Keyis in the coastal belt of Tellicherry, North Malabar. *Coastal Studies and Society*, 2(4), 336- 355.
- Dr V Govindan Nair Memorial Prize 2023 by the Indian Association for the Study of Sexually Transmitted Diseases and AIDS, for the best scientific presentation at ASTICON Conference, Kolkata, September 29 to October 1, 2023.

Lectures

- Re-imagining the 'Urban': A Methodological Exploration, Valedictory Address, Christ University, Bengaluru, March 16, 2024.
- Community Leadership in Public Health: Lessons that India Could Offer to Achieve SDG3, Keynote Address, Seminar on Erudita, Christ University, Bengaluru, March 4, 2024.
- SDGs and the Role of Higher Educational Institutions, Christ University, Bengaluru, September 11, 2023.
- Beyond A Monolithic Conceptualization of Muslim Societies, Keynote Address at the 5th Graduate International Conference, SJECH M. DJAMIL DJAMBEK University, Bukittinggi, Indonesia, June 21, 2023.

Memberships

- Life Member, Indian Sociological Society.
- Annual Member, Indian Association for the Study of Sexually Transmitted Diseases and AIDS.



Director



Shailesh Nayak
Director

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Joined NIAS on: March 19, 2018

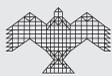
Research Areas: Earth System Science, Blue Economy, Science Diplomacy, Sustainability.

Award

The civilian honour Padma Shri award in the field of science and engineering, 2024, Government of India.

Professional Assignments/Memberships

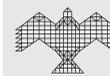
- Chancellor, TERI School of Advanced Studies, New Delhi.
- Life Trustee, India International Centre, New Delhi.
- Editor-in- Chief, Journal of the Indian Society of Remote Sensing, Dehradun.
- Fellow, Indian National Science Academy, New Delhi.
- Fellow, Indian National Science Academy, Delhi.
- Fellow, National Academy of Sciences, India, Allahabad.
- Fellow, Indian Academy of Sciences, Bengaluru.
- Fellow, International Society of Photogrammetry, Remote Sensing and Spatial Sciences.
- Regional Member for Asia, International Society of Photogrammetry, Remote Sensing and Spatial Sciences (ISPRS).
- Member, International Science Advisory Committee, ISPRS.
- Member, Board of Trustees, the ISPRS Foundation.
- Academician, International Academy of Astronautics, Paris.
- President, Mangrove Society of India, Goa.
- Member, Search-cum-Selection Committee (SCSC) for selection the post of:
- Scientific Secretary in the Office of Principal Scientific Adviser.
- Secretary, Ministry of Earth Sciences, Government of India.
- Secretary, Department of Science and Technology, Government of India.
- Chair, Research Council, ESSO-National Centre for Polar and Ocean Research (NCPOR), Goa.



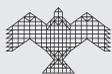
- Chair, Research Council, ESSO-National Centre for Coastal Research, Chennai.
- Chair, Research Council, Wadia Institute of Himalayan Geology (WIHG), Dehradun.
- Chair, National Nitrogen Steering Committee, MoEF, Government of India.
- Chair, Blue Flag National Jury – India.
- Chair, Research Council of CSIR-National Geophysical Research Institute, Hyderabad.
- Mentor, CSIR-National Geophysical Research Institute, Hyderabad.
- Chair, Project Appraisal and Monitoring Committee for collaborative Projects under Deep Ocean Missions, Ministry of Earth Sciences, Government of India.
- Chair, Programme Advisory Committee – Koyna Deep Borehole Research, MoES, Delhi.
- Co-Chair, Monsoon Mission-III, Ministry of Earth Sciences, Government of India.
- Chair, Expert Committee, CRZ, MoEF, Government of India.
- Chair, Screening-cum-Expert Committee, Facility Creation Projects, CSIR.
- Chairman, Constitution of External Expert Committee (EEC) under FCP 2.0 and Pilot Plant Categories of CSPS-2024, CSIR, Government of India.
- Chairman, Expert Committee for IN-SPACE Seed Fund Scheme for Agriculture Sector, Department of Space, Government of India.
- Member, Space Economy Sector, NITI Aayog, Government of India.
- Member, Advisory Committee on National Environment, Forest and Climate Disaster Management Plan, NIDM, New Delhi.
- Member, Board of Indian National Space Promotion Authorization Centre (IN-SPACE), Department of Space, Government of India.
- Member, Governing Board, The Energy and Resources Institute (TERI), New Delhi.
- Member, Governing Board, Foundation for Ecological Security (FES), Anand.
- Member, Governing Council, Indian Council of World (ICWA, New Delhi.
- Chair, Committee for review of Recruitment Rules and the Recruitment Process of Scientists in CSIR, CSIR, Delhi.
- Chair, Committee on Performance Review Mechanism for Directors of CSIR Labs, CSIR, Delhi.

Lectures

- Importance of Earth System Science and the Way Forward, MS University of Baroda, Vadodara, March 22, 2024.
- From Ocean Science to Sustainable Blue Economy, Space Applications Centre, Ahmedabad, March 19, 2024.
- Viewing the Earth from Space: Benefits for Humanity, Public Lecture, National Space Science Symposium, Goa University, Goa, February 27, 2024.
- Importance of Earth System Science and the Way Forward, Plenary Lecture, International Conference on Biodiversity and Geochemistry of Deep and Extreme Earth Systems, IIT-Kharagpur, Kharagpur, February 1, 2024.
- G20 Delhi Summit: Maritime Collaborations and Science and Technology Cooperation, India's G20 Year: 2023. A Joint Outreach Event by ICWA-Delhi and Asia Centre, Bengaluru, December 15, 2023.
- Disaster Management, Inaugural Address, Short-term Programme on Disaster Management, UGC Malaviya Mission Teacher Training Centre, University of Hyderabad, Hyderabad, December 11, 2023.



- Earth: Origin, Evolution to Earth System Science. NIAS-DST Training Course on Science and Technology, NIAS, November 27, 2023.
- Advances in Geoscience with Special Reference to Coastal Hazards, Presidential Address – IGU Diamond Jubilee Annual Convention, CUSAT, Kochi, November 22, 2023.
- From Ocean Science to Sustainable Blue Economy, Indian Institute of Technology – Gandhinagar, August 29, 2023.
- Ocean Science to Services: A Perspective for Blue Economy, First Panikkar Endowment Lecture, 8th Edition of the Ocean Society of India's Biennial Conference (OSICON-23), ESSO-Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, August 23, 2023.
- Blue Economy: A Perspective for India, Centre for Atmospheric and Oceanic Sciences, Indian Institute of Science, Bengaluru, July 28, 2023.
- Keynote Address, Fifth G20 RIIG Meeting: Scientific Challenges and Opportunities for a Sustainable Blue Economy, Education Hub, Diu, May 18, 2023.
- Climate Change: Status, Projections and Implications, Dr BM Das Memorial Lecture, Foundation Day Celebrations of CSIR-CLRI, Chennai, May 1, 2023.
- Climate Change: Status, Projections and Implications. Panel Discussion: Climate Change and Sustainability for India, Science for Scale Summit, IBM Research India, April 12, 2023.
- Climate Change Issues and Challenges, Panel Discussion: Marching to 100: India's Opportunities and Challenges in Coming Decade, Defence Services Staff Collage, Wellington, April 11, 2023.
- Role of Academia in National Security Architecture and Policy Formulation. Annual Security Dialogue 2023, Chennai Centre for China Studies, National Maritime Foundation, Chennai, April 4, 2023.

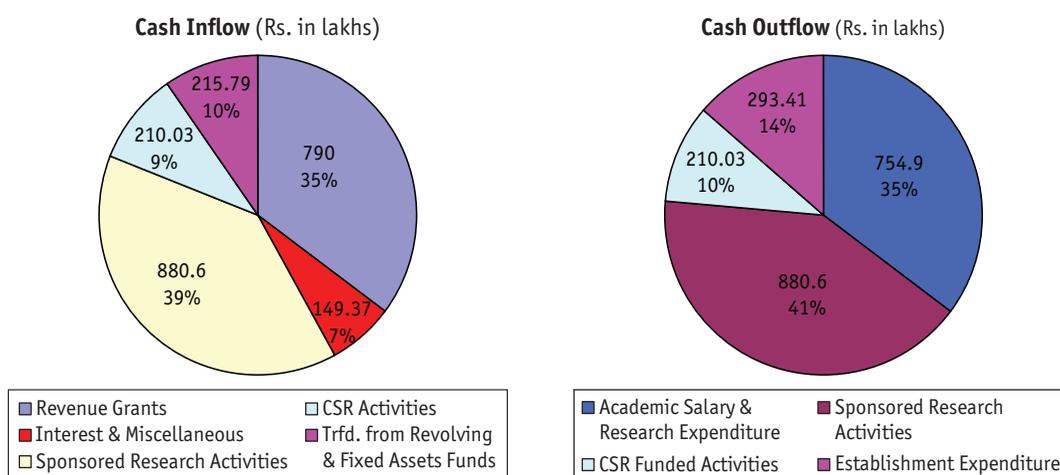


ADMINISTRATION

As a registered society, NIAS derives its administrative and financial authority through the society, represented by the general body. The Council of Management, which is currently chaired by Shri S Ramadorai, is vested with full power and authority to do all acts, deeds, etc. which are necessary for the promotion and fulfillment of the objectives set out in the Memorandum of Association. The Director, presently Dr Shailesh Nayak is the chief executive and exercises general, administrative, and financial control over the affairs of NIAS. The Director is assisted in the administrative and finance matters by the Head, Admin. & Finance.

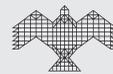
Besides management of all resources such as infrastructure, finance, human resources, estates etc., general administrative matters are also handled by Head, Admin. & Finance. Administration enables the recruitment and deployment of staff, servicing their needs and empowering them to effectively contribute to the objectives of NIAS. It services the students' programme in which seventy-one students work for their PhD degrees. The administration also takes care of the campus, its facilities such as the Auditorium, lecture halls, meeting rooms, classrooms, guesthouse, dining halls, etc. and all other infrastructure of NIAS. The administration also plays a unique role in conducting various programmes including training courses. Procurement of materials and consumables, maintenance of facilities, inventory control, etc. are also done by the Administration. Compliance with various statutory requirements such as Provident Fund, Professional Tax, Income Tax, etc. is also taken care by the administration. The administrative setup consists of, in addition to the Head-Administration, an Office Manager, two Assistant Managers in the area of Accounts and Finance and IT and other Secretarial/Office/Supporting Staff, in all numbering 29.

Finance management, accounting, auditing (internal and statutory), resource mobilization and expenditure control are carried out systematically. An overview of finances for the year 2023-24 is given below:



NIAS has a specified investment of Rs.1044.10 lakhs (exclusive of project funds) as of March 31, 2024.

During the year, the Institute has received 22 new research projects with a total value of Rs.787.17 lakhs. The total value of projects handled during the year including the projects sanctioned in the earlier years was Rs.3594.75 lakhs. This is inclusive of CSR funded initiatives. The foreign exchange component included in this sum was Rs.510.86 lakhs.



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Head, Administration and Finance

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Joined NIAS on: November 1, 1995



B Lalu
Office Manager

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Joined NIAS on: April 16, 2012



A Deva Raju (*till December 29, 2023*)
Coordinator (Admin & Logistics)

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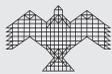
Joined NIAS on: March 27, 1989



P Satish Bhat
Assistant Manager (Accounts and Finance)

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Email: accounts@nias.res.in

Joined NIAS on: June 22, 2009



Ramprasad R
Assistant Manager (IT)

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Joined NIAS on: December 27, 2021



V Girija
Administrative Coordinator

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Joined NIAS on: March 26, 1992



KS Rama Krishna
Administrative Coordinator

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Joined NIAS on: December 10, 1990



S Lalitha
Administrative Coordinator

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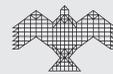
Joined NIAS on: October 1, 1992



VB Mariyammal
Senior Executive Assistant

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Joined NIAS on: December 1, 2006



JN Sandhya
Senior Executive Assistant

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Joined NIAS on: February 11, 1997



R Vijayalakshmi
Senior Executive Assistant

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Email: vlakshmi@nias.res.in

Joined NIAS on: October 9, 1996



V Ravisha
Executive Assistant (Accounts)

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Fax: 080-22185028
Email: ravisha@nias.res.in

Joined NIAS on: February 3, 2020



MS Shivakumar
Executive Assistant (Accounts & Admin)

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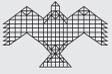
Joined NIAS on: July 7, 2008



AS Mary Stella
Executive Assistant

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Email: stella@nias.res.in

Joined NIAS on: June 23, 1994



Guruprasanna TS
Junior Executive Assistant (Technical)

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Joined NIAS on: May 3, 2021



Nagaraj P
Junior Executive Assistant

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Joined NIAS on: November 20, 2023



Rajesh K
Junior Executive Assistant (Library)

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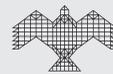
Joined NIAS on: March 1, 2023



VA Ramesh
Junior Executive Assistant (Technical)

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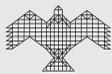
Joined NIAS on: July 1, 2011



SUPPORT STAFF



*Left to Right Row-1: Shivakumar, N Rajesh, S Sampath, G Venugopal, Chandrashekar, N Ramesh.
Row-2: SR Rathnam, Gajanana S Naik, G Nagaraja, Mujeeb Pasha, V Srinivasa, R Harish, Mohammed Umar.*



NIAS FINANCIAL REPORTS

**Deloitte
Haskins & Sells LLP**

Chartered Accountants
One International Centre, Tower 3, 27th -32nd Floor
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Mumbai – 400 013, Maharashtra, India

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INDEPENDENT AUDITOR'S REPORT

TO THE MEMEBERS OF NATIONAL INSTITUTE OF ADVANCED STUDIES

Opinion

We have audited the accompanying financial statements of **National Institute of Advanced Studies** ("the Society"), which comprise the Balance Sheet as at March 31, 2024, and the Statement of Income and Expenditure for the year ended, and a summary of material accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give a true and fair view in conformity with the Accounting Standards issued by the Institute of Chartered Accountants of India (ICAI) and other accounting principles generally accepted in India, of the state of affairs of the Society as at March 31, 2024, and its excess of expenditure over income for the year ended on that date.

Basis for Opinion

We conducted our audit of the financial statements in accordance with the Standards on Auditing (SAs) issued by ICAI. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

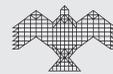
We are independent of the Society in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules made thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ICAI's Code of Ethics. We believe that the audit evidence obtained by us is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Management's Responsibility for the Financial Statements

The Society's Management is responsible for the preparation of these financial statements that give a true and fair view of the financial position and financial performance of the Society in accordance with the Accounting Standards and other accounting principles generally accepted in India. This responsibility also includes maintenance of a d e q u a t e accounting records for safeguarding the assets of the Society and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statement that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Society's management is responsible for assessing the society's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Society's management either intends to liquidate the Society or to cease operations, or has no realistic alternative but to do so.

The Society's Management is also responsible for overseeing the Society's financial reporting process.



Auditor's Responsibility for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal financial control relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Society's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Society's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Society to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Materiality is the magnitude of misstatements in the financial statements that, individually or in aggregate, makes it probable that the economic decisions of a reasonably knowledgeable user of the financial statements may be influenced. We consider quantitative materiality and qualitative factors in (i) planning the scope of our audit work and in evaluating the results of our work; and (ii) to evaluate the effect of any identified misstatements in the financial statements.

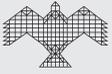
We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

For **DELOITTE HASKINS & SELLS LLP**
Chartered Accountants
(Firm Registration No. 117366W/ W-100018)

Sd/-
Jayesh Parmar
(Partner)
(Membership No. 106388)
(UDIN - 24106388BKCUCT8020)

MUMBAI,
Dated: October 25, 2024



BALANCE SHEET AS AT MARCH 31, 2024

Particulars	As at March 31, 2024 (In Rupees)	As at March 31, 2023 (In Rupees)
FUNDS AND LIABILITIES		
Funds		
(a) Corpus Fund	90,210,000	90,210,000
(b) Fixed Assets Fund	57,151,978	60,930,893
(c) Sponsored Research Funds	56,203,852	103,261,139
(d) Other Funds	14,200,000	32,000,000
(e) Income & Expenditure Account	33,397,616	24,120,793
	251,163,446	310,522,825
Current Liabilities and Provisions		
(a) Current Liabilities	13,784,427	2,933,416
	13,784,427	2,933,416
TOTAL	264,947,873	313,456,241
ASSETS		
(a) Fixed Assets	75,295,437	80,434,018
(b) Investments	78,305,500	112,626,500
(c) Loans and Advances	18,340,669	9,139,966
(d) Cash and Bank Balances	89,699,194	111,063,257
(e) Other Receivables	3,307,073	192,500
TOTAL	264,947,873	313,456,241

In terms of our report attached.
For **Deloitte Haskins & Sells LLP**
Chartered Accountants

For **National Institute of Advanced Studies**

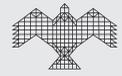
Sd/-
Jayesh Parmar
Partner

Sd/-
Dr. Shailesh Nayak
Director

Sd/-
P. Srinivasa Aithal
Head-Administration

Place : Mumbai
Date : October 25, 2024

Place : Bengaluru
Date : October 25, 2024



INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED MARCH 31, 2024

Particulars	For the year ended March 31, 2024 (In Rupees)	For the year ended March 31, 2023 (In Rupees)
Income		
Grant income	191,841,471	183,770,101
Other income	14,937,080	16,961,638
Total Income	206,778,551	200,731,739
Expenses		
Sponsored Research Expenditure	108,817,471	105,682,032
Research Expenditure	75,490,242	92,413,381
Establishment Expenditure	29,400,326	28,177,937
Depreciation	5,197,153	5,643,553
Total Expenses	218,905,192	231,916,903
Excess of Expenditure over Income for the year carried to Balance Sheet	(12,126,641)	(31,185,164)

In terms of our report attached.
For **Deloitte Haskins & Sells LLP**
Chartered Accountants

For **National Institute of Advanced Studies**

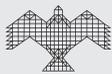
Sd/-
Jayesh Parmar
Partner

Sd/-
Dr. Shailesh Nayak
Director

Sd/-
P. Srinivasa Aithal
Head-Administration

Place : Mumbai
Date : October 25, 2024

Place : Bengaluru
Date : October 25, 2024



NATIONAL INSTITUTE OF ADVANCED STUDIES

MATERIAL ACCOUNTING POLICIES AND NOTES ON ACCOUNTS FORMING PART OF THE FINANCIAL STATEMENTS AS AT MARCH 31, 2024

1) (a) Organization Overview:

The National Institute of Advanced Studies ("Society/Institute") is registered as a Society under the Karnataka Societies Registration Act, 1960, vide No.139/88-89 dated June 20, 1988.

The Society is registered under Section 12A (a) of the Income Tax Act, 1961, vide No. Accts/718/10A/VOL./A II/N-110, dated February 13, 1990, which has been renewed vide provisional registration No.AAATN2269AE20214 dated 28 May 2021, till 31 March 2026.

Society is registered under Foreign Contribution (Regulation) Act, 1976 ("FCRA") vide registration no. 094420614 dated October 1, 1993.

Society is registered under 11-Clause (i) of first proviso to sub-section (5) of Section 80G of the Income Tax Act, 1961, vide No. AAATN2269AF20214, dated May 28, 2021. The exemption is valid till March 31, 2026.

FCRA authorities have renewed FCRA certificate for the period starting from April 1, 2022 to March 31, 2027 vide letter dated January 5, 2022.

(b) The main objectives of the Society include:

- I. To establish and develop an Institute of Advanced Studies in order to impart higher knowledge and conduct Research;
- II. To set up and sponsor research groups on problems relating to the development of the country and for identifying problems which require immediate study and resolution; and
- III. To provide programmers of varying duration for executives and officers of Government, Public and Private Enterprises, and Personnel of Universities, Defense services and the Professions, to broaden their cultural and academic background for the successful performance of their duties.

2) Material Accounting Policies:-

A. Basis of Preparation of Financial Statements:

The financial statements have been prepared in accordance with historical accounting convention and on the accrual basis of accounting. The Accounting Policies adopted in preparation of financial statements are consistent with those followed in the previous year.

B. Fixed Assets:

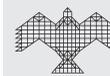
Fixed assets are stated at written down values i.e. cost of acquisition less accumulated depreciation. Cost of acquisition of fixed assets includes all direct expenses relating to acquisition of the asset.

C. Depreciation:

Depreciation on the fixed assets has been provided on written down value basis, in accordance with the rates prescribed under Income Tax Act, 1961.

D. Revenue Recognition:

- a) Donation/Revenue Grants are recognized as income in the Income and Expenditure Account in the period in which the collections are actually received.
- b) Earmarked grants are initially credited to a liability account in the Balance Sheet and are transferred to Income and Expenditure Account in the year in which and to the extent to which the Institute complies with the conditions attached to them.



- c) Interest Income is recognized in the time proportion basis taking into account the amount outstanding.
- d) Income from symposia, seminars and workshops are recognized as income as and when symposia, seminars and workshops are organized and held.

E. Foreign Exchange Transactions:

Transactions denominated in foreign currency are accounted at the transacted exchange rates.

F. Investments:

Investments are stated at cost less provision for diminution, other than temporary, in the value of such investments.

G. Employee Benefits:

Employee benefits include provident fund, gratuity fund and compensated absences.

Short Term Benefits:

Short term Employee Benefits are accounted as expenses in the income and expenditure account in the year in which service is rendered. These benefits include compensated absences, which are expected to occur within twelve months after the end of the period in which the employee renders the related service.

Post Employment Benefits and Other long term Employee Benefits:

Provident Fund contributions in respect of Employees' is deposited to the Employees' Provident Fund Organisation as per statutory rates.

For defined benefit plans in the form of gratuity fund, the cost of providing benefits is determined using the Projected Unit Credit method, with actuarial valuations being carried out at each Balance Sheet date. Actuarial gains and losses are recognized in the Income & Expenditure Account in the period in which they occur. Past service, cost is recognised immediately to the extent that the benefits are already vested and otherwise is amortised on a straight-line basis over the average period until the benefits become vested.

Compensated absences, which are not expected to occur within twelve months after the end of the period in which the employee renders the related services, are recognised as an actuarially determined liability at the present value of the defined benefit obligation at the balance sheet date, as reduced by the fair value of scheme assets.

H. Provisions and Contingent Liabilities:

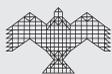
Provisions are recognized when the society recognizes that it has a present obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation and the amount can be reasonably estimated.

Provisions are not discounted to their present value and are determined based on best estimate required to settle the obligation at the balance sheet date. These are reviewed at each balance sheet date and adjusted to reflect the current best estimates.

Contingent liabilities are not recognized but disclosed in the notes to financial statement. Contingent assets are neither recognized nor disclosed in the financial statement.

I. Revolving Fund:

Revolving Fund is in the nature of contingency reserve fund. The interest earned on investment made out of the Revolving fund is used to meet the revenue expenditure of the Institute and the fund may be used to meet shortfall, if any, in general fund and replenished back as and when surplus funds are available, in order to keep the revolving fund intact. During the year the Institute had drawn an



amount of Rs.178.00 lakhs (Previous year March 31, 2023, of Rs.310.00 lakhs) to meet the revenue shortfall.

J. Recognition of Capital Grants:

Capital Grants received towards cost of fixed assets is credited to Fixed Assets Fund. The society has adopted Accounting Standard -12 issued by ICAI, in the case of Capital Grants. Accordingly, an amount equal to the depreciation on the assets created out of such grants is transferred from Fixed Assets Fund to Income and Expenditure Account.

3) Section 12A Registration:

The Society is registered under Section 12A (a) of the Income Tax Act, 1961, vide No. Accts/718/10A/VOL./A II/N-110, dated February 13, 1990, which has been renewed vide provisional registration No.AAATN2269AE20214 dated 28 May 2021, till 31 March 2026. This entitles the society to claim an exemption from Income tax provided certain conditions laid down in the Income Tax Act 1961 are complied with. Provision for tax will be made only in the year in which the Society is unable to establish reasonable certainty of its ability to fulfill these conditions.

4) Land Lease:

The NIAS had entered into lease agreement with Indian Institute of Science, Bangalore ("Institute") dated August 28, 1990 for plot of land of 5 acres for establishment of NIAS by way of license to NIAS, for the organisation and functioning of the NIAS at the Institute. The institute will levy a nominal amount of Rs. 1 (Rupee One only) per annum on the NIAS as license fee for the use of Institute ground. The said lease is perpetual in nature till the conditions specified in the agreement is observed. In failure to non-observance of the said conditions the Institute will revoke the licence and enter upon the site and buildings.

5) Employee benefits

a). Defined contribution plan

The Institute makes Provident Fund contribution to defined contribution retirement benefit plans for qualifying employees. Under the scheme, the Institute is required to contribute a specified percentage of the payroll costs to fund the benefits and thereafter the Institute does not have any legal or informal obligations to pay additional sums. The contributions payable to these plans by the Institute are at rates specified in the rules of the schemes. The amount recognized as an expense towards contribution to Provident Fund for the year aggregated to Rs.97,25,619/- (March 31, 2023 : Rs.1,00,87,872/-)

b). Defined benefit plans

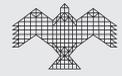
The Institute offers the following defined benefit schemes to its employees

i). Gratuity

The Institute makes annual contributions to the Employee's Group Gratuity Assurance scheme of the Life Insurance Corporation of India, a funded defined benefit plan for eligible employees. The scheme provides for lump sum payment to vested employees at retirement, death while in employment or on termination of employment of any amount equivalent to 15 days salary for each completed year of service or part thereof in excess of six months. Vesting occurs upon completion of five years of service. The present value of the defined benefit obligation and the related current service cost were measured using the "Projected Unit Credit" method, with actuarial valuations, which has been carried out for the first time, as on balance sheet date.

ii). Compensated Absences

The Institute makes annual contributions to the Employee's Group Leave Encashment Scheme of the Life Insurance Corporation of India, a funded defined benefit plan for eligible employees. The scheme provides for lump sum payment to vested employees at retirement, death while in employment or on termination of employment of any amount equivalent to 30 days salary for each completed year of service or part thereof, subject to a maximum of 300 days. The present value of the defined benefit obligation and the related current service cost were measured using the "Projected Unit Credit" method, with actuarial valuations, which has been carried out for the first time, as on balance sheet date.



The disclosure as required under AS 15 - employee benefits are as follows:

Principal assumptions used	For the year ended March 31, 2024 (in Rupees)	
	Gratuity (Funded)	Compensated absences (Funded)
Discount rate	7.00%	7.00%
Salary escalation	7%	7%
Attrition rate:	5.00% p.a. for all service groups	5.00% p.a. for all service groups
Retirement age:	60 years	60 years
Mortality rate during employment	Indian assured lives mortality 2012-14 (Ultimate)	Indian assured lives mortality 2012-14 (Ultimate)
Expected rate of return on plan assets (p.a)	7.00%	7.00%

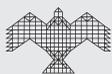
- 6) Due to the cash flow deficit, the Council of Management resolved via circular resolution dated 12 March 2024 to authorize the management to withdraw an amount of up to Rs.218 lakhs from the revolving fund. During the year, the Institute had drawn an amount of Rs.178 lakhs (Previous year March 31, 2023, of Rs.310 lakhs) to meet the deficit. Since, the revolving fund is to meet temporary funding requirement and needs to be replenished, the amount drawn down has been adjusted with accumulated Income and Expenditure balance.
- 7) Previous years' figures have been regrouped/ reclassified wherever necessary.
- a). Grant from DoS of Rs.39,99,933/- has been reclassified from Grant Income to Other Funds under Note No.5.1.
- b). Opening balance of Grant of Rs.40/-has been reclassified from Income and Expenditure (Note No.7) to Other Funds under Note No.5.1.

For and on behalf of National Institute of Advanced Studies

Place: Bengaluru
Date: October 25, 2024

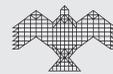
Sd/-
Dr. Shailesh Nayak
Director

Sd/-
P. Srinivasa Aithal
Head-Administration

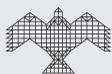


RESEARCH PROGRAMMES AND PROJECTS

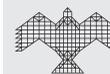
Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in lakhs)
School of Conflict and Security Studies					
1.	Preparation of Social Impact Assessment for proposed Kalpasar Dam at Gulf of Khambhat, Gujarat	NCCR-MoES	Anshuman Behera	Dec'21 – Jul'23	140.78
2.	Formal and Informal Decentralization: A Study of Manipur and Mizoram	ICSSR	Anshuman Behera	Mar'22 – Mar'24	12.60
3.	KAS Sponsored Project Study on Armed Conflicts and Peace Process: A Global Primer (IPRI)	KAS	Suba Chandran	Apr'23 – Mar'24	32.00
4.	Hosting of the BRICS YS Forum Secretariat and Implementation of Its Scientific Activities/Events etc.	DST	Suba Chandran	Apr'23 – Mar'24	71.31
5.	NIAS-ICWA Research on PR Insights: Weekly Dispatch on Contemporary Pakistan	ICWA	Suba Chandran	Apr'23 – Mar'24	14.00
6.	NIAS-ICWA Research on Indian Neighborhood	ICWA	Suba Chandran	Apr'23 – Mar'24	3.00
7.	Cooperative cum Competitive Federalism: Interrogating Politics of Decentralization and Local Governance in India	HSSF	Anshuman Behera	Apr'23 – Dec'23	13.29
8.	A Comprehensive Research Study on the Economic Impact Evaluation of Oil India Limited in the State of Assam	Oil India Limited	Anshuman Behera	Aug'23 – Dec'23	11.39
9.	Research Study titled Understanding Chinese Engagement in South Asia (UCESA)	UoSC	Suba Chandran	Jan'24 – Dec'24	48.00
School of Humanities					
10.	Historical Water Systems in the Extended Landscape of Malaprabha River Valley	DST	MB Rajani	Aug'19 – Mar'24	36.17
11.	Cultural Landscape Research: Characterising and Managing Built Heritage Sites	ISRO	MB Rajani	Oct'19 – Sept'23	39.23
12.	Understanding the Past: Intervention through dissemination-Phase-II	SFL	Smriti Haricharan	Nov'20 – Oct'23	15.00
13.	NIAS and SAC, Ahmedabad joint work plan on Geo-archaeology	SAC, ISRO	MB Rajani	Dec'20 – Mar'24	17.76
14.	Archeometallurgical, Ethnometallurgical and Ethnoarchaeological Investigations on Metal Artefacts and Related Tangible Heritage from Early Tamil Sites	DST	Sharada Srinivasan	Sept'21 – Sept'24	119.60



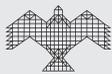
Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in lakhs)
15.	Investigation into the Chaotic Dynamics of Neural Networks	SERB	Nithin Nagaraj	Dec'21 – Dec'24	10.05
16.	The Visual Ethnography of Tribal Culture: An Emic Representation Through a Thematic Painting Series-25 Paintings by Artists from Three Tribal Communities on Their Life, and Living	SKF	Sangeetha Menon	Apr'22 – Mar'24	7.00
17.	Orientation of Temples of South India and Their Astronomical Associations	IKS	MB Rajani	Jan'23 – Dec'24	14.66
18.	Material Culture and Experimental Crafts Explorations into Early Tamil and Harappan Metal, Pottery and Bead Finds	TCS	Sharada Srinivasan	Mar'23 – Feb'26	158.24
19.	Philosophy of Health and the Healing Self: The Urgency of Humanising Health, and Its Philosophical, Interdisciplinary and Intersocial Imaginations.	ICPR	Sangeetha Menon	Feb'24 – Jan'26	5.00
20.	Unlocking the Sanskrit Effect: A Carnatic Rhythm and Mantra based Intervention Approach for Cognitive Training in Dyslexia	AICTE-IKS	Deepti Navaratna	Mar'24 – Feb'26	14.65
School of Natural Sciences and Engineering					
21.	To Understand the Interaction Between Components of Earth Systems and Human Systems at Various Spatial and Temporal Scales	MoES	R Srikanth	May'18 – Oct'23	318.00
22.	Urban Ecologies: Governing Nonhuman Life in Global Cities	ERC	Anindya Sinha	Aug'18 – Jul'25	184.38
23.	Early Fusion Music: Cross-Cultural Musical Exchanges in Colonial India from the late 18 th to the Early 20 th Century	DST	Anindya Sinha	Aug'19 – Mar'24	40.84
24.	Food Object Recognition in Primates: How Do Monkeys Identify Novel Food as Edible Objects	DST	Sindhu Radhakrishna	Mar'20 – Sept'23	24.56
25.	Addressing The Complex Challenges Facing India and Global Society in the Area of Environmental Sciences	IGMT	Vinay Kumar Dadhwal	Sept'20 – Aug'25	300.00
26.	Epilepsy Research – 1) Use Database and Molecular Modeling Techniques, to Modify the Presently Used AEDs for Better Performance, and 2) Synthesise and Test on Biological Systems the Designed Derivative Drugs	BBST	Madhusoodan Hosur	Apr'21 – Mar'24	44.70
27.	Dynamics of Complex Systems: Effect of the Environment on Living Systems	SERB	Janaki Balakrishnan	Aug'21 – Jul'24	29.16



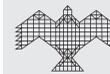
Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in lakhs)
28.	Inspire Faculty Fellowship Programme	DST	Ramya B Prabhakaran	Aug'21 – Jul'26	112.40
29.	Preparation of Draft Chapter on “Climate Change Mitigation for India’s Third National Communication”	MOEF& CC	Tejal Kanitkar	Sept'21 – May'23	34.25
30.	Identification of Potential Sites for Nuclear Power Plants for A Sustainable Energy Mix	BRNS-DAE	R Srikanth	Dec'21 – Dec'23	22.03
31.	Coping With an Invader: Understanding the Behavioral Adaptations Exhibited by the Juveniles of Deccan Mahseer in Response to Alien Invasive Fishes	SERB-DST	VV Binoy	Feb'22 – Feb'25	39.89
32.	Assessment of A Multidisciplinary Framework for Human-Wildlife Coexistence in the Indian Western Himalaya	Rufford Foundation	Anindya Sinha	Apr'22 – Jun'23	9.80
33.	Enhancing Domestic Coking Coal Availability to Reduce the Import of the Coking Coal	Niti Aayog	R Srikanth	Aug'22 – Feb'24	21.18
34.	To Establish the Current Status of Wildlife Crime and Other Facts of Illegal Wildlife Trade in Urban and Rural Parts of Karnataka	HSI	Sindhu Radhakrishna	Feb'23 – Feb' 24	10.08
35.	Study the Interactions Between Energy Security, Environment, and Climate Change	OPSA	R Srikanth	Mar'23 – Mar'26	92.96
36.	Identifying Emission Hot Spots and Developing High-Resolution Emission Inventory of Major Air Pollutants Using Drone Technology in Bengaluru	EMPRI	Gufran Beig	Apr'23 – Oct' 24	45.40
37.	Human Reliability Programme	Texas A&M University	M Sai Baba	Apr'23 – Mar'24	18.16
38.	Support to the EU’s Bilateral Relations with Strategic Partners on Climate-Related Policies and Investment (SPIPA II)	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	Tejal Kanitkar	Jun'23 – Jun'24	44.14
39.	An Evidence-based Approach Towards Assessing Energy Transition in the Residential Cooking Sector in India	MECS	Rudrodip Majumdar	Jun'23 – Jun'24	25.00
40.	Student-Scientist Network Monitoring the Impact of Climate Change and Communicating Risk of Natural Disasters on the Coasts of Kerala and Karnataka	DST	VV Binoy	Sept'23 – Sept'25	32.30
41.	Research on India’s Energy Transition to Net Zero by 2070	TCE	R Srikanth	Jan–Mar' 24	3.00



Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in lakhs)
42.	Investigating the Role and Patterning of Gut Microbiota in Crop Raiding and Non-Raiding Primates in India	DBT	Vani Kulkarni	Jan'24 – Dec'26	50.88
43.	Mitigation Actions for India's 1 st Biennial Transparency Report (BTR-1), 4 th Biennial Update Report (BUR-4), and 4 th National Communication (NC-4)	MoEFCC-UNDP	Tejal Kanitkar	Jan'24 – Dec'26	98.61
44.	Providing Inputs on GHG Emission Estimates from Aviation, Navigation, and Railways for BTR1, BUR4 and NC4 Communications to UNFCCC	MoEFCC-UNDP	Sumana Bhattacharya	Jan'24 – Dec'24	36.80
45.	Emission Estimation of HFCs, PFCs, Unspecified Mix of HFC and PFC, SF6 and NF3 from Industrial Processes and Product Use Sector for BTR1, BUR4 and NC4 Communications to UNFCCC	MoEFCC-UNDP	Gufran Beig	Jan'24 – Dec'24	36.80
46.	Impact of Monkey-proofing on Human-Macaque Conflict: Conservation of the Endangered Lion-Tailed Macaque in the Southern Western Ghats, India	Rufford Foundation	Anindya Sinha	Feb'24 – Jan'25	10.33
47.	Assist NTPC to Develop Strategies and Action Plans for Growing the Share of Nuclear Energy in Its Overall Generation Mix, Thereby Contributing to the National Goals of Reducing the Emission Intensity of India's GDP and the Long-Term Goal of Achieving Net Zero Emissions by 2070	NTPC	R Srikanth	Mar'24 – Feb'25	38.10
48.	Study to Collect and Analyze "Preliminary Information for Selecting Greenfield Sites for Establishing Nuclear Power Plants in India"	NPCIL	R Srikanth	Mar'24 – Feb'26	82.20
49.	Preliminary Information as per Expected guidelines of the AERB Code for Selecting These Potential Sites for SMRs in India	JRPPL	R Srikanth	Mar'24 – Feb'25	36.00
School of Social Sciences					
50.	Interdisciplinary Approaches to Economic Issues	RBI	Narendar Pani	On-going	6.00 (Yearly Interest)
51.	Inequality and Human Development	TCSF	Narendar Pani	Dec'20 – Jul'23	518.50
52.	Vocational Skill Policy, Dropout Reduction and Employability Among Adolescent Youth: A Study in Odisha and Assam	TSWT	Jeebanlata Salam	Nov'20 – Aug'23	106.88
53.	Labour Supply Chains in the Construction Industry: Circular Migrants, Contracting and Covid	APU-IITH	Carol Upadhya	Oct'21 – Sept'23	7.29



Sl. No.	Title of the R&D Project	Funding Agency	Name of the Project Investigator	Duration	Value (Rs. in lakhs)
54.	NIAS IKS Centre on Mathematics, Computation and Information Science	IKS	Shailaja Sharma D	Apr'22 – Jun'24	14.05
55.	Influence of Minority and COVID-19 Stressors on HIV Risk and Access to Services Among MSM and Transgender Women: A Longitudinal Observational Cohort (S3-Plus) Study in Chennai	IAVI	Aleena Sebastian	Apr'22 – Jun'23	27.90
56.	NIAS-EGT Programme: Identification and Mentoring Gifted and Talented Children in India-NIAS ALCs School Partnership Projects for Age Group 11-16 years	RGMFE	Anitha Kurup	Mar'23 – Mar'26	200.67
57.	Research on the Linkages Between Migration, Urbanization and Food Security in India	AAGS	Chetan Choithani	Jun'23 – Jun'24	4.81
58.	3HP Linkages Project: Integrating a Community-Led, Peer-Delivered Model of Prevention, Screening and Treatment Referral Services for Viral Hepatitis (HBV/HCV/HAV) and Prep within HIV Prevention Interventions for Sexual and Gender Minorities in India	Gilead Sciences, INC	Aleena Sebastian	Feb'24 – Jan'26	82.97



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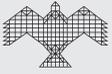
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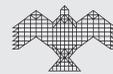
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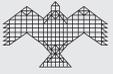
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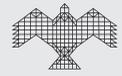
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PUBLICATIONS

BOOKS

Behera Anshuman and Hippu Salk Kristle Nathan (2023). *Negotiating development at the margins: Natural resources, conflicts and people's movements in Odisha*. Routledge.

Kapur Malavika (2023). *Lore of the honey gatherers and other stories*. New Delhi: Saptarishi Publishing.

Kapur Malavika (2024). *From Freud to Zuckerberg and back*. New Delhi: Storywell Books.

Mahalingam Sudha and Kapilan Mahalingam (2023). *Independent energy regulation in a developing economy: Stakeholder perspectives and legal interpretations*. Singapore: Springer.

Menon Srikumar M. (2024). *God on the hill and other stories*. New Delhi: Storywell Books.

Rajendran C. P. and Kusala Rajendran (2024). *The Rumbling earth: The story of Indian earthquakes*. Vintage.

EDITED BOOKS

Behera Anshuman ed. (2024). *Maoist insurgency, state and people: Overlooked issues and unaddressed grievances*. London: Routledge.

Chirayath Sunil S. and M. Sai Baba eds. (2023). *Human reliability programmness in industries of national importance for safety and security*. Singapore: Springer.

Khalid Monowar A., Dinesh K. Srivastava, Vinod P. Sharma and Tabassum Jehan eds. (2024). *Environment and biodiversity conservation*. New Delhi: Gutenberg.

Menon Sangeetha, Saurabh Todariya and Tilak Agerwala eds. (2024). *AI, Consciousness and the new humanism: Fundamental reflections on minds and machines*. Singapore: Springer.

Miller Jerry F., Anitha Kurup, S.S. Iyengar, Naveen Chaudhary and Niki Pissinou eds. (2024). *Mentoring beyond AI: Forging pioneers for a dawning era of artificial intelligence, the metaverse and space*. Florida: Quest Publishing.

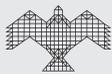
JOURNAL ARTICLES

Ahmed Aariz, Juhi Chatterjee, Rakesh Gomaji Nannewar and R. Srikanth (2024). Fulfilling domestic water demand in semiarid regions of North Karnataka: Challenges and way forward. *International Journal of Rural Management*. DOI: <https://doi.org/10.1177/09730052241236075>

Allahudheen S., A. Bhuvana Chandra, Rabindra K. Nayak, Vinay Kumar Dadhwal, M. Krishnapriya and M.V. Lakshmaiah (2023). High-resolution GEOS-Chem model for Indian monsoon region: Seasonal cycle and budget of tropospheric CO₂. *Atmospheric Environment* 309:119913.

Amatullah Shaima and Shalini Dixit (2023). Situatedness of school choice among Muslim students: An intersectional approach. *Contemporary Education Dialogue* 20(2): 206-235.

Anand Shaurabh and Sindhu Radhakrishna (2024). Does mining escalate human-wildlife conflict?: Insights from human-rhesus macaque conflict in a coal-mining region in Southern India. *Human Ecology* 52:129-141.



Athira Kakkara, Raghunathan Nair Jaishanker, Sajeev C. Rajan and Vinay Kumar Dadhwal (2023). Remote sensing of flowers. *Ecological Informatics* 78: 102369.

Banerjee Debosree (2023). Risk preference, gender, responsibility: A cross-cultural study from India. *Journal of Cross-Cultural Psychology* 54(6-7): 722-741.

Bano Shahana, Vrinda Anand, Ritesh Kalbande, Gufran Beig and Devendra Singh Rathore (2023). Spatio-temporal variability and possible source identification of criteria pollutants from Ahmedabad-a megacity of Western India. *Journal of Atmospheric Chemistry* 81(1).

Barua Maan and Anindya Sinha (2023). Cultivated, feral, wild: The urban as an ecological formation. *Urban Geography* 44(10): 2206-2227.

Behera Anshuman, Gaurav Nayak and Shyam Hari P. (2024). Making sense of Nepal's nationalism: Implications for the India–Nepal relationship. *India Quarterly: A Journal of International Affairs* 80(1): 1-17.

Beig Gufran, V. Anand, N. Korhale, S.B. Sobhana, K.M. Harshitha and R.H. Kripalani (2024). Triple dip La-Nina, unorthodox circulation and unusual spin in air quality of India. *Science of the Total Environment* 920:170963.

Chaudhuri Tanusree and Madhusoodan Vijayacharya Hosur (2023). Molecular modelling reveals how abundance of $\alpha 4$ sub-type in synaptic GABARA receptor can lead to refractoriness toward GABA and BZ-type drugs. *Journal of Biomolecular Structure and Dynamics*. DOI: <https://doi.org/10.1080/07391102.2023.2277858>

Chowdhury Anmol, Sneha Gutgutia, Shruti Ragavan and Shubhangi Srivastava (2024). A 'South within the South': Writing from more-than-human entanglements in Guwahati, India. *Scottish Geographical Journal*. DOI: <https://doi.org/10.1080/14702541.2024.2324124>

Das Soumya Deep and R. Srikanth (2023). A Balanced scorecard to enable electricity distribution sector reforms in India. *The Electricity Journal* 36(6).

Deepanshi, Rahasya Barkur, Devishi Suresh, Shyam Lal, C. Sudhakar Reddy and P.G. Diwakar (2023). RSCDNet: A Robust deep learning architecture for change detection from bi-temporal high resolution remote sensing images. *IEEE Transactions on Emerging Topics in Computational Intelligence* 7(2): 537-551.

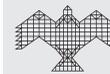
Garima Shukla, A.K. Sudheer, Sachin S. Gunthe, Gufran Beig and Ashwini Kumar (2023). Seasonal variability in fine particulate matter water content and estimated pH over a coastal region in the northeast Arabian Sea. *Atmosphere* 14(2).

Gautama Pushya A., Nirmala Subramanian, Ravi Gopal Varma and G.G. Gangadharan (2023). Integrative management of anaplastic astrocytoma through a combination of ayurveda and conventional care: A case report. *Journal of Ayurveda and Integrative Medicine* 14(5).

Ghosh Tanmay, Tejal Kanitkar and R. Srikanth (2023). Affordable and sustainable transportation: Key drivers and policy choices for a megacity in India. *Case Studies on Transport Policy* 13:101061.

Graham Ailish M., Richard J. Pope, Martyn P. Chipperfield, Sandip S. Dhomse, Matilda Pimlott, Wuhu Feng, Vikas Singh, Ying Chen, Oliver Wild, Ranjeet Sokhi and Gufran Beig (2024). Quantifying effects of long-range transport of NO₂ over Delhi using back trajectories and satellite data. *Atmospheric Chemistry and Physics* 24(2): 789-806.

Jain A.K., Malay Mukul, N.C. Pant, P.K. Mukherjee, Paramjeet Singh, Tejpal Singh, C.P. Rajendran, James Pebam, Preeti Singh, Gargi G. Deshmukh and Rahul Dixit (2024). Tectonics of the Northwestern, Sikkim and Eastern Himalaya. *Proceedings of the Indian National Science Academy*. DOI: <https://doi.org/10.1007/s43538-024-00255-4>



Jayaraman T. and Tejal Kanitkar (2023). Global climate targets: Peaking, emissions reduction and renewable energy (TWN Briefing Paper). Third World Network Berhad (198701004592 (163262-P)): 1-11.

Kalaiaarasi Ka Sa, Kritika Singh and Nisar Kannangara (2023). Mapping India's exposure to climate change: A district level study. *Current Science* 125(2).

Kalbande Ritesh, Bipin Kumar, Sujit Maji, Ravi Yadav, Kaustubh Atey, Devendra Singh Rathore and Gufran Beig (2023). Machine learning based quantification of VOC contribution in surface ozone prediction. *Chemosphere* 326.

Kanitkar Tejal, Akhil Mythri and T. Jayaraman (2024). Equity assessment of global mitigation pathways in the IPCC sixth assessment report. *Climate Policy*. DOI: <https://doi.org/10.1080/14693062.2024.2319029>

Katyal Sucharit, Sisir Roy, Philippe R. Goldin and Anna-Lena Lumma eds. (2023). The Varieties of contemplative experiences and practices. *Frontiers in Psychology*. 14 (2023): 1232999.

Khurana Hitesh, Rudrodip Majumdar and Sandip K. Saha (2024). Improved realistic stratification model for estimating thermocline thickness in vertical thermal energy storage undergoing simultaneous charging and discharging. *Journal of Energy Storage* 82:110490.

Kumar Meera, Sukanya G. and Sangeetha Menon (2023). Transgressing narrative boundaries: Exploring how indigenous faith—healing rituals from Kerala move beyond the limitations of narrative therapy. *Psychological Studies* 68: 281-290.

Kumar Praveen, Gufran Beig, Vikas Singh, Saroj Kumar Sahu, Devendraa Siingh and B.R. Bamniya (2023). Model simulation of carbonaceous fine particulate matter using SAFAR emission inventory and comparison with EDGAR-HTAP simulations. *Atmospheric Environment* 315:120147.

Kumar Praveen, Gufran Beig, S.K. Sahu, Ravi Yadav, S. Maji, V. Singh, and B.R. Bamniya (2023). Development of a high-resolution emissions inventory of carbonaceous particulate matters and their growth during 2011–2018 over India. *Atmospheric Environment* 303:119750.

Mani Sunil, Vinay Kumar Dadhwal and C.S. Shaijumon (2023). India's space economy, 2011–12 to 2020–21: Its size and structure. *Space Policy* 64:101524.

Menon Srikumar M. (2023). A Unique sun-facing rock-cut feature at Badami, Karnataka, India. *Journal of Astronomical History and Heritage* 26(2): 373-390.

Nagappa Rajaram (2023). The Hypersonic missile conundrum. *Journal of Air Power and Space Studies* 18(1).

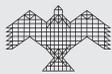
Nannewar Rakesh Gomaji, Tejal Kanitkar and R. Srikanth (2023). Role of agrometeorological advisory services in enhancing food security and reducing vulnerability to climate change. *Weather, Climate and Society* 15(4): 1013-1027.

Nayak Shailesh (2023). Regional cooperation to preserve the Himalayan system. *National Security* 6(1): 25-45.

Nayak Shailesh (2023). Towards stewardship of oceans: Role of G20 countries. *Current Science* 124(9): 1019-1020.

Nayak Shailesh (2024). From ocean science to sustainable blue economy. *Current Science* 126(2): 155-160.

Pandey Om Prakash, Mukund Sharma, Bandana Shukla, Madhav Kumar, Ram-Awatar, G. Parthasarathy, Sai Valiveti Venkata Sesha, Bojja Sreedhar, Priyanka Tripathi, Dayal Anurodh Mohan, Chandrakala Koteswara (2023). Presence of infratrappean gondwana sediments below deccan volcanic covered 1993 killari earthquake region, Maharashtra (India) and geodynamical instability of the south Indian craton. *Geological Journal* 58(7): 2473-2489.



Pandian Arul, Nagaraj M. Chelliah, Pradeep K. Rohatgi and Mirle K. Surappa (2023). Effect of melt temperature on microstructural and strength properties of in-situ aluminum metal matrix composites containing SiCNO particles. *Journal of Composite Materials* 57(9): 1571-1578.

Pani Narendar and Debosree Banerjee (2023). Is Inequality the unstated constraint on India's growth?. *Economic and Political Weekly* 58(7): 41-48.

Pani Narendar (2023). Women and their interests in rural India. *Indian Journal of Gender Studies* 30(3): 288-308.

Pani Narendar, Debosree Banerjee and Paul Thomas (2023). The National bias of India's first-past-the-post system. *Studies in Indian Politics* 11(1): 49-65.

Panicker Abhilash S., K. Sandeep, A.S. Gautam, S. Kumar, Gufran Beig, R. Latha and B.S. Murthy (2023). Black carbon characteristics over a semi-urban environment in the Garhwal Himalayas. *Pure and Applied Geophysics* 180: 2879-2888.

Parthasarathy G. (2023) Kullaiah Byrappa (Personal News). *Current Science* 125(4): 446.

Pasha S.V. and Vinay Kumar Dadhwal (2023). Age-based stratification to estimate aboveground biomass (AGB) and carbon stocks of rubber plantations in Tripura. *Journal of the Indian Society of Remote Sensing* 52: 711-721.

Pasha S.V., Sanjeev Kumar Varshney and Arindam Bhattacharyya (2024). BRICS young scientists and innovators forum: Meeting report. *Current Science* 126(5): 530-531.

Pasha S.V. and Vinay Kumar Dadhwal (2024). National analysis on variations in estimates of forest cover dynamics over India (2001–2020) using multiple techniques and data sources. *Spatial Information Research*. 32: 451-461.

Pathakoti Mahesh, A.L. Kanchana, D.V. Mahalakshmi, Tania Guha, P. Raja, K. Nalini, K.S. Rajan, M.V.R. Sessa Sai and Vinay Kumar Dadhwal (2023). Implications of emission sources and biosphere exchange on temporal variations of CO₂ and δ¹³C using continuous atmospheric measurements at Shadnagar (India). *Journal of Geophysical Research: Atmospheres* 128(8).

Pujari Ankush Shankar, Rudrodip Majumdar, Sandip K. Saha and Chandramouli Subramaniam (2023). Annular vertical cylindrical thermochemical storage system with innovative flow arrangements for improved heat dispatch towards space heating requirements. *Renewable Energy* 217:119168.

Rajendran C.P. (2023). The Grand challenge of earthquake prediction (Guest Editorial). *Current Science* 125(2): 463-464.

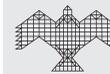
Rajendran C.P. (2024). The Emerging threats to the Himalayan environment. *Breakthrough* 23(4): 10-20.

Ramkumar K.G. and Prakash Panneerselvam (2023). Indian Navy's submarine development programme: A critical assessment. *Journal of Asian Security and International Affairs* 10(3): 395-416.

Rao N.V. Chalapathi and G. Parthasarathy (2024). Recent studies on volcanic materials and chemistry of the earth's interior – an Indian perspective. *Journal of the Geological Society of India* 100(2): 159-167.

Rath Nibedita, Chaitali Nikam, Tephane Seidel, Anindya Sinha and Vijay Arora (2023). Yes, we have the power to end TB!. *Indian Journal of Tuberculosis* 70(3): 269-272.

Rathod Aditi, Abhilash S. Panicker, Gufran Beig and Kaushar Ali (2024). Radiative impacts of organic and elemental carbon aerosols over two urban locations in India. *International Journal of Engineering Applied Sciences and Technology (IJEAST)* 8(10): 45-52.



Reyes-Villegas Ernesto, Douglas Lowe, Jill S. Johnson, Kenneth S. Carslaw, Eoghan Darbyshire, Michael Flynn, James D. Allan, Hugh Coe, Ying Chen, Oliver Wild, Scott Archer-Nicholls, Alex Archibald, Siddhartha Singh, Manish Shrivastava, Rahul A. Zaveri, Vikas Singh, Gufran Beig, Ranjeet Sokhi and Gordon McFiggans (2023). Simulating organic aerosol in Delhi with WRF-Chem using the volatility-basis-set approach: exploring model uncertainty with a Gaussian process emulator. *Atmospheric Chemistry and Physics* 23: 5763-5782.

Roy Chowdhury Supriya (2023). Slums, minorities and the darkness of knowledge. *Economic and Political Weekly* 58(38).

Roy Sisir (2023). Meditation research: Issues and limitations. *Journal of Applied Consciousness Studies* 11(1): 1-2.

Roy Sompriti Deb, Shahana Bano, Gufran Beig and Bandarusatya Murthy (2023). Impact assessment of surface ozone exposure on crop yields at three tropical stations over India. *Environmental Monitoring and Assessment* 195.

Sahu Saroj Kumar, Poonam Mangaraj and Gufran Beig (2023). Decadal growth in emission load of major air pollutants in Delhi. *Earth System Science Data* 15(7): 3183-3202.

Sahu Saroj Kumar, Pallavi Sahoo, Poonam Mangaraj, Gufran Beig, Bhishma Tyagi, Basanta Samal, Ashirbad Mishra and Ravi Yadav (2023). Identification and quantification of emission hotspots of air pollutants over Bhubaneswar: A smart city in eastern India. *Aerosol and Air Quality Research* 23(9).

Saikia Bhaskar J., G. Parthasarathy, Binoy K. Saikia and Rashmi R. Borah (2023). Occurrence of natural fullerene C₆₀ from the iridium-rich Cretaceous-Paleogene (K-Pg) boundary layers of the Um-Sohryngkew River section, Meghalaya, India. *Carbon Trends* 13.

Saikia Bhaskar J., G. Parthasarathy, Chalapathi Rao N.V., Vikas Seth and Rashmi R. Borah (2024). Mineral chemistry of Mahadevpur H4/5 chondrite: characterization of nanodiamonds through micro-Raman spectroscopic studies. *Current Science* 126(5): 574-582.

Sarkar Debarun and Anitha Kurup (2023). Outcome-based education as janus-faced travelling theory: Appeal for a broader research agenda. *Higher Education for the Future* 10(2): 139-152.

Saurabh Kumar and Rudrodip Majumdar (2023). Sub-segment-based approach for assessing growth and energy transition trajectories of Indian two-wheelers. *Journal of Cleaner Production* 430:139559.

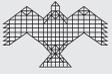
Stotrashyam Swetha, Narayan Sharma, Ajith Kumar and Anindya Sinha (2023). Winter foraging ecology of stump-tailed macaques *Macaca arctoides* in the Hollongapar Gibbon Sanctuary, Assam, India. *Journal of Biosciences* 48: 30.

Sunny Eros M., Balakrishnan Ashok, Janaki Balakrishnan and Jurgen Kurths (2023) The Ocean carbon sinks and climate change. *Chaos: An interdisciplinary Journal of Nonlinear Science* 33(10).

The Urban More-than-Human Collective, Sonja Dumpelmann, Robert R. Gioielli, Stephan Pauleit, Anindya Sinha, Kate Wright and Amy Zhang (2023). Making urban environments: Infrastructures of power, resistance and negotiation. *Global Environment* 16(2): 222-257.

Upadhyaya Carol (2023). Book review essay: Agrarian urbanism and vernacular capital in India'. *Journal of South Asian Development* 18(3): 457-462.

Yadav Ravi, Vrinda Anand, Saroj Kumar Sahu, Ravi Kumar Kunchala, Bhishma Tyagi and Gufran Beig (2024). Editorial: Anthropogenic trace gases and their linkages to meteorology and climate change. *Frontier in Sustainable Cities* 6.



BOOK CHAPTERS

Banerjee Debosree (2024). Understanding Maoism in India with socio-economic discriminations and rebel capabilities In: *Maoist insurgency, state and people: Overlooked issues and unaddressed grievances* edited by Anshuman Behera. London: Routledge, pp.176-194.

Banerjee Sayan and Anindya Sinha (2023). Political and affective ecologies of human–elephant relations: A gendered perspective In: *Composing worlds with Elephants: Interdisciplinary dialogues* edited by Nicolas Laine, Paul G. Keil and Khatijah Rahmat. Marseille: IRD Editions, pp.29-47.

Behera Anshuman (2024). Ideas and ideology of Maoist insurgency in India: An introduction In: *Maoist insurgency, state and people: Overlooked issues and unaddressed grievances* edited by Anshuman Behera. London: Routledge, pp.01-15.

Behera Anshuman (2024). Manufacturing threat: Reality and rhetoric of urban Maoism in India In: *Maoist insurgency, state and people: Overlooked issues and unaddressed grievances* edited by Anshuman Behera. London: Routledge, pp.36-47.

Behera Anshuman (2024). Maoist conflict in India: A critique of state response In: *Maoist insurgency, state and people: Overlooked issues and unaddressed grievances* edited by Anshuman Behera. London: Routledge, pp.217-234.

Chirayath Sunil S. and M. Sai Baba (2023). Introduction In: *Human reliability programmes in industries of national importance for safety and security* Sunil S. Chirayath and M. Sai Baba (eds). Singapore: Springer, pp.01-06.

Chowdhury Supriya Roy (2023). The political economy of labor informality in India: Trends, theories, and politics In: *Handbook of research on the global political economy of work* edited by Maurizio Atzeni et.al. Edward Elgar Publishing, pp.578-587.

Dixit Shalini (2023). Dealing with denial of community history: The case of adivasis in India In: *Towards Inclusive societies: Psychological and sociological perspectives* edited by Dharmendra Nath Tiwari. Routledge.

Kamasani Hrudaya C. (2024). Insurgency versus democracy: The violent clash of ideas between the Maoists and the Indian state In: *Maoist insurgency, state and people: Overlooked issues and unaddressed grievances* edited by Anshuman Behera. London: Routledge, pp.16-35.

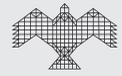
Kamath Anant (2023). Old caste exclusions and new digital divides In: *Technology, policy, and inclusion: An intersection of ideas for public policy* edited by Anjal Prakash et.al. Routledge, pp.179-205.

Kapur Malavika (2023). Paradigm shift to professional psychological practices towards creating an inclusive society In: *Towards inclusive societies: Psychological and sociological perspectives* edited by D.N.Tiwari. Routledge.

Kurup Anitha (2023). Education **In: \$1 Trillion economy: Karnataka's vision: roadmap for accelerated growth in the coming decade.** Planning and Programme Monitoring and Statistics, Government of Karnataka and FICCI, Bengaluru, pp.240-257.

Kurup Anitha and S. Chandrashekar (2023). The Social life of memes and education In: *Encyclopedia of new populism and responses in the 21st century* edited by Joseph Chacko Chennattuserry, Madhumati Deshpande and Paul Hong. Singapore: Springer.

Mandal Moumita (2023). Role of women in sustainable soil management: Some legal reflections In: *Soil law and governance in India* edited by Bharat H. Desai. Switzerland: Springer Nature.



Mandal Moumita (2023). South Asia: A India In: *Yearbook of international environmental law*. Oxford University Press, pp.1-5.

Mandal Moumita and Bharat H. Desai (2023). The Cost of climate change heightened sexual and gender-based violence: A challenge for international law In: *Regulating global climate change* edited by Bharat H. Desai. Amsterdam, Netherlands: IOS Press.

Meenakshisundaram S.S. (2024). Governance in Maoist affected areas In: *Maoist insurgency, state and people: Overlooked issues and unaddressed grievances* edited by Anshuman Behera. London: Routledge, pp.141-155.

Menon Sangeetha (2023). A Discussion on the philosophy of Sri Narayana Guru in the context of consciousness studies In: *Re-interpreting tradition: Critical essays on 20th century Indian thought* edited by Anirban Mukherjee and Ngaleknao Ramthing. New Delhi: NBU Studies in Philosophy, pp.276-287.

Menon Sangeetha (2024). Being “LaMDA” and the person of the self in AI In: *AI, Consciousness and the new humanism: Fundamental reflections on minds and machines* edited by Sangeetha Menon, Saurabh Todariya and Tilak Agerwala. Singapore: Springer, pp.331-349.

Menon Sangeetha, Saurabh Todariya and Tilak Agerwala (2024). Fundamental reflections on minds and machines In: *AI, Consciousness and the new humanism: Fundamental reflections on minds and machines* edited by Sangeetha Menon, Saurabh Todariya and Tilak Agerwala. Singapore: Springer, pp.01-09.

Menon Srikumar M. and Anindya Sinha (2023). Tusks of wisdom: The elephant in the Buddhist art of Kanaganahalli In: *Composing worlds with Elephants: Interdisciplinary dialogues* edited by Nicolas Laine, Paul G. Keil and Khatijah Rahmat. Marseille: IRD Editions, pp.123-135.

Nagappa Rajaram (2023). Human reliability in launch vehicle systems In: *Human reliability programmes in industries of national importance for safety and security* edited by Sunil S. Chirayath and M. Sai Baba. Singapore: Springer, pp.259-271.

Nagaraj Nithin (2024). Testing for causality in artificial intelligence (AI) In: *AI, Consciousness and the new humanism: Fundamental reflections on minds and machines* edited by Sangeetha Menon, Saurabh Todariya and Tilak Agerwala. Singapore: Springer, pp.37-54.

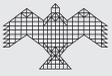
Pandey Arpita and Rudrodip Majumdar (2023). Assessing end-of-life room air conditioner recycling potential for sustainable resource utilization in India: A case study for reducing environmental burden In: *Anthropogenic environmental hazards: Compensation and mitigation* Pankaj Pathak, Rajiv Ranjan Srivastava and Sadia Ilyas (eds). Springer, pp.41-69.

Pandey Arpita and Rudrodip Majumdar (2024). Technological trends in electric passenger car segment in India and medium-term demand for magnet-based rare earth materials In: *E-Mobility in electrical energy systems for sustainability* edited by Lakshmi D. et.al. IGI Global, pp.321-342.

Panneerselvam Prakash (2024). Abe’s Indo-Pacific maritime security initiative In: *India-Japan partnership: Abe the game changer* edited by Srabani Roy Choudhury. New Delhi: KW Publishers.

Panneerselvam Prakash (2024). Autonomous weapon system: Debating legal–ethical consideration and meaningful human control challenges in the military machines In: *AI, Consciousness and the new humanism: Fundamental reflections on minds and machines* edited by Sangeetha Menon, Saurabh Todariya and Tilak Agerwala. Singapore: Springer, pp.243-258.

Panneerselvam Prakash (2024). India-Japan relations and maritime governance in the Indo-Pacific In: *Indo-Pacific vistas for India-Japan relationship and cooperation* edited by Vijay Sakhuja and Neelima A. Kochi: Centre for Public Policy Research (CPPR).



Panneerselvam Prakash and Virain Mohan (2023). India - Japan emerging cooperation in cybersecurity In: *Seventy years of India-Japan diplomatic relations: Reflections and way forward* edited by Nutan Kapoor Mahawar and Jojin V. John. New Delhi: KW Publishers & Indian Council of World Affairs.

Pasha S.V., Vinay Kumar Dadhwal and K. Saketh (2023) Remote sensing for Mango and Rubber mapping and characterization for carbon stock estimation—case study of Malihabad Tehsil (UP) and West Tripura District, India. In: *Digital ecosystem for innovation in agriculture: Studies in big data, Vol 121* edited by Sanjay Chaudhary, Chandrashekhar M. Biradar, Srikrishnan Divakaran and Mehul S. Raval. Springer. pp.183-200.

Ramakrishna Ishika, Ajith Kumar, Maan Barua and Anindya Sinha (2023). Ethos, Pathos, Logos: Affective and emotive ethnographies of Human–Macaque life worlds In: *Ecological entanglements: Affect, embodiment and ethics of care* edited by Ambika Aiyadurai, Arka Chattopadhyay and Nishaant Choksi. Orient BlackSwan. pp.15-40.

Raman Mini and Shailesh Nayak (2023) Remote sensing-based estimation of primary production in the Arabian sea. In: *Dynamics of planktonic primary productivity in the Indian ocean* edited by Sarat Chandra Tripathy and Arvind Singh. Springer, pp.245-280.

Riley Erin P., Luz Loria, Sindhu Radhakrishna and Asmita Sengupta (2023). Shared ecologies, shared futures: Using the ethnoprimate approach to study human-primate interfaces and advance the sustainable coexistence of people and primates In: *Primates in anthropogenic landscapes: Exploring primate behavioural flexibility across human contexts* edited by Tracie McKinney, Sian Waters and Michelle A. Rodrigues. Springer, pp.203-224.

Roy Sisir (2023). Quantum theory scope of consciousness, quantum physics. In: *Brain function in modern science and Buddhist philosophy*. New Delhi: Tibet House, pp.134-139.

Roy Sisir (2023). Quantum ontology and doctrine of two truths in Buddhist philosophy, quantum physics In: *Brain function in modern science and Buddhist philosophy*. New Delhi: Tibet House, pp.81-85.

Roy Sisir (2023). Quantum physics (special guest lecture). In: *Brain function in modern science and Buddhist philosophy*. New Delhi: Tibet House, pp.9-11.

Roy Sisir and Venkata Rayudu Posina (2024). Category theory and the ontology of Sunyata. In: *The Origin and significance of zero: An interdisciplinary perspective* edited by Peter Gobets and Robert Lawrence Kuhn. Brill, pp.450-478.

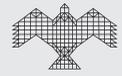
Sai Baba M. (2023). Human reliability programme in industries of national importance In: *Human reliability programmes in industries of national importance for safety and security* edited by Sunil S. Chirayath and M. Sai Baba. Singapore: Springer, pp.73-80.

Saurabh Kumar and Rudrodip Majumdar (2023). Functional use-based positioning of conventional vehicles in conjunction with alternate low-emission fuels. In: *Renewable fuels for sustainable mobility* edited by Pravesh Chandra Shukla et.al. Singapore: Springer, pp.97-159.

Sebastian Aleena (2023). Women and the invisible gender terrain of armed resistance in India. In: *Maoist insurgency, state and people: Overlooked issues and unaddressed grievances* edited by Anshuman Behera. London: Routledge, pp.61-78.

Sinha Anindya and Sayan Banerjee (2024). Engendered primatology: Of female primates and feminist primatologists In: *Gender and animals in history: Yearbook of women's history* edited by Sandra Swart Eds. Et al. Amsterdam: Amsterdam University Press, pp.137-156.

Srinivasaiah Nishant M. and Anindya Sinha (2023). The Outliers: An interplay of space, knowledge, and capabilities in defining human–elephant relations in rurban southern India. In: *Composing worlds with Elephants:*



Interdisciplinary dialogues edited by Nicolas Laine, Paul G. Keil and Khatijah Rahmat. Marseille: IRD Editions, pp.67-81.

Srinivasan Sharada (2023). Indian metals heritage and some common damages. In: *Kalyana mitra: A treasure house of history, culture and archaeological studies Vol.1* edited by K. Krishna Naik, Katta Narasimha Reddy and E. Siva Nagi Reddy. Archaeology Bluerose Publishers, pp.645-660.

Srinivasan Sharada (2024). Early finds of forged bronze and high-tin bronze from Tamil Nadu and India. In: *Proceedings of the 2nd International Seminar on Recent Advances in Archaeological Investigations of South India*. Roja Muthiah Library and Government of Tamil Nadu, Chennai, pp.78-89.

Srinivasan Sharada (2024). Indian metals heritage: Some archaeometallurgical insights (keynote address). In: *Souvenir of International Conference on Minerals, Mining and Metallurgy in South Asia*. Udaipur: Aryas Publishers, pp.1-19.

Srinivasan Sharada, S. Paranthaman, B. Asaithambi, Venkataguru R. Prasanna, K. Sakthivel, K. Rajan, R. Sivanantham, Suresh Radha, Madan Sundarraj and S. Udaya Kumar (2023). Investigating early iron finds from Mayiladumparai Tamil Nadu In: *Muthamizh Arignar Kalaigarnar centenary national seminar on 'Reflections on cultural development: An archaeological perspective' Proceedings*, pp.322-328.

Srivastava D.K. (2023). Myriad ways in which things could have gone wrong but did not. In: *Human reliability programmes in industries of national importance for safety and security* edited by Sunil S. Chirayath and M. Sai Baba. Singapore: Springer, pp.251-258.

Udayakumar S. and L. Pandey (2023). Revisiting the metal working in Southeast Rajasthan: A historical study In: *Peopling and cultural spread: Studies in South Asian archaeology (In honour of Prof. Vasant Shinde)* edited by Ajmal Shah and Mumtaz Yatoo. New Delhi: Dev Publishers & Distributors.

Udayakumar S. (2023). Experimenting with bones: Preliminary research on bone tool making techniques In: *Animals in archaeology: Integrating landscapes, environment and humans in South Asia (A Festschrift for Prof. P.P. Joglekar) Vol.1* edited by Pankaj Goyal, Abhayan G.S. and Sharada Channarayapatna. Thiruvananthapuram: Department of Archaeology, University of Kerala, pp.279-287.

Upadhyaya Carol (2023). Caste and capital In: *The Oxford handbook of caste* edited by Surinder S. Jodhka and Jules Naudet. Oxford University Press, pp.76-90.

Vijayakrishnan Sreedhar and Anindya Sinha (2023). Nagadhyakshacaritha: Elephant–mahout relationships in two communities of southern India. In: *Composing worlds with Elephants: Interdisciplinary dialogues* edited by Nicolas Laine, Paul G. Keil and Khatijah Rahmat. Marseille: IRD Editions, pp.198-213.

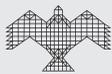
REPOSITORY PAPERS

Das Prantik and V.V. Binoy (2023). Landing the 'Tiger of Rivers': Understanding recreational angling of Mahseers in India using YouTube videos. *BioRxiv*. DOI:<https://doi.org/10.1101/2023.07.22.550129>

Ghosh Tanmay and Nithin Nagaraj (2024). Evaluating the determinants of mode choice using statistical and machine learning techniques in the Indian megacity of Bengaluru. *arXiv:2401.13977 [cs.LG]*.

Gupta Shreejata and Anindya Sinha (2024). Structure and functions of gesture sequences in wild Bonnet Macaques (*Macaca radiata*). *BioRxiv*. DOI:<https://doi.org/10.1101/2024.03.18.585581>

Harikrishnan N.B. and Nithin Nagaraj (2023). Permutation decision trees. *arXiv:2306.02617*. DOI:<https://doi.org/10.48550/arXiv.2306.02617>



Kripa M.K., Vinay Kumar Dadhwal and Atul Kaushik (2023) Spatial assessment of forest litterfall in central Himalayas (India): Comparison of geospatial, remote sensing and data-driven estimates. *Research Square*. DOI: <https://doi.org/10.21203/rs.3.rs-3315721/v1>

Laine Nicolas, Romain Simenel, Anindya Sinha, Nishant M. Srinivasaiah and Prajna Chowta (2023). The Animal tracking's agency: Why are camera traps and GPS collars new research agents in the interaction between humans and other animals?. *Open Anthropology Research Repository*. <https://openanthroresearch.org/index.php/oarr/preprint/view/391>

Srinivasan Sharada (2023). Metalwork of Karnataka. *Indian Textiles & Crafts Repository*, Work Identifier 120.

Srinivasan Sharada (2023). Metalwork of Kerala. *Indian Textiles & Crafts Repository*, Work Identifier 319.

Srinivasan Sharada (2023). *Metal crafts of Tamil Nadu: Swamimalai bronze icons; Vilaku-brass lamps*. Indian Textiles & Crafts Repository, Work Identifier 428.

Vijayakrishnan Sreedhar, Ganesh Raghunathan, Mavatur Ananda Kumar and Anindya Sinha (2024). Elephants in a teacup: Ranging and habitat-use of Asian elephants *elephas maximus* in a plantation dominated landscape in Southern Western ghats, India. *BioRxiv*. DOI:<https://doi.org/10.1101/2024.01.08.574633>

BOOK REVIEWS

Kamath Anant (2023). Book review of 'Mapping scientific method: Disciplinary narrations' by Gita Chadha and Renny Thomas eds. (Routledge, 2022). *Contributions to Indian Sociology* 57(1-2): 147-149.

Parthasarathy G. (2023). Book review of 'Science, war and imperialism: India in the second world war' by Jagdish N. Sinha (New Delhi: Manohar Publishers, 2023). *Current Science* 125(12): 1391.

Parthasarathy G. (2024). Book review of 'Empowering India: Ideas for action by scientists and engineers' by Thalappil Pradeep and Krishnan Narayanan (Bengaluru: Indian Academy of Science, 2023). *Current Science*, 126(1): 99-100.

Sinha Anindya (2023). Book review of 'Living and working with giants: A multispecies ethnography of the Khamti and Elephants in Northeast India'. by Nicolas Laine (Paris: Muséum national d'Histoire naturelle, 2020), *Conservation and Society* 21(3): 205-207.

REPORTS

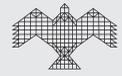
Behera Anshuman (2023). The Social and political dimensions of ethnic conflicts in Manipur. Issue Brief. *Observer Research Foundation*, New Delhi.

Choithani Chetan, C.P. Abdul Jaleel and S. Irudaya Rajan (2023). Rural-Urban transition and food security in India (MiFood Paper No. 12). Working Paper. *The Hungry Cities Partnership at the Balsillie School of International Affairs*, Waterloo, Ontario, Canada.

Kurup Anitha, Brigid Freeman, Cheshta Arora and Debarun Sarkar (2023). Learning for/towards sustainable development: Reimagining education and learning as a key vertical across the SDGs (T20 Policy Brief). *Report. Task Force 6: Accelerating SDGs: Exploring New Pathways to the 2030 Agenda*.

Nayak Shailesh (2023). Issue Brief III: India and China in the Arctic. *Centre for China Studies*, Chennai.

Panneerselvam Prakash (2023). India and Australia: The need for strategic cooperation in underwater domain awareness. Policy Brief. *Australia - India Institute*, University of Melbourne.



Srikanth R. (2023). Small modular reactors to achieve SDG 7 and Net zero emission (T20 Policy Brief). *Report. Task Force 6: Accelerating SDGs: Exploring New Pathways to the 2030 Agenda.*

Sahathevan Ganesh and Prakash Panneerselvam (2024). Needed, a framework to protect undersea cable. Issue Brief. *Institute for Security and Development Policy, Sweden.*

CONFERENCE PAPERS/POSTERS/PRESENTATIONS

Ahmed Anas A.E., Rudrodip Majumdar and Sandip Kumar Saha (2023). Experimental investigation of stratified sensible thermal energy storage using silicone oil In: *Proceedings of the 27th National and 5th International ISHMT-ASTFE Heat and Mass Transfer Conference, 14-17 December 2023, IIT Patna, Bihar, India.*

Das Sherin S., Rudrodip Majumdar, A.V. Krishnan and R. Srikanth (2024). A Methodological framework for strategic electricity generation planning in India: Assessing resource adequacy through probability risk metrics In: *3rd International Conference on Renewable Power (ICRP), 28-29 March 2024, MAIT, Delhi.*

Debnath Titir., A. Das, Anindya Sinha and N. Sharma (2023). The Montane Macaques: Distribution, habitat ecology and conservation status of Arunachal and white-cheeked macaques and their relationships with indigenous human communities in the Eastern Himalaya of Arunachal Pradesh, Northeastern India. *International Primatological Society – Malaysian Primatological Society / IPS–MPS Joint Meeting 2023, Kuching, Malaysia, 19–25 August 2023.*

Joshi Y.C. and Anindya Sinha (2023). The Crocodile conundrum of Charotar: Peaceful coexistence and deep socioecological connections between human and marsh crocodile communities in Gujarat, Western India. *ICCB 2023 – 31st International Congress for Conservation Biology, Kigali, Rwanda, 23–27 July 2023.*

Joshi Y.C. and Anindya Sinha (2023). The Crocodile conundrum of Charotar: Peaceful coexistence and deep socioecological connections between human and marsh crocodile communities in Gujarat, Western India. *Panel on Multispecies Futures for the End of the World, AAA/CASCA Annual Meeting 2023 of the American Anthropological Association and Canadian Anthropology Society, Toronto, Canada, 15–19 November 2023.*

Kathpalia Aditi, Nithin Nagaraj (2023). “Spectral estimation based on compressibility” In: *Perspectives in Nonlinear Dynamics 2023 (PNLD 2023)*, Centre for Complex Systems and Dynamics, IIT Madras and the Department of Applied Mechanics, IIT Madras, 01 August 2023.

Krishnan A.V. (2024). Strategic planning for electricity generation in India: Methodological framework for assessing resource adequacy through probability risk metrics In: *3rd International Conference on Renewable Power (ICRP), 28-29 March 2024, MAIT, Delhi.*

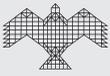
Kumar Rajeev and Rudrodip Majumdar (2024). Evaluation of energy transition readiness in the residential cooking sector among the low and medium-income households in Bengaluru In: *3rd International Conference on Renewable Power (ICRP), 28-29 March 2024, MAIT, Delhi.*

Mohan Poornima, Karthi Balasubramanian, Gayathri R. Prabhu, Nithin Nagaraj (2023). “Interpretation of ETC in the context of biomedical signal analysis” In: *IEEE R10 Humanitarian Technology Conference 2023 (AI and Smart Technologies for Humanity)*, Marwadi University, Rajkot India, 16-18 October 2023.

Nagaraj Nithin (2023). “Donald Hoffman’s Conscious realism and Sri Ramanuja’s Viśiṣṭādvaita In: *MBCC 2023: Mind, Brain, Consciousness Conference, organised by Indian Knowledge System and Mental Health Applications (IKSMHA) Centre, IIT Mandi, 14 December 2023.*

Nagaraj Nithin (2023). “The Locus of Perception”, Special session on “The Philosophy of Perception” In: *MBCC 2023: Mind, Brain, Consciousness Conference, organised by Indian Knowledge System and Mental Health Applications (IKSMHA) Centre, IIT Mandi, 14 December 2023.*

Natarajan S., K. Mukhopadhyay and Anindya Sinha (2023). Monkeys – here, there, everywhere! artistic



representations of bonnet macaques in mediaeval Vijayanagara sculpture from Southern India. *International Primatological Society – Malaysian Primatological Society / IPS–MPS Joint Meeting 2023*, Kuching, Malaysia, 19–25 August 2023.

Pujari Ankush Shankar, Rudrodip Majumdar, Chandramouli Subramaniam and Sandip Kumar Saha (2023). Study of different flow configurations of radial flow annular reactor for thermochemical energy storage In: *Proceedings of the 27th National and 5th International ISHMT-ASTFE Heat and Mass Transfer Conference*, 14-17 December 2023, IIT Patna, Bihar, India.

Ramakrishna I. and Anindya Sinha (2023). Ethos, pathos, logos: Affective and emotive ethnographies of human–macaque lifeworlds. *International Primatological Society – Malaysian Primatological Society / IPS–MPS Joint Meeting 2023*, Kuching, Malaysia, 19–25 August 2023.

Ramakrishna I., C. Hill, K. Karanth, N. Sharma and Anindya Sinha (2023). Learning to love and live with gibbons: Seemingly amicable human–primate relationships from Assam, India. *ICCB 2023 – 31st International Congress for Conservation Biology*, Kigali, Rwanda, 23–27 July 2023.

Ramakrishna I., C. Hill, K. Karanth, N. Sharma and Anindya Sinha (2023). Learning to love and live with gibbons: Seemingly amicable human–primate relationships from Assam, India. *International Primatological Society – Malaysian Primatological Society / IPS–MPS Joint Meeting 2023*, Kuching, Malaysia, 19–25 August 2023.

Sebastian Aleena (2023). Dwelling separately under the same roof: Economic disparity and negotiation in the matrilineal households of Malabar Muslims. National conference on “*Sociology of Gender in India: Emerging Issues an Future Agenda*”, organised by the Department of Sociology, University of Hyderabad. 27-28 October 2023.

Sebastian Aleena (2023). Spatial layout of the tharavad and gendered spaces of power relations: An ethnography of the matrilineal Muslims on the Malabar Coast In: *The international workshop titled “Matrilineal Kerala: Investigations Across Borders”*, organised by the Leiden University Institute for Area Studies, the Netherlands; Mar Chrysostom Chair, Mahatma Gandhi University (Kerala) & the Kannur University at Kannur, Kerala. 15-16 December 2023.

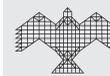
Sebastian Aleena, R. Nelson, J. Kaur, et al (2023). Assessment of Hepatitis-B vaccination status through an intersectionality lens: A cross-sectional study among MSM and transgender women in India In: *Vaccination Acceptance Research Network (VARN) 2023 conference* organised by the Sabin Vaccine Institute in partnership with UNICEF and Gavi, the vaccine alliance at Bangkok, Thailand. 13-15 June 2023.

Sebastian Aleena, R. Nelson, J. Kaur, et al (2023). COVID-19 vaccination status and access to health services among men who have sex with men and transgender women in India: Findings from a hybrid-mode cross-sectional survey In: *Vaccination Acceptance Research Network (VARN) 2023 conference* organised by the Sabin Vaccine Institute in partnership with UNICEF and Gavi, the vaccine alliance at Bangkok, Thailand. 13-15 June 2023.

Sebastian Aleena, V. Chakrapani, J. Kaur, et al (2023). Mpox awareness and predictors of Mpox vaccine acceptability among Men who have Sex with Men and Transgender Women in India: Implications for educational outcomes”. ASTICON-organised by the Indian Association for the Study of Sexually Transmitted Diseases and AIDS, Kolkata. 29 Sep – 01 Oct 2023.

Sinha Anindya (2023). Brave new world: An anthropogenic history of primate commensalism in a synurbising forest of southern India. *Workshop on Commensality and the City*, Cambridge University, Cambridge, UK, 25 May 2023.

Sinha Anindya (2023). The Macaque in the city: Affective, negotiated non/human relationships in urban India. *Symposium on how do platyrrhines and catarrhines respond to human-induced habitat changes?*. *International*



Primatological Society – Malaysian Primatological Society / IPS–MPS Joint Meeting 2023, Kuching, Malaysia, 19–25 August 2023

Sinha Anindya, K. Mukhopadhyay and A. Pal (2023). Not in their genes either: Phenotypic flexibility, behavioural inheritance, cultural traditions and gene–culture coevolution in macaque societies. *International Primatological Society – Malaysian Primatological Society / IPS–MPS Joint Meeting 2023*, Kuching, Malaysia, 19–25 August 2023.

Srinivasan Sharada (2024). Keynote lecture on Indian metals heritage: Some archaeometallurgical insights. Abstract In: *Souvenir of International Conference on Minerals, Mining and Metallurgy in South Asia: Historical Perspectives*, Mohanlal Sukhadia University, Udaipur, Rajasthan, India, 11-12 January 2024.

Srinivasan Sharada, K. Rajan and R. Sivanantham (2023). Prospects of early Indian iron and steel: Insights from neolithic-iron age transition at Mayiladumparai, Tamil Nadu (Abstract). *International Conference of World of Iron at 10*, British Institute of Eastern Africa, November 2023, pp.4.

Venugopal Rahul, Arun Sasidharan, G. Ramajayam, P.N. Ravindra, Nithin Nagaraj, Kaviraja Udupa, John P. John and Bindu M. Kutty (2023). Targeting ongoing neural oscillations and aperiodic activity through tACS: Unravelling frequency specific modulation and nonlinear interactions In: *MBCC 2023: Mind, Brain, Consciousness Conference, organised by Indian Knowledge System and Mental Health Applications (IKSMHA) Centre*, IIT Mandi, 14 December 2023.

Zakhiya P. C., M. Chatterjee, K. Mukhopadhyay and Anindya Sinha (2023). The myth of species-typical traits: Remarkable heterogeneity within and across allogrooming networks of adult female bonnet macaques *Macaca radiata*. *Understanding Behaviour 2023: Behaviour, Ecology and Evolution in India*, Indian Institute of Science Education and Research, Kolkata, 26–29 June 2023.

NIAS PUBLICATIONS

Behera Anshuman and Pratyush Pran Sarma (2023). Cooperative federalism and local governance in India (NIAS/CSS/CRPR/U/PB/17/2023). Policy Brief, Bengaluru: NIAS.

Beig Gufran and Shailesh Nayak (2023). Air quality forecasting and resource framework (NIAS/NSE/EECP/U/PB/22/2023). Policy Brief. Bengaluru: NIAS.

Beig Gufran, M. Mohanthy, R. Srikanth and Shailesh Nayak (2023). National air quality resource framework of India (NARFI), (NIAS/NSE/EECP/U/WR/01/2023). Report. Bengaluru: NIAS.

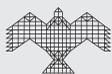
Guruprasad B.R., Rajaram Nagappa, Amit Mukherjee, Upasana Dasgupta and V. Siddhartha (2023). Moon missions: The way ahead (NIAS/CSS/ISSSP/U/RR/10/2023). Report. Bengaluru: NIAS.

Joseph Vamshij, Kanaya Dutta, Ananya Paul, S. Varshini, Rudrodip Majumdar, A.V. Krishnan and R. Srikanth (2023). Identification of potential sites for nuclear power plants for a sustainable energy mix (NIAS/NSE/EECP/R/RR/19/2023). Report. Bengaluru: NIAS.

Patil Ishita (2023). Is backwardness immune to state intervention?. (NIAS/SSc/IHD/U/WP/16/2023). Working Paper. Bengaluru: NIAS.

Ramamurthy V.S. and D. K. Srivastava (2023). Science, technology and development: How long is the long path for developed India. (NIAS/NSE/U/RR/11/2023). Report. Bengaluru: NIAS.

Salam Jeebanlata (2023). Vocationalisation of school education: Prospects and challenges (NIAS/SSc/ED/U/RR/18/2023). Report. Bengaluru: NIAS.



Srikanth R. and Shailesh Nayak (2023). Small modular reactors to achieve net zero with energy security for India (NIAS/NSE/EECP/U/PB/20/2023). Policy Brief. Bengaluru: NIAS.

Suba Chandran D. and Padmashree Anandhan eds. (2023). Europe Annual 2023. Bengaluru: NIAS

Suba Chandran D., Apoorva Sudhakar, Padmashree Anandhan and Anu Maria Joseph eds. (2023). Conflict Annual 2023. Bengaluru: NIAS

OUTREACH ARTICLES

Beig Gufran, Climate change has made it harder to breathe in Mumbai. *Indian Express*, 25 Oct 2023.

Beig Gufran, in conversation with Srishti Choudhary: Will Delhi see any relief from Pollution?. *CNN News 18*, 9 Nov 2023.

Beig Gufran, Dr Gufran Beig, Founder-Director of SAFAR, explains air pollution management (Interview). *Indian Express*, 20 Dec 2023.

Beig Gufran and Shailesh Nayak. Why pollution control needs localised data, grounded in science. *Indian Express*, 20 Jan 2024.

Beig Gufran, Research nails climate change as cause of poor AQI during 2022 winter. *Indian Express*, 22 Feb 2024.

Beig Gufran. 2nd Aerosol Winter School MANTHAN-2024 concludes. *Daily Excelsior*, 03 Mar 2024.

Beig Gufran. Air quality improved in North India, fell in peninsula in 2022 winter due to rare 'Triple Dip' La Nina event: Study. *The Wire*, 20 Feb 2024.

Beig Gufran. Climate change made Mumbai air 30 pc worse in 22-23: Study. *Mid.day*, 19 Feb 2024.

Beig Gufran. Climate change makes Asia's April heat wave 30 times more likely. *NewsClick*, 19 May 2023.

Beig Gufran. Cue from past: Why Delhi is unlikely to face brunt of farm fires in much of October. *Times of India*. 06 Oct 2023.

Beig Gufran. Data shows air quality in Bengaluru has improved, but experts think otherwise. *Deccan Herald*, 29 Mar 2024.

Beig Gufran. Express view on air pollution: El Nino, La Nina. *Indian Express*, 21 Feb 2024.

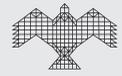
Beig Gufran. Farm fires dipped this month but impact on Delhi air rose. *Times of India*, 01 Dec 2023.

Beig Gufran. Farm fires spark bad air alarm in Delhi. *Hindustan Time*, 03 Oct 2023.

Beig Gufran. Heat waves to come in the way of achieving India's SDGs. *NewsClick*, 20 Apr 2023.

Beig Gufran. How long will It take to clean India's air?. *The Indian Express*, 10 Nov 2023.

Beig Gufran. Indian coastline becoming more vulnerable to intense cyclones due to climate change. *NewsClick*, 15 May 2023.



Beig Gufran. La Nina impacted air quality in India in the winter of 2022: What a new study says. *Indian Express*, 20 Feb 2024.

Beig Gufran. Mercury below 20°C in Delhi, first time this season. *Hindustan Times*, 03 Oct 2023.

Beig Gufran. No snow: Tourists cancel holidays as Indian ski resorts run dry. *Reuters news*, 15 Jan 2024.

Beig Gufran. Ozone, dust major pollution concerns for Delhi in summer. *Times of India*, 09 Apr 2023.

Beig Gufran. Quality matters: Experts alarmed by the deteriorating air quality in the city; blame climate change. *Bangalore Mirror*, 21 May 2023.

Beig Gufran. Rare 'triple-dip' La Nina behind unusual air quality trend in India in 2022-23 Study. *The Week* 18 Feb 2024.

Beig Gufran. Rare 'triple-dip' La Nina improved air quality in north India, increased pollution in peninsular region in 2022-23, study says. *The Hindu*, 18 Feb 2024.

Beig Gufran. Stubble burning worsened Mumbai's air quality last winter: study. *Hindustan Times*, 19 Feb 2024.

Beig Gufran. Too many bad air days. *Bangalore Mirror*, 13 Sept 2023.

Beig Gufran. Triple-dip La Nina led to better winter air in 2023: Elsevier Journal study. *Hindustan Times*, 19 Feb 2024.

Beig Gufran. Two-wheelers choke Bengaluru's roads and air. *Bangalore Mirror*, 13 Sept 2023.

Beig Gufran. What has brought about Delhi's 'cleaner' air this year cloudy days, rainfall major factors. *Indian Express*, 02 May 2023.

Beig Gufran. When Mumbai's air was more polluted than Delhi: What caused the change in air quality in winter of 2022?. *News 18*, 21 Feb 2024.

Beig Gufran. Why did Mumbai become more polluted while Delhi skies cleared up last winter? Climate change may be a factor. *Down to Earth*, 19 Feb 2024.

Beig Gufran. Why is India covered in a haze one year and not the other? Delegates at COP28 have to join the dots. *The Indian Express*, 08 Dec 2023.

Beig Gufran. Why winter of 2022-23 in Delhi was cleaner than usual, but Mumbai saw poor air. *Indian Express*, 19 Feb 2024.

Beig Gufran. Will weather aid in Delhi's pollution fight like last year? unlikely, say experts. *Indian Express*, 03 Oct 2023.

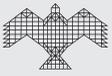
Chowdhury Supriya Roy. Karnataka elections: What the political debate ignores. *Indian Express*, 03 May 2023.

Chowdhury Supriya Roy. News from Tideland. *The Telegraph*, 03 May 2023.

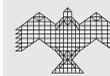
Dharmapalan Biju. 3-D Printed foods for customised cuisine. *The Statesman*, 12 July 2023.

Dharmapalan Biju. Are foreign universities best bet for better education?. *The Pioneer*, 01 Dec 2023.

Dharmapalan Biju. Caste census an impediment to nation development. *Daily Excelsior*, 07 Oct 2023.



- Dharmapalan Biju. Chandrayaan-3's safe moon landing is an extraordinary feat. *The Pioneer*, 24 Aug 2023.
- Dharmapalan Biju. Combating women's underrepresentation in science. *Daily Excelsior*, 15 Mar 2024.
- Dharmapalan Biju. Fossil fuels and the rapid retreat of glaciers. *The Pioneer*, 18 Dec 2023.
- Dharmapalan Biju. Fossil fuels and the rapid retreat of glaciers. *The Pioneer*, 18 Dec 2023.
- Dharmapalan Biju. India to become a space superpower. *The Pioneer*, 05 Sep 2023.
- Dharmapalan Biju. Libraries are repositories of knowledge, must be revived. *The Pioneer*, 18 Aug 2023.
- Dharmapalan Biju. Nari Shakti' in Indian space missions. *Daily Excelsior*, 10 Sep 2023
- Dharmapalan Biju. Phenomenal performance of Indian scientists in 2023. *The Pioneer*, 03 Jan 2024.
- Dharmapalan Biju. Safeguarding the Himalayan ecosystem. *The Pioneer*, 24 Jan 2024.
- Dharmapalan Biju. Scientists play key role in a nation's progress. *The Pioneer*, 15 Mar 2024.
- Dharmapalan Biju. Soil pollution can lead to a major catastrophe?. *The Pioneer*, 12 Dec 2023.
- Dharmapalan Biju. Taking science to people through a science festival. *The Pioneer*, 18 Jan 2024.
- Dharmapalan Biju. Tourism as a green investment for the future. *The Pioneer*, 02 Oct 2023.
- Dharmapalan Biju. Water, an elixir of life and an agent of peace. *The Pioneer*, 27 Mar 2024.
- Kanitkar Tejal and T. Jayaraman. Disentangling the 2030 global renewable energy target. *The Hindu*, 15 Sep 2023.
- Kurup Anitha. Needs of the gifted children are not met in the classrooms. (Interview) *Brainfeed Magazine*, 26 Sept 2023.
- Majumdar Rudrodip. E-cooking becomes a topic of discussion at international energy festival of Kerala. *The Hindu Bureau*, 08 Feb 2024.
- Menon Srikumar M. The Moole Shankareshwara temple where the real 'Sun' comes through a hole & illuminates the Shiva linga. *Lokmat Times*, 07 Jan 2024.
- Menon Srikumar M. Where the Sun comes to worship. *Deccan Herald*, 15 Dec 2023.
- Nayak Shailesh. Meet the man who merges human, social and science issues (Interview). *StratNewsGlobal*, 07 Feb 2024.
- Pani Narendar. How Bengaluru explains Karnataka. *Times of India*, 15 May 2023.
- Pani Narendar. Is Bengaluru's economy the reason why Karnataka votes this way?. *Times of India* 14 May 2023.
- Pani Narendar. Karnataka results could pave the way to 2024. *Hindustan Times*, 06 May 2023.
- Panneerselvam Prakash and K.G. Ramkumar. Piracy and armed robbery in Southeast Asia: The need for a fresh approach. *The Diplomat*, 15 May 2023.



Panneerselvam Prakash. Russian trenches major challenge for Ukraine's counter-offensive. *Indian Defence Review*, 01 Jun 2023.

Rajendran C P. Closing the gap between rhetoric and action at COP28. *The Wire*, 22 Jun 2023.

Rajendran C P. COP summits need to change to be effective. *The New Indian Express*, 23 Dec 2023.

Rajendran C P. Declining scientific consciousness. *Madhyamam (Kerala daily)*, 12 Aug 2023.

Rajendran C P. El Nino-La Nina: How the jugalbandhi of oceans impacts our climate patterns. *ETV Bharat Blog*, 10 Feb 2024.

Rajendran C P. Explained: The extraordinary genetic diversity of Indians. *ETV-Bharat Blog*, 09 Mar 2024.

Rajendran C P. Global water crisis needs radical rethink. *Indian Express*, 14 Mar 2024.

Rajendran C P. How a calendar exposed the falling standards of an IIT. *The Wire*, 02 Jan 2024.

Rajendran C P. Meagre funds and red tape hobble Indian science. *The New Indian Express*, 16 Feb 2024.

Rajendran C P. Remembering Satyendra Nath Bose. *Mathrubhumi Daily*, 04 Feb 2024.

Rajendran C P. Removing Darwin from the school syllabus is a body blow to science education. *The Wire*, 08 May 2023.

Rajendran C P. Science, God, Nationalism and the ISRO's milestone. *The Wire*, 06 Sep 2023.

Rajendran C P. The curious case of a bill on forest conservation. *The New Indian Express*, 22 Apr 2023.

Rajendran C P. The fading role of universities as conscience of society. *The Hindu*, 18 Jan 2024.

Rajendran C P. The Unsettled questions on the Joshimath subsidence. *The Wire*, 10 Oct 2023.

Sangurmth Prabhakar. Unearth potential of mining, geo-tourism. *Deccan Herald*, 18 Jul 2023.

Sinha Anindya. Frans de Waal showed non-human species are more complex than they are given credit for: (Interview). *Down to Earth*, 26 Mar 2024.

Sinha Anindya. Left Out, Radioscope: The National Science Magazine Programme (Interview), *All India Radio, Kolkata*, 24 Dec 2023.

Sinha Anindya. Monkeys for science: The transnational world of primate testing, an 101 East documentary (contributed to a film), *Al Jazeera*, 14 September 2023.

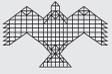
Srikanth R and J.R. Bhatt. Coal isn't easy to exclude from sustainable development explained. *The Hindu*, 21 Nov 2023.

Srikanth R. Can small modular nuclear reactors help India achieve net-zero?. *The Hindu*, 10 Aug 2023.

Srikanth R. Should India consider phasing out nuclear power?. *The Hindu*, 28 Apr 2023.

Srinivasan Sharada. No iron and steel was used to construct Ayodhya Ram temple. here's why. *NDTV*, 21 Jan 2024.

Srinivasan Sharada. Women had it all. *Bangalore Mirror*, 25 Jul 2023.



Srivastava Dinesh K. Vaigyanik: a magazine born out of lack of means and struggles of Dr.Madhav Das Saxena. *Vaigyanik* 53. pp.73. 2023.

Srivastava Dinesh K.The Dream of a Sthitipragya editor and Madhava Saxena “Arvind”. *Kathabimb*. 2023.

Suba Chandran D. Deep state pulls strings in Pakistan’s February elections. Will 2018 repeat?. *The Frontline*, 11 Jan 2024.

Suba Chandran D. Can the judiciary be truly independent in Pakistan?. *The Hindu*, 10 Apr 2024.

Suba Chandran D. Pakistan elections: four provinces, mixed results, one message | Data. *The Hindu*, 29 Feb 2024.

Suba Chandran D. The illusion of change in Pakistan. *The Hindu*, 14 Feb 2024.

Suba Chandran D. Pakistan and Iran: calm after the storm | Explained. *The Hindu*, 30 Jan 2024.

Suba Chandran D. Baloch march: from Turbat to Islamabad. *The Hindu*, 2 Jan 2024.

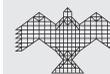
Suba Chandran D. Explained | The calm after the storm for Pakistan?. *The Hindu*, 2 Jul 2023.

Suba Chandran D. (2023). Pakistan’s establishment has an Imran Khan problem. *The Hindu*, 23 May 2023.

Upadhya Carol. The Rise and fall of the Amaravati green field city project. *SCAS Talks Podcast Series*, 26 Jan 2024.

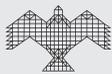
NEWSLETTER

Rath Nibedita, Mridula Ramanna, Arkalgud Ramaprasad, S. D. Sreeganga, Susanna Ghosh Mitra, Nibras K. Thodika, Rudrodip Majumdar, Naresh Shetty, V. K. Arora and M. Sai Baba (2023). *OSPF-NIAS Tuberculosis Newsletter* Vol.2(1). OSPF & NIAS, Bengaluru.

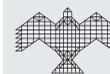


LIST OF COMMITTEES

Name of the Committee	Chairperson	Members
Faculty Committee	Director, NIAS	Prof Janaki Balakrishnan Prof D Suba Chandran Prof Narendar Pani Prof Sindhu Radhakrishna Prof Anindya Sinha Prof Sharada Srinivasan Prof R Srikanth Prof PM Soundar Rajan Prof Sangeetha Menon Prof Anitha Kurup (<i>Convener</i>)
Appointments Committee	Director, NIAS	Prof Narendar Pani Prof Anindya Sinha Prof Sangeetha Menon Prof D Suba Chandran Prof R Srikanth Respective Programme Head Two Subject Experts
Faculty Renewal/Promotion Committee	Director, NIAS	Prof Narendar Pani Prof Anindya Sinha Prof Sangeetha Menon Prof R Srikanth Prof Suba Chandran Two Subject Experts
Committee to Oversee PhD Programme	Dr Tejal Kanitkar (Academic Head)	Dr Srikumar Menon Dr Anshuman Behera Dr Aleena Sebastian Dr Chetan Choithani Ms AS Mary Stella (<i>Secretary</i>)
Research Ethics Committee	Prof Sharada Srinivasan	Dr Debosree Banerjee Dr VV Binoy
Institutional Academic Integrity Panel	Prof Anindya Sinha	Dr Srikumar Menon Asst Library & Information Officer, NIAS Prof TA Abinandanan (External Member)
Library and Publications Committee	Prof R Srikanth	Dr Tejal Kanitkar Dr Nithin Nagaraj Dr Jeebanlata Salam Dr Anant Kamath Asst. Library and Information Officer, NIAS (<i>Convener</i>)



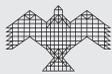
Name of the Committee	Chairperson	Members
Grievance Redressal Committee	Prof Anitha Kurup	Dr Prakash Panneerselvam Dr Rudrodip Majumdar Dr Debosree Banerjee Head-Administration, NIAS (<i>Member Secretary</i>)
Internal Committee for Redressal of Complaints of Sexual Harassment of Women at NIAS (IC, NIAS)	Prof Sangeetha Menon	Dr MB Rajani Dr Chetan Choithani Ms VB Mariyammal Ms Laxmi Murthy (External Member)
Committee to Oversee Website, Outreach and e-Newsletters	Prof D Suba Chandran	Prof N Ramani Dr Rudrodip Majumdar Dr Prakash Panneerselvam Dr Aleena Sebastian Asst. Library and Information Officer, NIAS (<i>Convener</i>)



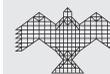
DETAILS OF MEMORANDUM OF UNDERSTANDING (MOU)

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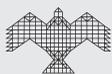
Sl. No.	MoU With	Areas of Cooperation
1.	Sahapedia, New Delhi	Collaboration through various programmes in arts and humanities disciplines.
2.	The Institute of Trans-Disciplinary Health Sciences and Technology	PhD Programme.
3.	Kyoto University, Inuyama, Japan	To exchange scientific information in the fields of primatology, wildlife biology, and conservation. Both Institutes will promote the development of joint research projects in the fields of primatology, wildlife biology, and conservation.
4.	National Institute of Science Technology and Development Studies (NISTADS)	To create value-added policy analysis and policy advocacy for applications of science and technology for sustainable and holistic development at national and global scale.
5.	NITI Aayog, Government of India	Part of SAMAVESH initiative and work under the S&T cluster group
6.	Institute of Rural Management Anand, Gujarat	Academic collaboration between the faculty and staff of both Institutions
7.	Public Health Foundation, New Delhi	Encourage academic collaboration between the faculty, researchers, and students in the area of energy and environment, air pollution and health and any other topic or activity of mutual interest.
8.	Southern Regional Load Despatch Centre (SRLDC), POSOCO	For knowledge sharing and capacity building in areas of mutual interest.
9.	Manipal University	NIAS PhD programme and collaborative research to address national challenges and priorities in areas including, but not limited to energy, healthcare, ecology, conservation of natural resources and education.
10.	University of Liverpool	Undertake collaborative, interdisciplinary research activities – Heritage, Conflict resolution and other fields of mutual interest.
11.	Defence Research and Development Organisation	To support and strengthen collaboration and cooperation in identified topics pertaining to national security
12.	DIAT, Pune	Collaborative research programme, joint events and activities, collaborative PhD programme, exchange of research and faculty and collaborative projects.
13.	Geospatial Media and Communications	Collaborate in conducting research; Research Publications; Joint Proposals for Research Funding; Co-hosting of Conferences etc.
14.	Karnataka Science and Technology Academy	Collaborate and partner to Promote Science, Technology and Innovation for Societal Welfare



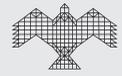
Sl. No.	MoU With	Areas of Cooperation
15.	Indian Council of World Affairs	To organise studies and webinars on agreed topics, mainly on the Indian neighborhood.
16.	Digital Discourse Foundation, Bengaluru	To create since-based communication strategy applications of science and technology for sustainable and holistic development at national and global scale
17.	Indian Institute of Remote Sensing	To encourage academic collaboration between the faculty, researchers, and students.
18.	Agastya International Foundation	To work together on programmes aimed at identifying and nurturing Highly Able/Gifted children in India, optimally utilizing the experience, strengths and capabilities of both organisations for that goal.
19.	Sanskriti Foundation	<ul style="list-style-type: none"> · Joint research activities such as explorations into Indic Mathematical Heritage, Indic philosophical, computational and astronomical knowledge systems. · Visits by and exchange of doctoral students and faculty members for research. · Exchange of information including, but not limited to, research publications of faculty members. · The Kannada work Siribhoovalaya shall be initially taken up for exploration of mathematical and informatics content.
20.	Kristu Jayanti College	To develop a collaborative academic partnership and to collaborate in the areas of research projects, internship programme, exchange of faculty/senior scholars, joint events and workshops, and academic network on international relations.
21.	SRM Institute of Science and Technology, Tamil Nadu	Collaborative cooperation through: Research programmes, Student training programme, Faculty exchange programme, Sharing of instrumentation/library facility/other facilities, Organisation of joint meetings, and Any other areas of mutual interests.
22.	Pondicherry University	Collaboration on academic and research activities
23.	Maritime Research Centre, Pune	Collaborate in maritime research and studies, academic exchange and interaction to further scholarship, knowledge, and information in the field of underwater domain awareness.
24.	Ghent University, Belgium	To promote international academic, cultural and scientific exchange.
25.	Greater Bengaluru Parisara Foundation (GBPF)	To provide collaborative cooperation through: Collaborative Research Programmes and Training Programmes.
26.	National Atmospheric Research Laboratory	Academic collaboration between the faculty, researchers, and students. To carryout collaborative research activities in the area of atmosphere, weather and climate science and their applications in meteorology, air quality and numerical weather prediction.
27.	NIAS and SATCOM Industry Association	To collaborate in specific research studies, policy analysis, training and capacity building and related activities, through mutual acceptance.



Sl. No.	MoU With	Areas of Cooperation
28.	Tata Consultancy Limited	To promote cooperation in areas of mutual interest for the benefit of both parties
29.	Alva's Institute of Engineering and Technology	To promote education and scholarly exchange; collaboration and technical interchange between the parties involved as educational partners
30.	Environmental Management and Policy Research Institute, Bengaluru	Sharing knowledge between the Institutes and establish a vibrant research collaboration, by undertaking joint activities in the broad areas of ecology, environmental management, climate change and sustainable development, including associated capacity building
31.	The Indian Maritime University	Cooperation through academic exchange, collaborative research projects, co-hosting of conference and other mutually beneficial activities in the areas of Policy related matters in Maritime and allied Fields
32.	Institute of Wood Science and Technology, Bengaluru	To undertake joint research in the area of forest and climate change
33.	EXC 2176 "Understanding Written Artefacts" University of Hamburg, Germany	To provide additional opportunities to exchange ideas, information, skills and researchers, and to support cooperative activities in the field of research between the two countries
34.	Gujarat National Law University	To develop, promote and organise various academic, research, extension and training programmes for the stakeholders
35.	Loyola College, Chennai	Collaborative academic partnership between Department of History, Loyola College and STIR Programme, School of Conflict and Security Studies, NIAS.
36.	Transcending Horizons Private Limited (Finovista)	Collaborative research and academic exchange.
37.	Pixel Softek Private Limited	For collaborative research and development.
38.	Hartwick College	To facilitate the development of technical and educational cooperation, to foster advancement in teaching and research and to enhance educational and cultural understanding between the parties.
39.	Oriental Institute-Czech Academy of Sciences	Academic and research collaboration.
40.	Pathfinder Foundation, Sri Lanka	To promote regional harmony and co-operation and to promote the study and discussion of global and regional problems in the economic, political educational, cultural and social fields and the dissemination of knowledge on international affairs.
41.	National Centre for Polar and Ocean Research	Collaborate in specific research studies, policy analysis, training and capacity building and related activities, through mutual acceptance in the field of polar and ocean research.
42.	UL Research Centre, Kozhikode, Kerala	Collaborate in research and studies, academic exchange and interaction to further scholarship, knowledge and information in the field of martial arts and wellbeing.
43.	NTPC Limited (Funding MoU)	Assist NTPC to develop strategies and action plans for growing the share of nuclear energy in its overall generation mix, thereby contributing to the National goals of reducing the emission intensity of India's GDP and the long-term goal of achieving net zero emissions by 2070.
44.	Springer Nature	Institutional partnership for publishing NIAS policy briefs.



Sl. No.	MoU With	Areas of Cooperation
45.	Capacity Building Commission, Government of India – Statement of Intent	Knowledge partnership.
46.	Shakti Sustainable Energy Foundation	Shakti and NIAS agree to cooperate in the fields of climate and clean energy, or any other inter-sectional area as may be mutually agreed, including research and studies, academic exchange, and interaction to build data and evidence, knowledge and information, communication and practice.
47.	Nuclear Power Corporation of India Limited	Study to collect and analyze “Preliminary Information for Selecting Greenfield Sites for Establishing Nuclear Power Plants in India”.
48.	Indian Institute of Technology Madras	Collaborate in research and studies, academic exchange and interaction to further scholarship, knowledge and information in the field of underwater domain awareness.
49.	Open Source Pharma Foundation	Joint collaboration focusing on areas such as medicinal discovery in areas of health of interest to India. Collaborative research in the area of (i) Modern methods for traditional medicines (ii) Drug and vaccine work related to neglected disease, pandemics, and other diseases of importance to India and the world (iii) Education, training, policy work, lectures, and public dissemination and engagement (iv) Other activities in the health sphere.
50.	Centre for National Security Studies, MSR University of Applied Sciences	Collaborative research, exchange of faculty, internship programme, joint courses/workshops, etc.
51.	Ritambhara Ashram – Kotagiri	Collaborate in creating, and establishing “The Centre for Citta Vidya and Indian Psychology”.



REPORT ON COUNCIL OF MANAGEMENT

The 55th Meeting of the Council of Management of the National Institute of Advanced Studies was held in hybrid mode in the Council Room of the Institute in Bengaluru on April 25, 2023.

The members of the Council, who attended the meeting, included Dr S Ramadorai, Nominee of the Tata Trusts and Chairman of the Council; Dr Shailesh Nayak, Director, NIAS; Prof Govindan Rangarajan, Director, IISC; Prof N Balakrishnan, Dr AS Kiran Kumar, Prof Indira Rajaraman, Ambassador Nirupama Rao, all Nominees of the Council. Mr P Srinivasa Aithal, Head-Administration, NIAS, was present at the meeting as Invitee.

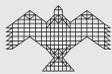
Current financial status and proposed financial plan; advancements in NIAS research programmes were presented by Dr Shailesh Nayak at the meeting. The meeting concluded after extensive and in-depth discussions on the progress that the Institute has made in the recent past and the paths that could be followed in the years to come.

The joint 56th Meeting of the Council of Management of the National Institute of Advanced Studies and the 33rd Annual General Body Meeting of the NIAS Society were held in the Council Room of the Institute in Bengaluru on October 27, 2023.

The members of the Council, who attended these meetings, comprised Dr S Ramadorai, Nominee of the Tata Trusts and Chairman of the Council; Dr Shailesh Nayak, Director, NIAS; Prof Govindan Rangarajan, Director, IISC; Prof Padma M Sarangapani, Nominee of the Tata Trusts; Dr Usha Dixit, Representative, DST; Prof N Balakrishnan, Mr KM Chandrasekhar, Dr AS Kiran Kumar, Mr B Muthuraman, Ms Swati Ramanathan, and all Nominees of the Council. Mr P Srinivasa Aithal, Head-Administration, NIAS, was present at both meetings as Invitee.

The annual academic report, financial status of the Institute, audited financial statements and other administrative reports of the Institute were presented by Dr Shailesh Nayak at both these meetings. The meetings concluded after widespread and in-depth discussions on the progress that the Institute has made in the recent past and the trajectories that could be followed.

Prof Sangeetha Menon
Secretary, Council of Management of NIAS



REPORT ON ACADEMIC COUNCIL

The 6th meeting of the NIAS Academic Council was held in NIAS on March 27, 2024. The members of the Academic Council who attended this meeting were: Prof Ravi B Grover, Prof Mewa Singh, Prof N Jayaram, Prof Upinder Singh, Prof Anitha Kurup, Prof Sangeetha Menon, Prof PM Soundar Rajan, Prof Narendar Pani, Prof Sindhu Radhakrishna, Prof Sharada Srinivasan, Prof D Suba Chandran, and Prof R Srikanth. The meeting was chaired by Dr Shailesh Nayak.

NIAS faculty, Dr Aleena Sebastian, Dr VV Binoy and Dr Anshuman Behera attended the meeting as Special Invitees. The Director briefed the Council on the research activities of NIAS and nine NIAS faculty made presentations on their research. Each presentation was followed by a vigorous exchange of ideas on the larger goal of the research, and how it addresses the mission statement of NIAS. The meeting concluded with external members expressing their satisfaction at the different streams of research being carried out in the institute.

Prof Sindhu Radhakrishna
Convener, Academic Council of NIAS



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