# Dr. Prakash N Thirumali Adjunct Professor

# **National Institute of Advanced Studies**

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#### **Brief Outline:**

Dr. Prakash is a Marine Scientist. He retired from National Centre for Earth Science Studies (NCESS), Ministry of Earth Sciences (GoI), Trivandrum in July 2019 and continued to work as Senior Consultant till September 2021. He also held highest position as Director during 2016-17. The main focuses of his research are on beach and coastal processes including the coastal zone management aspects in the islands and also in the mainland of the country. Over the years, he has completed many research projects sponsored by different central department/ organizations like DST, DOD, MoES, UTL, IREL, Atomic Minerals Directorate, etc. Apart from building a strong coastal research group at NCESS, many new results for understanding the placer mineral enrichment on to the beach have been demonstrated and a step-ladder process has been suggested from these projects. More specific accomplishments include sediment budgeting studies for placer mineral for sustainable exploitation with least impact on coastline. As a continuation to this programme a revisit to the placer mining sites was also carried out during 2019 and suggested ways to continue beach mining operation in a sustainable manner. Coastal Zone Management is another important activity carried out by him for the preparation of Coastal Zone Management Plan (CZMP) and Coastal Regulation Zone (CRZ) work in the islands and mainland in the country. Rain water harvesting through innovative techniques/methods is also dear to him as a societal programme. He has published more than 50 research papers in national and international journals including a book and two field guide books.

Date of Birth: 20 July 1959

**Home Address:** D-1029, Brigade 7 Gardens, Padhukamandira Road, Subramanyapura, Bharath Housing Society, Uttarahalli, Bangalore-560 061

## **Academic Qualifications:**

1979	B.Sc., Physics, Mathematics, Geology	Bangalore University
1981	M. Sc., (Marine Geology)	University of Mysore
1992	Ph. D., (Marine Geology)	Mangalore University

# Courses/Training undertaken in specialized fields:

1985	Onboard training in research vessel ORV Sagara Kanya for the polymetallic nodules survey in the central Indian Ocean, Department of Ocean Development, Government of India
1987	International course on Management and Conservation of Marine Resources & UNCLOSS III at International Ocean Institute, Malta.
1992	Course on Digital Image Processing at RRSSC, Dept of Space, Bangalore.

1988	Awareness workshop on Accelerator Mass Spectrometry for geological applications at Institute of Physics, Bhuvaneshwar.
1993	Refresher course for IOI-Indian Alumnus at Ocean Engineering Department, IIT Madras
1999	ERDAS-Digital Imaging Software training at Space Application Centre, Dept. of Space, Ahmedabad.
2001	Visiting fellow at Department of Earth Sciences, University of Waikato, New Zealand

# **Areas of Research:**

Beach and Coastal Processes, Placer mineral deposits, Quaternary Geology, Coastal Zone Management, Island studies, Societal programmes

# Positions held at NCESS:

Duration	Position
2019 to Sept, 2021	Senior Consultant
2017 to July, 2019	Scientist-G & Group Head
2017 to 2016	Director, NCESS
2016 to 2014	Scientist G & Group Head
2014 to 2011	Scientist-G
2009 to 2004	Scientist-F
2004 to 1999	Scientist EII
1999 to 1994	Scientist El
1994 to 1988	Scientist C
1988 to 1983	Scientist B

Memberships in professional bodies and other important Committees

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Period	Affiliation of the Body/Committee and position	
1983	Fellow (Life Member) of Geological Society of India, Bangalore	
2002	Member, Indian Society of Remote Sensing	
2005	Project Review Committee, DST, Gol	
2005	Project Review Committee, DoD, Gol	
2007	Member, Technical Committee, IGCP-514	
2010	Resource Person, INSPIRE Camp, DST, Gol	
2010	Member,International Society of Sedimentologist	
2011	Convenor, Research Committee of CUSAT-NCESS Research Programme	
2011	Member, Recruitment Committee, NCSCM, MoEF &CC, GoI	

# National Meeting/Workshops/Conferences (upto 2010)

2018 Invited paper in the International Conference on Geology and Earth Sciences (Geoscienes-2018) held in Rome, Italy from 1st to 4th May 2018

- 2016 Presented in the technical session of 35th International Geological Congress held at Cape Town, South Africa during August, 28-30<sup>th</sup> 2016
- 2014 Invited paper in the Indian National Conference on Harbour and Ocean Engineering (INCHOE 2014) held at NIO, Goa
- 2013 Invited talk on `Integrated Island Management Plans (IIMPs) for Lakshadweep islands' at Kavaratti island, UT of Lakshadweep
- 2013 Invited talk at the Refresher Course on Integrated Coastal Zone Management at the College of Fisheries, Mangalore on 31<sup>st</sup> October 2013.
- 2013 Invited paper at HYDRO 2013 International Conference held at Ocean Engineering Dept., IIT Madras.
- 2013 Invited talk at Round Table Conference, organized by TERI, New Delhi at Goa during 5-7<sup>th</sup> April 2013.
- 2013 Participated in the `ICZMP coastal guidelines workshop: A road map to the coastal sustainability' at National Centre for Sustainability and Coastal Management (NCSCM), New Delhi.
- 2013 Discussion meeting on `Hazard Line Mapping in the Islands' organized by SICOM, MoEF, Government of India held at New Delhi on 5<sup>th</sup> July 2013.
- 2010 Invited talk at the Expert Committee Meeting on Coral Reef Mapping using Remote Sensing, Space Application Centre, Ahmedabad.
- 2010 Project Review meeting of 23rd Group Monitoring Workshop of DST, GoI at HN Bahuguna Central University, Garhwal Srinagar.

## Supervision of Ph. D thesis:

- Sedimentology and Geochemistry of Core Sediments from the Ashtamudi Estuary and the Adjoining Coastal Plain, Central Kerala, India (Tiju I Varghese: A Ph. D was awarded by the Cochin University of Science and Technology, Kochi in 2010).
- Environmental magnetism and geochemical characteristics of estuarine sediments, Beypore, Kerala, SW India. Mrs.B.S.Praseetha, Cochin University of Science and Technology, Kochi, Ongoing.

#### **Completed Research Projects and Ongoing:**

1. <u>Title:</u> Preparation of Integrated Coastal Zone Management Plan (ICZMP) for Lakshadweep islands

Funding agency: Ministry of Environment & Forest, Government of India

Budget outlay: 75 lakh; Period: 2002-2005 Principal Investigator: T. N.Prakash

2. <u>Title:</u> Studies on coastal erosion and sediment movement in the selected islands of

Lakshadweep - Androth, Kalpeni and Minicoy (Phase-III)

Funding Agency: DST, UT Lakshadweep

Budget Outlay: Budget 25.48 lakh

Period: 2002-2004

Principal Investigator: T. N.Prakash

3. Title: Studies on Shore Protection Measures for Lakshadweep Islands

Funding Agency: DST, UT Lakshadweep

Budget outlay: Rs. 14.75 lakh

Period: 2005-2006

Principal Collaborator: T. N.Prakash

4. Title: Spatio-temporal shore changes during Holocene and tracing the evolutionary history of the Asthamudi estuary, southern Kerala

Funding Agency: Department of Science and Technology, Government of India.

Budget outlay: Rs. 36.10 lakhs; completed in 2010

Principal Investigator: T. N.Prakash

5. Title: Impact of Tsunami on the Kerala coast and an initiative for development of management plan for the region

Funding Agency: Department of Science and Technology, Government of India.

Budget outlay: approx. Rs. 11.08 lakh; completed 2005.

Principal Investigator: T. N.Prakash

6. **Title:** Preparation of Integrated Island Management Plan for Lakshadweep Islands.

Funding Agency: Department of Science and Technology, UT Lakshadweep

Budget outlay: approx. Rs. 70.0 lakh;

Period: 2011-2-012.

Principal Investigator: T. N.Prakash

7. **Title**: Tracing source to sink link in placer deposit formation of Kerala.

Funding agency: MoES, Gol

Budget outlay: approx: Rs.0.8 lakhs; completed in 1992.

PI: G.R.Ravindra Kumar: Investigator: T. N.Prakash

8. Title: Tsunami and Storm Surge Inundation Modeling and Mapping for the Coasts of

Kerala, Karnataka and Lakshadweep

Funding agency: MoES, Gol

Budget outlay: approx: Rs.27.0 lakh;. PI: N.P.Kurian; Investigator: T. N.Prakash

9. Title: Coastal Engineering Strategies for Kerala – a pilot project

Funding agency: MoES, Gol

Budget outlay: approx: Rs.71.47 lakh;. PI: N.P.Kurian; Investigator: T. N.Prakash

## **Book:**

Geomorphology and Physical Oceanography of the Lakshadweep coral islands in the Indian Ocean., Springer Series in Earth Sciences T.N.Prakash., L.Sheela Nair and T.S.Shahul Hameed., (2015). PP.120

# **Field Guide Book:**

Charnockite-Knondalite belt and Tertiary-Quaternary sequence of southern Kerala. Field Guide published Journal Geological Society of India, G.R.Ravindrakumar, C.P.Rajendran and T.N.Prakash. 1990, 116p.

• Field Trip Guide. International Workshop (IGCP-514) on Fluvial and Marine Processes of Cenozoic and Formation of Placers. Centre for Earth Science Studies, <u>T.N.Prakash</u>, Narayanaswamy and D.S.Suresh Babu November 1-10, 2007. pp.101-113.

#### **PUBLICATIONS:**

- 1. Prakash, T.N., Mallik, T.K. and Aby Varghese, P.(1984) Differentiation of accreted & eroded beach grain size trends- Study in Quilon district Kerala, West coast of India. Indian J. Mar. Sci., V.13, pp.202-204.
- 2. Prakash, T.N. and Aby Varghese, P. (1987) Seasonal beach changes along Quilon district coast, Kerala. J. Geol.Soc. India, V. 29, pp. 390-398.
- 3. Mallik, T.K., Samsuddin, M., Prakash, T.N. Vasudevan, V. and Terry Machado. (1987) Beach erosion and accretion- An example from Kerala, Southwest coast of India. Environ. Geol. Water Sci., V. 10(2), pp. 105-110.
- 4. Prakash, T.N. and Prithviraj, M. (1988) A study of seasonal longshore transport direction through grain size trends: An example from Quilon coast, Kerala, India. Ocean and Shoreline Management, Elsevier Applied Science, No.11, pp.195–209.
- 5. Prithviraj, M and Prakash, T.N. (1989) Sediment distribution and sediment transport studies of the innershelf zone off the central coast of Kerala, India. Journal of Coastal Research (CERF), USA. V.5, No.2, pp.271-280.
- 6. Prithviraj, M and Prakash, T.N. (1989) An analysis of the fluvio-marine ineraction on the shelf sedimentation through textural studies: A case study from Trichur coast of Kerala. Proceedings volume of Recent Geoscientific studies in Arabian Sea off India. Sp. Publ. No. 24, Geol. Survey of India, pp.375.
- 7. Prithviraj, M and Prakash, T.N. (1990) Distribution and geochemical associations of clay minerals on the innershelf of central Kerala. Marine Geology, Elsevier, V.92, p-290.
- 8. Prakash, T.N., Raja, G.K. and Prithviraj, M. (1991) Radioelement distribution in river, beach, and offshore areas and their significance to Chavara placer deposit, southern Kerala coast of India. Geo-Marine Letter, Springier-Verlag New York Inc., V.11, pp.32-38.
- 9. Prithviraj, M and Prakash, T.N. (1991) Surface microtextural study of detrital quartz grains of the innershelf sediments of central Kerala coast. Indian J. Mar. Sci., V.20, pp.13-16.
- 10. Shankar, R., Thompson, R. and Prakash, T.N. (1996) Estimation of heavy and opaque mineral contents of beach and offshore placers using rock magnetic techniques. Geo-Marine Letters, V. 16, pp. 313-318.
- 11. Prakash T. N., Kurian N. P. and Felix Jose. Beach stability in relation to nearshore wave energy distribution along Quilon coast, SW coast of India. Indian Journal of Marine Sciences, V.28, 1999, pp.233-239.

- 12. Manjunatha, B.R., Yeats, P.A., Smith J.N., Shankar, R., Narayana, A.C. and Prakash T.N. (1998) Accumulation of heavy metals in sediments of marine environments along the SW coast of India. Proc. of Internaional Atomic Energy Agency, IAEA-SM-534/51.
- 13. T.N.Prakash. (2000) Sediment distribution and placer mineral enrichment in the inner shelf of Quilon, SW coast of India, Indian Journal of Marine Sciences, V.29, 2000, pp.120-127.
- 14. T.N.Prakash, K.P. Black, J. Mathew, N.P. Kurian, K.V.Thomas, T.S.Shahul Hameed, M.V.Vinod and K.Rajith., (2007) Nearshore and beach sedimentary dynamics in a placer-dominated coast, SW India. Journal of Coastal Research, CERF, V.23(6), pp.1091-1398.
- 15. T.S.Shahul Hameed, N.P. Kurian, K.V.Thomas, K.Rajith and T.N.Prakash., (2007). Wave and current regime off the SW coast of India. Journal of Coastal Research, CERF, USA V. 23(5), V.23(5), pp.1167-1174.
- 16. K.Rajith, N.P.Kurian, K.V.Thomas, T.N.Prakash and T.S.Shahul Hameed.,(2008). Erosion and Accretion of a Placer Mining Beach of SW Indian Coast. Marine Geodesy, Vol.31, No.2, pp.128-142.
- 17. N.P.Kurian., T.N.Prakash and Baba, M., (2007). Field observations on the Tsunami impact along the Kerala coast, Southwest India. In: the Indian Ocean Tsunami, Edsedited Tad S. Murty, U.Aswathanarayana and N.Nirupama. Taylor and Francis Group, London, UK., pp. 323-337.
- 18. Nagendra R, Prakash T N, Jayamurugan K, Gayathri R And Reddy A.N. (2011), Preliminary report on benthic foraminiferal assemblage in the Ashtamudi estuary, Kerala. Journal of Palaeontological Society of India 2011, 56(2), 137-142.
- 19. Arjun, S., Kalarani P. Dhanya S.S, Praveen, A.K. Reshmi., N.P.Kurian,., M.v.Ramana Murthy., T.S.Shaul Hameed and T.N.Prakash (2011). Numerical simulation of the Makran 1945 tsunami on the southwest and Lakshadweep islands of India. Marine Geodesy Special Issue on Tsunamis, 34(1), pp.1121.
- 20. S.S. Praveen, A.K. Reshmi., P. Dhanya., Arjun, S., Kalarani., N.P.Kurian,., M.v.Ramana Murthy., T.S.Shaul Hameed and T.N.Prakash (2011). Numerical simulation of 26 December 2004 Tsunami on the Southwest coast and Lakshadweep islands of India, Marine Geodesy Special Issue on tsunamis, 34(1), pp.59-67.
- 21. T.N.Prakash, L.Sheela Nair and Tiju I Varghese., (2014). Shoreline changes and reef strengthening at Kavaratti island in Lakshadweep Archipelago- A case study. Indian Journal of Geo-Marine Sciences, 43(7): 1134-1138.
- 22. R. Prasad, L. Sheela Nair, N.P. Kurian and, T.N. Prakash, 2016. Erosion and heavy mineral depletion of a placer mining beach along the southwest coast of India: Part I—Nearshore sediment transport regime. Natural Hazards, 83: 769–796, doi: 10.1007/s11069-016-2368-z.
- 23. T.N. Prakash, T.I. Varghese, R. Prasad, L. Sheela Nair and, N.P. Kurian, 2016. Erosion and heavy mineral depletion of a placer mining beach along the southwest coast of

- India: Part II— Sedimentological and mineralogical changes. Natural Hazards 83: 797—822, doi: 10.1007/s11069-016-2350-9.
- 24. R. Prasad, L. Sheela Nair, N.P. Kurian, T.N. Prakash and, T.I. Varghese, 2016. Erosion and heavy mineral depletion of a placer mining beach along the southwest coast of India: Part III– Short and long term morphological changes. Natural Hazards 83: 823–847, doi: 10.1007/s11069-016-2346-5.
- 25. Nagendra, R., Nagarajan, R., Prakash, T.N. and Varghese, T.I. (2017). Metal enrichment in core sediments and their possible impact, the Ashtamudi Estuary, Southern Kerala, India, Journal of Indian Association of Sedimentologists, Volume 34, Issue 1& 2, 127–139.
- 26. Varghese, T.I., Prakash, T.N., Shahul Hameed, T.S. (2017). Post M-9 event changes on bathymetry and sediment characteristics of innershelf zone off Kayamkulam, Southern Kerala, India, Indian Journal of Geo-Marine Sciences, Volume 46, Issue 3, 504–512.
- 27. Varghese T.I., Prakash T.N., Nagendra R. and Nagarajan R. (2018). Sediment Geochemistry of Coastal Environments, Southern Kerala, India: implication for Provenance, Arabian Journal of Geosciences, February 2018, doi: 10.1007/s12517-018-3406-9.
- 28. Anoop, T.R., Sheela Nair, L., Prasad, R., Reji, S., Ramachandran, K.K., Prakash, T.N. and Balakrishnan Nair, T.M., 2018. Locally and remotely generated wind waves in the SouthvWestern Shelf Sea of India. Journal of Coastal Research (Accepted).
- 29. Ramesh Madipally, Sheela Nair L., Ramachandran K.K. and Prakash T.N., 2018. Development of video monitoring system for coastal applications. Journal of Coastal Research (Accepted).
- 30. G. Sreenivasulu, B.S. Praseetha, Nurul Rabitah Daud, Tiju I. Varghese, T.N. Prakash (2018). Benthic Foraminifera as Potential Ecological Proxies for Environmental Monitoring in Coastal Regions: a study on the Beypore Estuary, Southwest Coast of India. Marine Pollution Bulletin 138 (2019) 341–351. https://doi.org/10.1016/j.marpolbul.2018.11.058.
- 31. Sheela Nair, L., Prasad, R., Rafeeque, M.K. and Prakash, T.N., 2018. Coastal morphology and long-term shoreline changes along the southwest coast of India. Journal of Geological Society of India, Vol. 92, No.5, pp. 588-595.
- 32. Varghese, T.I., Prakash, T.N., Nagendra, R. and Nagarajan, R., 2018. Sediment geochemistry of coastal environments, southern Kerala, India: implication for provenance; Arabian Journal of Geosciences, 11:61, DOI: 10.1007/s12517-018-3406-9
- 33. Prasad, R., Sheela Nair, L., Kurian, N.P. and Prakash T.N., 2018. Shoreline evolution along a placer mining beach of southwest coast of India. Journal of Coastal Research (In press).

# **Proceedings of Conferences/Worshop/Seminars:**

- Prakash, T.N. and Suchindan, G.K. (1994) Coastal erosion studies in the Lakshadweep islands. In: Proc. volume of Indian National Conference on Harbour and Ocean Engineering (INCHOE-94), V.1, pp. D31-D41.
- Prakash, T.N. and Kurian, N.P. (1994) A conceptual model for the placer mineral concentrations at Chavara in the Quilon coast, Kerala. In: Proc. volume of Indian National Conference on Harbour and Ocean Engineering (INCHOE-94), V.1, pp. J55-J63.
- Kurian, N.P., Prakash, T.N. and Felix Jose. (1996) Hydrodynamic processes along Quilon coast. Int. Conf. in Ocean Engg. COE'96, PP.264-269.
- Kurian N. P., Prakash T. N. and Felix Jose (1997) Wave power potential of the Kanyakumari- Alappuzha sector, southwest coast of India. Proc. Second Indian National Conference on Harbour and Ocean Engineering, 1997, V.1, pp 228-233.
- Prakash T. N., Kurian N. P. and Felix Jose Heavy sand concentration in relation to hydrodynamic processes along Manavalakurichi, SW coast of India. Proc. Second Indian National Conference on Harbour and Ocean Engineering, 1997, V.2, pp 1099-1107.
- Felix Jose, Kurian N. P. and Prakash T. N. Longshore sediment transport along the southwest coast of India. Proc. Second Indian National Conference on Harbour and Ocean Engineering, 1997, V.2, pp 1047-1053.
- Prakash T. N., T.S.Shahul Hameed and G.K.Suchindan. (2001) Shoreline dynamics of selected islands of Lakshadweep Archipelago in relation to wave diffraction. Geol. Surv.Ind. Spl. Pub. No.56, 2001, pp.201-209.
- Prakash, T.N., S Chattopadhyay and A S K Nair., (2006). Impact of Tsunami on the Kerala Coast and a Rehabilitation Plan for the Worst Affected Stretch at Alappad. In: 26th December 2004 Tsunami – A Geoscientific Perspective. Etd. G.V.Rajamanickam et.al, New Academic Publishers, New Delhi., pp.139-149.
- T.N.Prakash, N.P.Kurian, K.Rajith, Abilash P. Pillai, B.T.Muralikrishnan, P.Kalaiarasan and Tiju Varghese., (2005). December 2004 Tsunami: Some Results of Field Surveys along the Kerala Coast. In: Proc. of the Workshop on Tsunami Effects and mitigation measures edited by V.Sundar, IIT Madras, Chennai, 26th December 2005. pp.
- T N Prakash, S Chattopadhyay and A S K Nair., (2005). Impact of Tsunami on the Kerala Coast and a Rehabilitation Plan for the Worst Affected Stretch at Alappad. In: 26th December 2004 Tsunami A Geoscientific Perspective, edited by: G.V.Rajamanickam et.al, New Academic Publishers, New Delhi.
- N.P.Kurian., T.N.Prakash and Baba, M., (2007). Field observations on the Tsunami impact along the Kerala coast, Southwest India. In: the Indian Ocean Tsunami, Edsedited Tad S. Murty, U.Aswathanarayana and N.Nirupama. Taylor and Francis Group, London, UK., pp. 323-337.

- T.N. Prakash, L Sheela Nair and T.S.Sahul Hameed., 2013. Impact of 2004 cyclone in the Lakshadweep islands, XVIII Conference on Hydraulics, Water Resources, Coastal and Enviornmental Engineeering, HYDRO 2013 International, 4-6 Dec 2013, IIT Madras, Chennai, India, 282-290.
- Prakash, T. N., Sheela Nair, L. and Tiju I. Varghese (2014). Shoreline changes and reef strengthening at Kavaratti island in Lakshadweep archipelago - a case study, Proc. of Indian National Conference on Harbour and Ocean Engineering (INCHOE 2014), Goa, India, pp. 622-625
- T.R. Anoop, L. Sheela Nair, R. Prasad, S. Reji, K.K. Ramachandran, T.N. Prakash, T.M. Balakrishnan Nair (2017). Locally and remotely generated wind waves in the SouthWestern Shelf Sea of India. Proceedings of the 5 th National Conference of Ocean Society ofIndia (OSICON-17), held at National Centre for Earth Science Studies (NCESS), Trivandrum, during Aug 28-30, 2017 (Abstract No: 408).
- M. Ramesh, L. Sheela Nair, K.K. Ramachandran, T.N. Prakash (2017). Video MonitoringSystem for Coastal Applications, Proceedings of the 5 th National Conference of OceanSociety of India (OSICON-17), held at National Centre for Earth Science Studies (NCESS), Trivandrum, during Aug 28-30, 2017.
- Tiju I. Varghese, T.N. Prakash and R Nagendra (2017). Quartz Microtexture and Texturalcharctertistics of Palaeo-Strandline Sediments, South Central Kerala -Implications toDepositional History, Proceedings of the 5 th National Conference of Ocean Society of India(OSICON-17), held at National Centre for Earth Science Studies (NCESS), Trivandrum, during Aug 28-30, 2017, p. 176.
- Praseetha B.S. and T.N. Prakash (2017). Micro-surface Features of Beypore EstuarineSediments and their Depositional History. Proceedings of the 5 th National Conference ofOcean Society of India (OSICON-17), held at National Centre for Earth Science Studies(NCESS), Trivandrum, during Aug 28-30, 2017, p. 177.
- Praseetha B.S., Prakash T.N., Shankar R. and Varghese T.I. (2017). Environmental andgeochemical characteristics of Beypore sediments, SW Coast of India. Proceeding of National Conference on Basin dynamics, Facies architecture and Paleoclimate, 34 thConvention of Indian Association of Sedimentologists, Organized by Department of Geology, SGB Amravati University Amravati, Maharashtra during 19-21 December 2017, p. 65.
- Ramesh M., Sheela Nair L., Anoop T.R., Ramachandran K.K. and Prakash T.N.,m"Nearshore wave dynamics in southwest coast of India A video imagery approach", 3 rdInternational Conference on Coastal Zones and Oceanography"- May 18-19, 2018, Singapore.
- Ramesh M., Sheela Nair L., Ramachandran K.K. and Prakash T.N.,
   "Indigenous development of Advanced Video Imagery Methods for High Resolution

Observations of Coastal Processes", India International Science Festival (IISF), Lucknow, India, 2018.

# **Technical Reports/Project Reports/Memoirs:**

- Studies on coastal erosion, sediment movement and bathymetry in selected islands of the UT of Lakshadweep. Final report submitted to Department of Science & Technology, Union Terriotory of Lakshadweep, 1993. (G.K.Suchindan, T.N.Prakash and M.Prithviraj)
- ii. Sedimentological studies of the innershelf of Varkala-Purakkad coast in south Kerala with implication on placer concentration. Technical Report of CESS, 1994, 50p (T.N.Prakash).
- iii. Placer mineral transport and concentration along South-West coast of India. Final report submitted to Department of Science & Technology, Government of India., 1997 (Kurian, N.P., Prakash, T.N. and Felix Jose)
- iv. Developing a management plan for Ashtamudi estuary, Kollam, India, 2001, Technical Memoir, edited by Kerry Black and M.Baba. Sections a) Geology and Sediment Characteristics by T.N.Prakash, M.N.M.Nair,N.P.Kurian and M.V.Vindod, pp.363-431.b) Bathymetry of Ashtamudi estuary. By N.P.Kurian, Joseph Mathew, C.M.Harish, T.S.Shahul Hameed and T.N.Prakash. and c)Hydrography and sediment chemistry of the Asthamudi estuary by M.N.M.Nair, T.N.Prakash, N.P.Kurian and K.Rajith.
- v. Heavy mineral budgeting and management at Chavara, 2002. Final report submitted to Indian Rare Earths Ltd., Chavara, Vol. I & II, pp.1-508.
- vi. Studies on coastal erosion, sediment movement and bathymetry in selected islands of the UT of Lakshadweep -Phase III, 2005. Department of Science & Technology, UT Lakshadweep. (T.N.Prakash, K.V.Thomas and G.K.Suchindan).
- vii. Integrated Coastal Zone Management Plan for Lakshadweep Islands (2005). Ministry of Environment and Forests, GoI, (T.N.Prakash, K.V.Thomas and others)
- viii. Impact of Tsunami on the Kerala coast and an initiative for the development of a management plan for the region (2006). Department of Science & Technology, Gol. (T.N.Prakash and others)
  - ix. Coastal Engineering Strategies for Kerala a pilot project (2007), Ministry of Earth Sciences, Gol (Co-Investigator)
    - x. Studies on Shore Protection Measures for Lakshadweep islands (2010), Department of Science & Technology, UT Lakshadweep (T.N.Prakash and others)