### **Curriculum vitae**

# Dr. Veerasingam Subramanian

Research Associate

Qatar University, Environmental Science Center, Building H10, Zone 3, P.O. Box: 2713, Doha, Qatar Tel: (+974) 4403 5703, Mobile: (+974) 5063 2099

Email: v.subramanian@qu.edu.qa



## **Education & Qualifications**

- 2008 2012: Ph.D., (Physics), Annamalai University, Tamil Nadu, India (Title: *Mineralogical, Geochemical and Environmental magnetic studies on marine sediments off Chennai, Bay of Bengal, India*)
- 2005 2007: M.Sc., (Physics), Annamalai University, Tamil Nadu, India
- 2002 2005: B.Sc., (Physics), University of Madras, Tamil Nadu, India

### **Employment**

- April 2022 till date: Research Associate, Environmental Science Center, Qatar University, Qatar
- August 2019 Mar 2022: Post-Doctoral Researcher, Environmental Science Center,
  Qatar University, Qatar
- April 2015 March 2018: DST-Fast Track Young Scientist, Director, CSIR-National Institute of Oceanography, India
- December 2012 March 2015: Project Associate, DST-Fast Track Young Scientist,
  Director, CSIR-National Institute of Oceanography, India
- April 2012 November 2012: Senior Research Fellow, Director, Faculty of Marine Sciences, Annamalai University, India
- November 2007 October 2010: Junior Research Fellow, Director, Faculty of Marine Sciences, Annamalai University, India

### **Research Interests**

- Nanoplastics and Microplastics
- Marine litter and Tarmat
- Marine Biogeophysics
- Geochemistry (trace metals and hydrocarbons)
- Environmental Magnetism
- Applied Spectroscopy
- Physical Oceanography
- Nearshore dynamics and coastal processes
- Machine Learning
- Environmental Impact Assessment

#### *Instruments handled*

- Fourier Transform Infrared Spectroscopy
- Atomic Absorption Spectroscopy
- Inductively Coupled Plasma Optical Emission Spectroscopy
- Ultra-Violet Fluorescence Spectroscopy
- Magnetic susceptibility meter (MS2B)
- Alternating field Demagnetizer
- Autonomous wind station
- Acoustic Doppler Current Profiler (ADCP)
- Wave, tide recorder
- Recording current meter
- Single Beam Echo-Sounder

## Scientific production & Impact of own research

• H-index: **19** 

• I10-index: 24

• Total citations: 1157

• Cumulative impact factor: 139

• Google Scholar link: https://scholar.google.co.in/citations?user=NMgpvhsAAAAJ&hl=en

• Research gate link: https://www.researchgate.net/profile/S-Veerasingam

• ORCID: **0000-0002-1791-3418** 

• Scopus Author ID: **36199128500** 

• Loop profile: 202765

Total number of publications : 36
 Total number of conference proceedings : 23
 Number of Book Chapters : 1
 Number of major research projects as LPI : 1
 Number of research projects as a team member : 7

## **List of publications**

- Veerasingam, S., Ranjani, M., Venkatachalapathy, R., Bagaev, A., Mukhanov, V., Litvinyuk, D., Mugilarasan, M., Gurumoorthi, K., Guganathan, L., Aboobacker, V.M., Vethamony, P., 2021. Contributions of Fourier Transform Infrared Spectroscopy in microplastic pollution research: A review. Critical Reviews in Environmental Science and Technology, 51:22, 2681-2743. <a href="https://doi.org/10.1080/10643389.2020.1807450">https://doi.org/10.1080/10643389.2020.1807450</a> (Citation: 67) (Impact Factor: 12.561) (JIF Quartile: Q1).
- Neelavannan, K., Hussain, S.M., Sangode, S.J., Prakasam, M., Sen, I.S., Veerasingam, S., Tyagi, A., Kumar, P., Singh, P., 2022. A 51 ka sedimentary sequence in a seamount basin, Eastern Arabian Sea: Records for paleoceanographic and paleoclimatic conditions. Journal of Asian Earth Sciences, 226, 105086. <a href="https://doi.org/10.1016/j.jseaes.2022.105086">https://doi.org/10.1016/j.jseaes.2022.105086</a> (Citation: Nil) (Impact Factor: 3.449) (JIF Quartile: Q1).

- Veerasingam, S., Vethamony, P., Aboobacker, V.M., Giraldes, A.E., Dib, S., Al-Khayat, J.A., 2021. Factors influencing the vertical distribution of microplastics in the beach sediments around the Ras Rakan Island, Qatar. Environmental Science and Pollution Research, 28, 34259-34268. <a href="https://doi.org/10.1007/s11356-020-12100-4">https://doi.org/10.1007/s11356-020-12100-4</a> (Citation: 5) (Impact Factor: 4.223) (JIF Quartile: Q2).
- Ranjani, M., Veerasingam, S., Venkatachalapathy, R., Mugilarasan, M., Bagaev, A., Mukhanov, V., Vethamony, P., 2021. Assessment of potential ecological risk of microplastics in coastal sediments of India: a meta-analysis. Marine Pollution Bulletin, 163, 111969. <a href="https://doi.org/10.1016/j.marpolbul.2021.111969">https://doi.org/10.1016/j.marpolbul.2021.111969</a> (Citation: 23) (Impact Factor: 5.553) (JIF Quartile: Q1).
- Al-Khayat, J.A., Veeasingam, S., Aboobacker, V.M., Vethamony, P., 2021. Hitchhiking of encrusting organisms on floating marine debris along the west coast of Qatar, Arabian/Persian Gulf. Science of the Total Environment, 776, 145985. <a href="https://doi.org/10.1016/j.scitotenv.2021.145985">https://doi.org/10.1016/j.scitotenv.2021.145985</a> (Citation: 4) (Impact Factor: 7.963) (JIF Quartile: Q1).
- 6. Bagaev, A., Esiukova, E., Litvinyuk, D., Chubarenko, I., **Veerasingam, S.,** Venkatachalapathy, R., Verzhevskaya, L., 2021. Investigations of plastic contamination of seawater, marine and coastal sediments in the Russian Seas: A review. Environmental Science and Pollution Research, 28, 32264-32281 (Citation: 4) (Impact Factor: 4.223) (JIF Quartile: Q2).
- Rajendran, S., Al-Khayat, J.A., Veerasingam, S., Nasir, S., Vethamony, P., Sadooni, F.N., Al-Kuwari, H.A.S., 2021. WorldView-3 mapping of tar deposits of the Ras Rakan Island, Northern coast of Qatar: Environmental Perspective. Marine Pollution Bulletin, 163, 111988. <a href="https://doi.org/10.1016/j.marpolbul.2021.111988">https://doi.org/10.1016/j.marpolbul.2021.111988</a> (Citation: 2) (Impact Factor: 5.553) (JIF Quartile: Q1).
- 8. Aboobacker, V.M., Samiksha, S.V., **Veerasingam, S.,** Al-Ansari, E.M.A.S., Vethamony, P., 2021. Role of shamal and easterly winds on the wave characteristics off Qatar, central Arabian Gulf. Ocean Engineering, 236, 109457. <a href="https://doi.org/10.1016/j.oceaneng.2021.109457">https://doi.org/10.1016/j.oceaneng.2021.109457</a> (Citation: Nil) (Impact Factor: 3.795) (JIF Quartile: Q1).
- Neelavannan, K., Hussain, S.M., Nishath, N.M., Achythan, H., Veerasingam, S., Prakasam, M., Kumar, P., Singh, P., Kurian, P.J., 2021. Paleoproductivity shifts since the last 130 ka off Lakshadweep, Southeastern Arabian Sea. Regional Studies in Marine Science, 44, 101776. <a href="https://doi.org/10.1016/j.rsma.2021.101776">https://doi.org/10.1016/j.rsma.2021.101776</a> (Citation: 2) (Impact Factor: 1.624) (JIF Quartile: Q3).
- Aboobacker, V.M., Shanas, P.R., Veerasingam, S., Ibrahim M.A.S. Al-Ansari, Fadhil N Sadooni, Vethamony, P., 2021. Long-term assessment of onshore and offshore wind energy potentials of Qatar. Energies, 14, 1178. <a href="https://doi.org/10.3390/en14041178">https://doi.org/10.3390/en14041178</a> (Citation: 11) (Impact Factor: 3.004) (JIF Quartile: Q3).
- 11. **Veerasingam, S.,** Ranjani, M., Venkatachalapathy, R., Bagaev, A., Mukhanov, V., Litvinyuk, D., Verzhevskaia, L., Guganathan, L., Vethamony, P., 2020. Microplastics in different environmental compartments in India: current understanding and future challenges. Trends

- in Analytical Chemistry, 133, 116071. <a href="https://doi.org/10.1016/j.trac.2020.116071">https://doi.org/10.1016/j.trac.2020.116071</a> (Citation: 22) (Impact Factor: 12.296) (JIF Quartile: Q1).
- 12. **Veerasingam, S.,** Al-Khayat, J.A., Aboobacker, V.M., Hamza, S., Vethamony, P., 2020. Sources, spatial distribution and characteristics of marine litter along the west coast of Qatar. Marine Pollution Bulletin, 159, 111478. <a href="https://doi.org/10.1016/j.marpolbul.2020.111478">https://doi.org/10.1016/j.marpolbul.2020.111478</a> (Citation: 10) (Impact Factor: 5.553) (JIF Quartile: Q1).
- Veerasingam, S., Al-Khayat, J.A., Haseeba, K.P., Aboobacker, V.M., Hamza, S., Vethamony, P., 2020. Spatial distribution, structural characterization and weathering of tarmats along the west coast of Qatar. Marine Pollution Bulletin, 159, 111486. <a href="https://doi.org/10.1016/j.marpolbul.2020.111486">https://doi.org/10.1016/j.marpolbul.2020.111486</a> (Citation: 5) (Impact Factor: 5.553) (JIF Quartile: Q1).
- 14. Mukhanov, V.S., Litvinyuk, D.A., Sakhon, A., Bagaev, A.V., **Veerasingam, S.**, Venkatachalapathy, R., 2019. A new method for analysing microplastic particle size distribution in marine environmental samples. Ecologica Montenegrina, 23, 77-86. <a href="https://doi.org/10.37828/em.2019.23.10">https://doi.org/10.37828/em.2019.23.10</a> (Citation: 9) (Impact Factor: Nil) (JIF Quartile: -).
- Suneel, V., Saha, M., Rathore, C., Sequira, J., Nikhil Mohan, P.M., Ray, D., Veerasingam, S., Rao, V.T., Vethamony, P., 2019. Assessing the source of oil deposited in the surface sediment of Mormugao Port, Goa A case study of MV Qing incident. Marine Pollution Bulletin, 145, 88-95. <a href="https://doi.org/10.1016/j.marpolbul.2019.05.035">https://doi.org/10.1016/j.marpolbul.2019.05.035</a> (Citation: 3) (Impact Factor: 5.553) (JIF Quartile: Q1).
- 16. **S. Veerasingam,** M. Saha, V. Suneel, P. Vethamony, 2017. Microplastic pollution: a serious threat to the marine ecosystem. Newsletter Blue waters, Indian Coast Guard **(Citation: 6)** (**Impact Factor: Nil)** (**JIF Quartile: -**).
- Veerasingam, S., M. Saha, V. Suneel, P. Vethamony, A.C. Rodrigues, S. Bhattacharyya, B.G. Naik. 2016. Characteristics, seasonal distribution and surface degradation features of microplastic pellets along the Goa coast, India. Chemosphere, 159, 496 505. <a href="https://doi.org/10.1016/j.chemosphere.2016.06.056">https://doi.org/10.1016/j.chemosphere.2016.06.056</a> (Citation: 196) (Impact Factor: 7.086) (JIF Quartile: Q1).
- 18. **Veerasingam, S.,** M. Mugilarasan, R. Venkatachalapathy, P. Vethamony. 2016. Influence of 2015 flood on the distribution and occurrence of microplastic pellets along the Chennai coast, India. Marine Pollution Bulletin, 109, 196–204. <a href="https://doi.org/10.1016/j.marpolbul.2016.05.082">https://doi.org/10.1016/j.marpolbul.2016.05.082</a> (Citation: 169) (Impact Factor: 5.553) (JIF Quartile: Q1).
- Veerasingam, S., P. Vethamony, R. Mani Murali, B. Fernandes. 2015. Depositional record of trace metals and degree of contamination in core sediments from the Mandovi estuarine mangrove ecosystem, west coast of India. Marine Pollution Bulletin, 91, 362–367. <a href="https://doi.org/10.1016/j.marpolbul.2014.11.045">https://doi.org/10.1016/j.marpolbul.2014.11.045</a> (Citation: 57) (Impact Factor: 5.553) (JIF Quartile: Q1).
- 20. **Veerasingam**, **S.,** P. Vethamony, R. Mani Murali, M.T. Babu. 2015. Sources, vertical fluxes and accumulation of petroleum hydrocarbons in sediments from the Mandovi estuary, west coast

- of India. International Journal of Environmental Research, 9, 179 186. <a href="https://doi.org/10.22059/IJER.2015.887">https://doi.org/10.22059/IJER.2015.887</a> (Citation: 21) (Impact Factor: 2.479) (JIF Quartile: Q3).
- 21. **Veerasingam**, **S.**, R. Venkatachalapathy. 2014. Estimation of carbonate concentration and characterisation of marine sediments by Fourier Transform Infrared Spectroscopy. Infrared Physics and Technology, 66, 136 140. <a href="https://doi.org/10.1016/j.infrared.2014.06.005">https://doi.org/10.1016/j.infrared.2014.06.005</a> (**Citation: 34**) (**Impact Factor: 2.638**) (**JIF Quartile: Q2**).
- 22. Veerasingam, S., R. Venkatachalapathy, T. Ramkumar. 2014. Historical environmental pollution trend and ecological risk assessment of trace metals in marine sediments off Ady ar estuary, Bay of Bengal, India. Environmental Earth Sciences, 71, 3963 3975. <a href="https://doi.org/10.1007/s12665-013-2781-5">https://doi.org/10.1007/s12665-013-2781-5</a> (Citation: 28) (Impact Factor: 2.784) (JIF Quartile: Q3).
- 23. **Veerasingam**, **S.**, R. Venkatachalapathy. 2014. Characterization of 2004 Indian Ocean Tsunami induced deposits along the Chennai coast using magnetic and geochemical techniques. Indian Journal of Geo-Marine Sciences, 43, 1378-1383. **(Citation: Nil)** (**Impact Factor: 0.496**) (**JIF Quartile: Q4**).
- 24. Veerasingam, S., R. Venkatachalapathy, T. Ramkumar. 2014. Distribution of clay minerals in marine sediments off Chennai, Bay of Bengal, India: indicators of sediment sources and transport processes. International Journal of Sediment Research, 29, 11-23. <a href="https://doi.org/10.1016/S1001-6279(14)60018-4">https://doi.org/10.1016/S1001-6279(14)60018-4</a> (Citation: 25) (Impact Factor: 2.902) (JIF Quartile: Q2).
- 25. **Veerasingam**, **S.,** R. Venkatachalapathy, N. Basavaiah, T. Ramkumar, S. Venkatramanan, K. Deenadayalan. 2014. Identification and characterization of tsunami deposits off southeast coast of India from the 2004 Indian Ocean tsunami: Rock magnetic and geochemical approach. Journal of Earth System Science, 123, 905–921. <a href="https://doi.org/10.1007/s12040-014-0427-y">https://doi.org/10.1007/s12040-014-0427-y</a> (Citation: 19) (Impact Factor: 1.371) (JIF Quartile: Q4).
- 26. **Veerasingam, S.,** R. Venkatachalapathy, T. Ramkumar. 2012. Heavy metals and ecological risk assessment in marine sediments of Chennai, India. Carpathian journal of Earth and Environmental Sciences, 7, 111-124 (Citation: 41) (Impact Factor: 1.347) (JIF Quartile: Q4).
- R. Venkatachalapathy, Veerasingam, S., V. Rajeswari. 2012. Distribution and origin of Petroleum hydrocarbons in Pichavaram mangrove swamp along Tamilnadu coast, Bay of Bengal, India. Geochemistry International, 50, 476 480. <a href="https://doi.org/10.1134/S0016702912050072">https://doi.org/10.1134/S0016702912050072</a> (Citation: 11) (Impact Factor: 0.881) (JIF Quartile: Q4).
- R. Venkatachalapathy, Veerasingam, S., N. Basavaiah, T. Ramkumar, K. Deenadayalan. 2011. Environmental magnetic and petroleum hydrocarbons records in sediment cores from the north east coast of Tamilnadu, Bay of Bengal, India. Marine Pollution Bulletin, 62, 681-690. <a href="https://doi.org/10.1016/j.marpolbul.2011.01.030">https://doi.org/10.1016/j.marpolbul.2011.01.030</a> (Citation: 53) (Impact Factor: 5.553) (JIF Quartile: Q1).
- 29. **Veerasingam, S.,** R. Venkatachalapathy, P. Raja, S. Sudhakar, V. Rajeswari, R. Mohamed Asanulla, R. Mohan, P. Sutharsan. 2011. Petroleum hydrocarbon concentrations in ten

- commercial fish species along Tamilnadu coast, Bay of Bengal, India. Environmental Science and Pollution Research, 18, 687 693. <a href="https://doi.org/10.1007/s11356-011-0466-8">https://doi.org/10.1007/s11356-011-0466-8</a> (Citation: 34) (Impact Factor: 4.223) (JIF Quartile: Q2).
- 30. **Veerasingam, S.,** R. Venkatachalapathy, S. Sudhakar, P. Raja, V. Rajeswari. 2011. Petroleum hydrocarbon concentrations in eight mollusk species along Tamilnadu coast, Bay of Bengal, India. Journal of Environmental Sciences, 23, 1129 1134. <a href="https://doi.org/10.1016/S1001-0742(10)60524-4">https://doi.org/10.1016/S1001-0742(10)60524-4</a> (Citation: 25) (Impact Factor: 5.565) (JIF Quartile: Q1).
- 31. R. Venkatachalapathy, **Veerasingam**, **S.**, N. Basavaiah, T. Ramkumar, K. Deenadayalan. 2011. Environmental magnetic and geochemical characteristics of Chennai coastal sediments, Bay of Bengal, India. Journal of Earth System Science, 120, 885-895. <a href="https://doi.org/10.1016/S1001-0742(10)60524-4">https://doi.org/10.1016/S1001-0742(10)60524-4</a> (Citation: 14) (Impact Factor: 1.371) (JIF Quartile: Q4).
- 32. R. Venkatachalapathy, **Veerasingam**, **S.**, N. Basavaiah, T. Ramkumar. 2010. Comparison between Petroleum hydrocarbon and Magnetic properties in Chennai coastal sediments, Bay of Bengal, India. Marine and Petroleum Geology, 27, 1927 1935. <a href="https://doi.org/10.1016/j.marpetgeo.2010.07.004">https://doi.org/10.1016/j.marpetgeo.2010.07.004</a> (Citation: 33) (Impact Factor: 4.348) (JIF Quartile: Q1).
- 33. R. Venkatachalapathy, **Veerasingam**, **S.,** T. Ramkumar. 2010. Petroleum hydrocarbon concentrations in marine sediments along Chennai coast, Bay of Bengal, India. Bulletin of Environmental Contamination and Toxicology, 85, 397 401. <a href="https://doi.org/10.1007/s00128-010-0097-7">https://doi.org/10.1007/s00128-010-0097-7</a> (**Citation: 41**) (**Impact Factor: 2.151**) (**JIF Quartile: Q3**).
- 34. **Veerasingam**, **S.,** P. Raja, R. Venkatachalapathy, R. Mohan, P. Sutharsan. 2010. Distribution of petroleum hydrocarbon concentrations in coastal sediments along Tamilnadu coast, India. Carpathian journal of Earth and Environmental Sciences, 5, 5 8 **(Citation: 36)** (**Impact Factor: 1.347)** (**JIF Quartile: Q4**).
- 35. Raja, P., Veerasingam, S., Suresh, G., Marichamy, G., Venkatachalapathy, R., 2009. Heavy metals concentration in four commercially valuable marine edible fish speceis from Parangipettai coast, Southeast coast of India. International Journal of Animal and Veterinary Advances, 1, 10-14 (Citation: 112) (Impact Factor: Nil) (JIF Quartile: -).
- 36. Marichamy, G., Raja, P., **Veerasingam, S.,** Rajagopal, S., Venkatachalapathy, R., 2009. Fatty acids composition of Indian mackerel Rastilliger kanagurta under different cooking methods. Current research Journal of Biological Sciences, 1, 109-112 (Citation: 30) (Impact Factor: Nil) (JIF Quartile: -).

#### Research papers presented in conferences

 Veerasingam, S., Aboobacker, V.M., Giraldes, A.E., Dib, S., Al-Khayat, J., Vethamony, P., 2021. Microplastics in the beach sediments around the Ras Rakan Island, Qatar. Qatar University Annual Research Forum & Exhibition (QUARFE 2021). https://doi.org/10.29117/quarfe.2021.0028.

- 2. Vethamony, P., **Veerasingam, S.**, Al-Khayat, J., Aboobacker, V.M., Sadooni, F.N., Al-Kuwari, H.A.S., 2021. Distribution, characterization and weathering of tarmats along the west coast of Qatar. Qatar University Annual Research Forum & Exhibition (QUARFE 2021). https://doi.org/10.29117/quarfe.2021.0033.
- 3. Al-Khayat, J., **Veerasingam, S.,** Aboobacker, V.M., Vethamony, P., 2021. Assemblage of encrusting organisms on floating marine debris along the west coast of Qatar. Qatar University Annual Research Forum & Exhibition (QUARFE 2021). <a href="https://doi.org/10.29117/quarfe.2021.0029">https://doi.org/10.29117/quarfe.2021.0029</a>.
- 4. Aboobacker, V.M., **Veerasingam, S.,** Al-Ansari, E.M.A.S., Vethamony, P., 2021. Surface waves generated by shamal and easterly winds off Qatar. Qatar University Annual Research Forum & Exhibition (QUARFE 2021). <a href="https://doi.org/10.29117/quarfe.2021.0037">https://doi.org/10.29117/quarfe.2021.0037</a>.
- 5. M. Ranjani, **Veerasingam**, **S.,** R. Venkatachalapathy, V. Suneel, M.J. Alex, A. Bagaev, P. Vethamony, 2021. Influence of near-surface currents on the dispersal of marine microplastics in the northern Indian Ocean. Asia Oceania Geosciences Society, held during August 02-06, 2021, at Singapore.
- 6. M. Ranjani, **Veerasingam**, **S.**, R. Venkatachalapathy, L. Guganathan. 2021. Seasonal variations, polymer composition and controlling factors of microplastics along the Chennai coast, Bay of Bengal, India. International Conference on Advances in Chemical, Biological and Environmental Engineering, held during April 23-24, 2021 at MNIT Jaipur.
- 7. **Veerasingam**, **S.,** P. Vethamony, Jassim Al-Khayat, Shafeeq Hamza. 2020. Sources, spatial distribution and characteristics of marine litter and microplastics along the west coast of Qatar, Arabian Gulf. International Indian Ocean Science Conference (IIOSC-2020) held during 16-20 March, 2020 in CSIR-National Institute of Oceanography, Goa, India.
- 8. **Veerasingam, S.**, Al-Khayat, J., Vethamony, P., 2020. COVID-19 personal protection equipment (PPE): A potential source of microplastic pollution in the State of Qatar. Qatar University Annual Research Forum & Exhibition (QUARFE 2020). <a href="https://doi.org/10.29117/quarfe.2020.0284">https://doi.org/10.29117/quarfe.2020.0284</a>.
- 9. Haseeba, K.P., **Veerasingam, S.,** Shafeeq, H., Al-Khayat, J., Vethamony, P., 2020. Assessment of tarmat contamination and its chemical characterization along the west coast of Qatar, Arabian Gulf. Qatar University Annual Research Forum & Exhibition (QUARFE 2020). <a href="https://doi.org/10.29117/quarfe.2020.0075">https://doi.org/10.29117/quarfe.2020.0075</a>.
- 10. Aboobacker, V.M., Al-Ansari, E.M.A.S., Shanas, P.R., **Veerasingam, S.**, Vethamony, P., 2020. Wind energy potential along the onshore and offshore Qatar. Qatar University Annual Research Forum & Exhibition (QUARFE 2020). <a href="https://doi.org/10.29117/quarfe.2020.0018">https://doi.org/10.29117/quarfe.2020.0018</a>.
- 11. **Veerasingam, S.**, P. Vethamony, Jassim A. Al-Khayat, Shafeeq Hamza. 2019. Sources, spatial distribution and characteristics of marine litter and microplastics along the west coast of Qatar, Arabian Gulf. Poster presented at the Open day for Graduate Studies, organized at the Qatar University, 23-24 October 2019.
- 12. Ranjani, M., Mugilarasan, M., **Veerasingam, S.,** Venkatachalapathy, R., 2017. FTIR spectroscopic studies on microplastic pellets deposited during 2015 flood along the Chennai

- coast, Bay of Bengal, India. International conference on recent advances in Applied Physics (ICRAAP-2017), Annamalai University, Tamil Nadu, India
- 13. **Veerasingam, S.,** Ranjani, M., Venkatachalapathy, R., 2017. Nanoplastic pollution: A serious threat to the marine and freshwater systems. International conference on recent advances in Applied Physics (ICRAAP-2017), Annamalai University, Tamil Nadu, India
- 14. M. Saha, **Veerasingam**, **S.**, V. Suneel, B.G. Naik, P. Vethamony, B. Bhattacharya, 2016. Microplastic pollution on the coast of India. *5<sup>th</sup> International conference on Ecotoxicology and Environmental Sciences (ICEES–2016)* held during 15–17 February, 2016 in Central Institute of Fisheries Technology, Cochin, Kerala, India, pp. 18–19.
- 15. **Veerasingam, S.,** P. Vethamony, M. Mugilarasan, R. Venkatachalpathy, 2015. Occurrence and distribution of plastic debris on the Marina beach, Chennai, east coast of India: spectroscopic and hydrodynamic modelling approach. *Dynamics of the Indian Ocean: Perspective and Retrospective International Symposium on the Indian Ocean (IIOE-2)* held during 30 November 4 December, 2015 in CSIR–National Institute of Oceanography, Goa, India, IO50 03 0008.
- 16. **Veerasingam, S.,** M. Mugilarasan, R. Venkatachalpathy, P. Vethamony, 2015. Preliminary observations on occurrence, spatial distribution and identification of plastic resin pellets in sediments around Agatti Island, Lakshadweep Archipelago. *4th National Conference of Ocean Society of India (OSICON 15)* held during 22–24 March 2015 in CSIR–National Institute of Oceanography, Goa, India, pp. 207.
- 17. **Veerasingam, S.,** P. Vethamony, R. Venkatachalpathy, 2014. Rapid characterization and identification of tsunami induced sediment deposits using Fourier Transform Infrared Spectroscopy. *International conference on A decade after the Indian Ocean Tsunami status and experiences (IOTSUNAMI 2014)* during 10–13 December, 2014 in Pondicherry Engineering College, Pondicherry, India, pp. 21.
- 18. **Veerasingam**, **S.**, P. Vethamony, R. Venkatachalapathy, 2014. Comparison of rock magnetic properties and trace metals in surface sediments from the Pichavaram (east coast of India) and Mandovi (west coast of India) estuaries. *Asia Oceania Geosciences Society 2014 (AOGS-2014)* held during 28<sup>th</sup> July 1<sup>st</sup> August 2014, Japan, SE04–A007.
- 19. **Veerasingam**, **S.**, R. Venkatachalapathy, 2014. Characterisation of 2004 Indian Ocean Tsunami induced deposits along the Chennai coast using magnetic and geochemical techniques. *Fifth Indian National Conference on Harbour and Ocean Engineering (INCHOE-2014)* held during 5–7, February 2014 in CSIR–National Institute of Oceanography, Goa, India, pp. 70.
- 20. R. Venkatachalapathy, V. Rajeswari, N. Basavaiah, and **Veerasingam, S.,** 2012. Mineral magnetic, geochemical and textural studies on Visakhapatinam coastal sediments, Bay of Bengal, India. *Asia Oceania Geosciences Society 2012 (AOGS-2012)* held during 13 17 August, 2012, Singapore, SE72–A005.
- 21. **Veerasingam**, **S.,** R. Venkatachalapathy, and R. Mohan. 2010. Assessment of trace metals and petroleum hydrocarbons contamination in marine sediments off Chennai, Bay of Bengal,

- India. International conference on recent frontiers in applied spectroscopy (ICORFAS-2010) held during 22-24<sup>th</sup> September, 2010 at Department of Physics, Annamalai University, India,
- 22. **Veerasingam, S.,** R. Venkatachalapathy, and R. Mohan. 2010. Petroleum hydrocarbon concentrations in marine sediments along Chennai coast, Bay of Bengal, India. *National seminar on new frontiers in chemistry (NSNFC-2010)* held during 15<sup>th</sup> and 16<sup>th</sup> March, 2010 at Department of Chemistry, Annamalai University, India.
- 23. **Veerasingam, S.,** R. Venkatachalapathy, and R. Mohan. 2009. Assessment of heavy metal contamination in marine sediments off Chennai coast. *National conference Recent trends in bioscience 21st Millennium (BIOS-2009)* held during 6th and 7th March 2009 at Department of Zoology, Annamalai University, India.

# Research Projects undertaken/involved

- 1. Project title: Tarmats of Qatar Coast: Resilience to Weathering Processes and Quantification of Environmental Hazards; Funding Agency: Qatar Energy; Duration: August 2019 to March 2022.
- 2. Project title: *Identification and modelling of microplastic transport in the coastal areas under the influence of dominant wind patterns*; Funding Agency: *DST, India.*
- 3. Project title: Modelling the migration of Polycyclic Aromatic Hydrocarbons (PAHs) through sediments along the Goa coast: Application to water quality management; Funding Agency: DST, India; Duration: April 2015 to March 2018.
- 4. Project title: Setting-up of a finger-printing laboratory for oil spills; Funding Agency: DST, India; Duration: April 2014 to March 2018.
- 5. Project title: Numerical modelling study of hydrodynamics for Environmental Impact Assessment (EIA) of proposed marina at Sancoale Bay; Funding Agency: Yacht Haven Pvt. Ltd., Goa; Duration: December 2012 to March 2015.
- 6. Project title: Studies and modeling on occurrence of Bioluminescence off Cuddalore and Parangipettai coastal waters and its features and causes; Funding Agency: DRDO-NRB, India; Duration: April 2012 November 2012.
- 7. Project title: Establishment of coastal Palaeomonsoonal conditions along major geomorphic entity of Tamilnadu coast using mineral magnetic and geochemical studies; Funding Agency: DRDO-NRB, India; Duration: April 2012 November 2012.

### Member in Editorial Board

- Editorial Board Member and Review Editor, Frontiers Journal of Environmental Science
- Topic Editor for "Challenges in Characterizing Nano- to Macro-Plastics and Adhered Substances in the Aquatic Environment" – Special Issue in the Frontiers in Environmental Science (2021-2022), Switzerland (<a href="https://www.frontiersin.org/research-topics/27719/challenges-in-characterizing-nano--to-macro-plastics-and-adhered-substances-in-the-aquatic-environme">https://www.frontiersin.org/research-topics/27719/challenges-in-characterizing-nano--to-macro-plastics-and-adhered-substances-in-the-aquatic-environme</a>)

### Reviewer of the Journals

- Water Research
- TrAC Trends in Analytical Chemistry
- Journal of Hazardous Materials
- Environmental Pollution
- Science of the Total Environment
- Marine Pollution Bulletin
- Estuarine coastal and Shelf Science
- Environmental Science and Pollution Research
- Environmental Monitoring and Assessment
- International Journal of Environmental Science and Technology
- Ecotoxicology and Environmental Safety
- Environmental Earth Sciences
- Journal of Coastal Research
- Current Science
- Frontiers in Environmental Science
- Chemosphere
- Environmental Research
- Heliyon
- Regional Studies in Marine Science
- Journal of Earth System Science
- Bulletin of Environmental Contamination and Toxicology
- Arabian Journal of Geosciences

### Reviewer of research project grants

Reviewed a project proposal for grant from the Minister of Earth Sciences (MoES), India

### Cruises/Field work

Participated as a chief-scientist/team member of Cruises onboard RV Sagar Paschimi, RV Sindhu Sankalp and boats, and collected microplastics, sea water (surface and subsurface), sediments (surface and core sediments) and oceanographic surveys, including bathymetry survey, deployment of tide gauge, wave recorder, CTD, Recording current meter (RCM) and Acoustic Doppler current profiler (ADCP).

### Member of professional bodies

- Member Asia Oceania Geosciences Society (AOGS), Singapore
- Life Member Indian Science Congress Association (ISCA), Kolkata, India
- Member Ocean Society of India (OSI), Kochi, India

# **Courses taught and supervision**

 Acoustics – Practical class session, M.Sc., (Ocean Science and Technology), Annamalai University (2008-2012)

### **Skills and interests**

- Computer skills: MS Office, Adobe Illustrator, SPSS, Minitab, Grapher, Surfer, MIKE 21
- Language skills: English (Fluent), Tamil (Mother tongue), Hindi (basic knowledge), Malayalam (basic knowledge) and Telugu (basic knowledge)

### **Synergistic Activities**

- Member, Casino monitoring committee Compliance with the directives of the National Green Tribunal, all six Casinos on river Mandovi and Sewage Treatment Plant of PWD at Tonca Caranzalem, Goa have been monitored and reported to Goa State Pollution Control Board.
- Member, Plastic Pollution—Environmental Education Team, CSIR—NIO, Goa: Delivering the lectures in various schools at Goa to create awareness about plastics to children.
- Invited Online lecture, Delivered Talk on 'Physics principles on marine applications' to the students of Theivanai Ammal College for Women, India through online.
- Contributed to provide the contents for the ESC website modifications under the Marine Science Cluster. 20-25 January 2021.
- Invited Online lecture, delivered talk on "Increased plastic pollution in Qatar due to COVID-19 Pandemic: Challenges and Recommendations" in Qatar University Life Sciences Symposium (QULSS-2020) held in the Department of Biological and Environmental Sciences on 11 November, 2020.
- Presented a talk on "Marine litter in the Arabian Gulf with particular reference to the Qatar coast" conducted as part of the ESC internal seminars. 14th November, 2019.