

CURRICULUM VITAE

PROFESSOR NALIN PRASANNA RATNAYAKE

BSc Hons (SL), MSc (Japan), PhD (Japan)

Head/Department of Earth Resources Engineering, University of Moratuwa

Professor at the Dept. of Earth Resources Engineering, University of Moratuwa

Center of Excellence Research Fellow (Japan)

Field of Specialty: Marine Geology and Oceanography

1. PERSONAL DATA

FULL NAME: Nalin Prasanna Ratnayake
NATIONALITY: Sri Lankan
AGE: 49
BIRTH DATE: 1970-09-29
SEX: Male
ADDRESS (OFFICIAL): Department of Earth Resource Engineering, University of Moratuwa, Moratuwa, Sri Lanka.
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2. EDUCATION

2000-2004 **PhD in Marine Geology and Oceanography**--Ocean-land linkage between the Pacific Ocean and the mid latitudes, studied using the North Pacific Ocean and the Bering sea piston core sediments at Hokkaido University, Japan.

1997-1999 **MSc in Marine Geology and Oceanography**--The natural and anthropogenic effects on the Negombo and Lunawa lagoon environments during the last 100 years studied using organic geochemical techniques at Shimane University, Japan.

1992-1996 **BSc (Hons) Degree** with a Upper Second Class in Geology at Peradeniya University, Sri Lanka.

1983-1989 **Secondary Education**, Kingswood College, Kandy, Sri Lanka.

1977-1982 **Primary Education**, N/Sumana Maha Vidyalaya, Talawakelle, Sri Lanka.

3. EMPLOYMENT RECORD

2014 to date	Professor in Geology Department of Earth Resources Engineering, Faculty of Engineering, University of Moratuwa, Sri Lanka
2019 - 2021	Vice Chancellor , Ocean University of Sri Lanka (Sabbatical Leave from Moratuwa Univ for 1 ½ years)
2019	Head , Department of Earth Resources Engineering, Faculty of Engineering, University of Moratuwa, Sri Lanka (for 3 months period)
2005-2014	Senior Lecturer in Marine and Petroleum Geology Department of Earth Resources Engineering, Moratuwa University
2012-2012	Visiting Researcher in Offshore Petroleum Geology, Hokkaido University, Japan. Source rock and maturation analysis, Mannar Basin, Sri Lanka (Sabbatical Leave from Moratua University for 6 months)
2004-2005	Postdoc Research Fellow (Petroleum) Hokkaido University. Diagenesis and distribution of biomarkers in Late Miocene to Pliocene marine siliceous rocks from Horonobe (Hokkaido, Japan).
1999-2000	Research Student Shimane University, Japan--Modelling for understanding Petroleum and gas formation using Negombo and Lunawa Lagoon sediments. 1999 Oct to 2000 April
1997-1997	Research Assistant at the Institute of Fundamental Studies (Institute of Fundamental Studies, Kandy, Sri Lanka. Structural Geology. 1997 March to 1997 Sept.
1996-1997	Demonstrator (teaching assistant) at the Dept. of Geology Univ. of Peradeniya from 1996 April 1997 March

4. PRESTIGIOUS AND PROFESSIONAL POSITIONS

2017	President -Geological Society of Sri Lanka (GSSL)
2017-2020	General Secretary - Institute of Geology, Sri Lanka (IGSL)
2014-2016	Joint Editor -Geological Society of Sri Lanka (GSSL) for two terms 2014 and 2015
2015-2016	Editor -Institute of Geology, Sri Lanka (IGSL)
2013-2014	Vice President -Geological Society of Sri Lanka (GSSL) for 1 term 2013
2010-2014	Member -1 st council of the Institute of Geology, Sri Lanka (IGSL)
2008-2010	Secretary -Geological Society of Sri Lanka for two terms 2008 and 2009
2008-2009	Project Coordinator -Department of Earth Resources Engineering, University of Moratwua of the Improvement of Relevance and Quality

	of Undergraduate Education in Sri Lanka (IRQUE Project) World Bank Funded National Project
2005-2009	Member of the Board of Governors at the Postgraduate Institute of Science, University of Peradeniya, Sri Lanka
2017-2018	Visiting Lecturer – Department of Civil Engineering, University of Ruhuna
2016-2018	Visiting Lecturer – MSc level at University of Peradeniya Postgraduate Institute of Sciences
2007-2009	Visiting Lecturer – Department of Natural Resources, University of Sabaragamuwa, Sri Lanka
2017 to date	OBE and IESL Accreditation Coordinator , Department of Earth Resources Engineering, University of Moratuwa

5. AWARDS

2018	Moratuwa University, Award of Excellence with Distinction-- Outstanding Research Performances 2017
2017	Moratuwa University, Outstanding Research Award 2016
2015	NRC Merit Award for Scientific Publication-2013
2010	Presidential Award for the International Publication of the period of 2007 – 2005
2004-2005	Center of Excellence (COE) Postdoc Fellowship 2004 Jan. to 2005 Feb.
2013	National Research Council Merit Award year 2011
1997-1999	Monbugaksho Scholarship for MSc studies at Shimane University Japan
1997-1999	The Rotary Yoneyama Scholarship for PhD studies at Hokkaido University, Japan

6. RESEARCH ACTIVITIES/GRANTS

NATIONAL

2019 to date	Potential of Rare Earth Elements (REE) in Sri Lanka Onshore and Offshore Terrains and Development of Extraction Techniques. Development Oriented Research (DOR) grants under Accelerating Higher Education Expansion and Development (AHEAD) Operation
2017 to date	Millennial and sub-millennial-scale variability of northeast monsoon and its impact on terrestrial ecosystems in Sri Lanka. NSF partially funded.

2017 to date	Development of a regional sea level curve in context with Sri Lankan coastal proxies and assessment of future sea level impact. Senate Research Grant.
2015 to 2019	Investigations on the fertilizing capacity of bottom sediments in the Anuradapura region. Moratuwa University, Senate Research Grant.
2012-2016	Economic feasibility of heavy minerals in the south western and north eastern offshore and onshore regions of Sri Lanka. Moratuwa University, Senate Research Grant.
2014-to date	Development of a performance forecasting model for beach nourishment project at Uswetakeyyawa-Palliyawata, Sri Lanka. Moratuwa University, Senate Research Grant.
2005-2009	National Science Foundation of Sri Lanka (NSF) – characterization of tsunami sediments (2005 Oct – 2009 Jan)

INTERNATIONAL

2017 to date	Effects of tsunami to the long-term geomorphologic change with the collaboration of the Japan International Cooperation Agency (JICA), Tohoku University and University of Moratuwa
2009-2015	Practical Community Countermeasure for Earthquake and Tsunami Disaster Mitigation through PTA (Participatory Technology Assessment) in Sri Lanka” with the collaboration of the Japan International Cooperation Agency (JICA), Tohoku University and University of Moratuwa along with DMC, Sri Lanka.
2005-2009	Historical and pre-historical tsunamis due to earthquakes that have occurred along Indo-Australian plate boundaries—Collaborative research work funded by United Nations International Strategy for Disaster Reduction (Collaborative partners—NIED (Japan), Tohoku University (Japan), AIST (Japan), University of Moratuwa (Sri Lanka)).

7. Postgraduate Students

G.P. Gnasinghe	MPhil, Hydrodynamics and Sediment Transport Modeling of a Monsoon Affected River Inlet (On going)
N. Madubashini	MPhil, Potential of Rare Earth Elements (REE) in Sri Lankan Onshore and Offshore Terrains and Development (On going)
Nimila Dushantha	PhD, Development of extraction techniques for Rare Earth Elements (REE) in Sri Lankan Onshore and Offshore Terrains (On going)
Kusala Premaratne	MPhil, Millennial and sub-millennial-scale variability of northeast monsoon and its impact on terrestrial ecosystems in Sri Lanka. NSF partially funded (ongoing)

S. Chithra	PhD, Changes and Challenges of Coastal Geomorphology in Western Part of Sri Lanka (Ongoing)
K. Amalan	MPhil, Economic Feasibility of Heavy Minerals in South Western and North Eastern Onshore and Offshore Regions of Sri Lanka (completed)
Nimila Dushantha	MPhil, "Fertilizing capacity of lake bottom sediment around Eppawala Phosphate Deposit, Sri Lanka", (completed)
DSM Weththasinghe	MSc, Developing Coastal Sediment Dynamic Model for Sri Lanka, Sri Lanka (completed)
S. S. Pathirage	MSc, Value addition to local vein quartz in producing industrial grade silica (completed)

8. CONSULTANCY EIA STUDIES

2018-todate	Consultant — Groundwater Resource Management and Aquifer Protection Project, Islands of Maldives, Water Solutions.
2018-todate	Consultant and project leader — Shore Profile Monitoring at Kaluganga Outlet and Ratmalana area for the Department of Coast Conservation and Coastal Resource Management, Sri Lanka
2018	Consultant to the EIA of the proposed extension to the Kollupitiya marine drive section
2013-2014	Consultant —Exploration and Ore reserve estimation plan for 18 vein quartz deposits in and around Badulla area for Woolim Lanka Pvt Ltd
2014	Consultant - the Environmental Impact Assessment (EIA) report of the proposed project on Metro Colombo Solid Waste Management.
2011	Consultant -Strategic Environmental Assessment (SEA) of Petroleum Exploration at Cauvery Basin, Sri Lanka.
2009	Consultant -Preparation of initial environmental examination (IEE) report and detail design for the proposed composting plant and to improve the existing dumping site at Thirupperumththurai in Batticaloa district.

9. PARTICIPATION AT INTERNATIONAL MEETINGS / WORKSHOPS

2014	Training on Basin Analysis and Prospects Generation at Department of Geology, Univesity of Peradeniya <i>Organized by</i> Department of Geology, University of Peradeniya In collaboration <i>with</i> University Grants Commission (UGC) and Petroleum Resources Development Secretariat (PRDS) with the Sponsorship of Cairn Lanka (Pvt) Ltd.March 3-7, 2014
2011	Presentation Skills. Conducted by the British Council, Colombo 21st to 23rd Dec. 2011

2010	Workshop on Introduction to Petroleum Geology, Geophysics and Drilling 22-25 March 2010 conducted by Dr. Nigel Banks, UK and organized by Petroleum Resources Development Secretariat and Carin Lanka (Pvt) Ltd.
2009	Specialized training on Ocean remote sensing and coastal dynamics, School of Environmental System Engineering, University of Western Australia, Australia, 24th April 2009 to 10th May 2009
2009	Training on Practical community counter measure for earthquake and tsunami disaster mitigation 6th to 26th Dec. 2009. (JICA funded), Miyage Prefecture, Japan
2009	Distant Early Warning System (DEWS) training course on Tsunami hazard assessment, Sensor systems, Numerical modelling, etc. at GFZ, Potsdam, Germany 1st—6th July 2009
2009	Training program on Introduction o ArcGIS Desktop II And III, EMSO Ltd April 2010
2009	Workshop on Estimating the recurrence interval and behavior tsunamis in the Indian Ocean via survey of tsunami sedimentation 18th – 19th March 2009 Tsukuba International congress centre, Japan
2007	UNESCO-IOC international training course on tsunami numerical modeling. Course 2-Tsunami Inundation Modelling, Intergovernmental Oceanographic Commission , Melbourne/Australia, 10th to 19th Jan.
2007	Training on Application of seismology to tsunami detection and alert, USGS/UNESCO, Colombo, Sri Lanka, 3rd to 7th April 2006
2006	Workshop on Student counseling Conducted by the Staff Development Center of University of Moratuwa, 16th Nov. 2006
2006	POGO visiting professorship training program 2006 on ocean observation and data analysis, POGO/University of Western Australia, Colombo, Sri Lanka, 8th to 19th May 2006
2005	UNESCO-IOC international training course on tsunami numerical modeling. Course 1-tsunami source and propagation Modelling, Intergovernmental Oceanographic Commission / UNESCO, Kualalampur/ Malaysia, 21st to 23rd 2005

10. TEACHING EXPERIENCE IN MARINE GEOLOGY, OCEANOGRAPHY AND RELATED AREAS

Undergraduate level at the Department of Earth Resources Engineering, University of Moratuwa

2007-2019	Introduction Oceanography
2008-2019	Coastal Oceanography
2008-2015	Marine Mineral Resources

2008-2018	Marine Exploration Geophysics and Offshore Mining
2008	Marine Survey
2007-2019	Offshore Field Visits
2007-2013	Mineral Exploration Field Camp
2015-2018	Introduction to Petroleum Engineering
2016-2018	Petroleum Exploration and Basin Modeling

Undergraduate level at the Department of Natural Resource, Sabaragamuwa University

2005-2006	Coastal and Marine Resources
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Undergraduate level at the Department of Civil Engineering, University of Ruhuna

2017-2018	Engineering Geology
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MSc level at University of Moratuwa

2014	Drilling, Borehole Logging and Reserve Estimation
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MSc level at University of Peradeniya Postgraduate Institute of Sciences

2016-2018	Marine Resources & Marine Pollution (MSc in Environmental Sciences)
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11. EDITOR SCIENTIFIC JOURNALS/CONFERENCE PROCEEDINGS/NEWSLETTERS

2016	Joint Editor Proceeding of the 32 nd GSSL Annual Technical Session “Rocks, Minerals and Prosperity”. ISSN 2362-0420
2015	Joint Editor -JW Herath Felicitation Volume (Journal of Geological Society of Sri Lanka – JGSSL Volume 17 th). ISSN 1391-3786
2015	Joint Editor -Proceeding of the 31 st GSSL Annual Technical Session “Understanding Geology for Better and Safer Living”. ISSN 2362-0420
2015	Editor -Geological Society of Sri Lanka Newsletter –Volume 32:1
2014	Joint Editor -P.G. Cooray Memorial Volume (Journal of Geological Society of Sri Lanka –JGSSL Volume 16 th). ISSN 1391-3786
2014	Editor -Geological Society of Sri Lanka Newsletter—Volume 31:2
2011	Editor-in-Chief -Proceedings of the 6 th Annual National Conference on “Minerals and Innovative Thinking” Published by the Department of Earth Resources Engineering. ISSN 1800-346X
2010	Joint Editor -Proceedings of the International Workshop on Practical Community Countermeasures for Earthquakes and Tsunami. 16 th March 2010, BMICH, Colombo, Sri Lanka
2010	Joint Editor -Proceedings of the 5 th Annual Conference on “Earth Resources for National Development” Published by the Department of Earth Resources Engineering. ISSN 1800-346X

12. PUBLICATIONS

REFEREED JOURNALS

1. Gunasinghe, G. P., Ruhunage, L., **Ratnayake, N. P.**, Ratnayake, A. S., Samaradivakara, G. V. I., & Jayaratne, R. (2021). Influence of manmade effects on geomorphology, bathymetry and coastal dynamics in a monsoon-affected river outlet in Southwest coast of Sri Lanka. *Environmental Earth Sciences*, 80(7), 1-16.
2. Dushyantha, N., **Ratnayake, N.**, Panagoda, H., Jayawardena, C., & Ratnayake, A. (2020). Phosphate mineral accumulation in lake sediment to form a secondary phosphate source: A case study in lake sediment around Eppawala Phosphate Deposit (EPD) in Sri Lanka. *International Journal of Sediment Research*.
3. Dushyantha, Nimila, Nadeera Batapola, I. M. S. K. Ilankoon, Sudath Rohitha, Ranjith Premasiri, Bandara Abeysinghe, **Nalin Ratnayake**, and Kithsiri Dissanayake. "The story of rare earth elements (REEs): occurrences, global distribution, genesis, geology, mineralogy and global production." *Ore Geology Reviews* 2020
4. Weththasinghe, D. S. M., **Ratnayake, N. P.**, Hemalal, P. V. A., & Dushyantha, N. P. (2020). Enhancing scientific and societal understanding of geohazards in Sri Lanka. Geological Society, London, Special Publications, 501.
5. Batapola, N. M., N. P. Dushyantha, H. M. R. Premasiri, A. M. K. B. Abeysinghe, L. P. S. Rohitha, **N. P. Ratnayake**, D. M. D. O. K. Dissanayake, I. M. S. K. Ilankoon, and P. G. R. Dharmaratne. "A comparison of global rare earth element (REE) resources and their mineralogy with REE prospects in Sri Lanka." *Journal of Asian Earth Sciences* (2020): 104475
6. Lakshika, P., Sandaruwan, R.A., Ranjith, P.H., **Ratnayake, N.P.**, Jinadasa, K., Nimila, D., Shanaka, W. and Panchala, W.W., 2020. Sea-level inundation and risk assessment along the south and southwest coasts of Sri Lanka. *Geoenvironmental Disasters*, 7(1)
7. N.P. Dushyantha, P.V.A. Hemalal, C.L. Jayawardena, **Nalin Prasanna Ratnayake** (2019) Application of geochemical techniques for prospecting unconventional phosphate sources: A case study of the lake sediments in Eppawala area Sri Lanka. *Journal of Geochemical Exploration* DOI: 10.1016/j.gexplo.2019.02.010
8. Ratnayake, A.S., Sampei, Y. and **Ratnayake, N.**, (2019). Molecular indicators of early stage diagenesis in the tropical coastal Bolgoda Lake, Sri Lanka. *Journal of the National Science Foundation of Sri Lanka*, 47(1).
9. Pathirage, S.S., Hemalal, P.V.A., Rohitha, L.P.S. **Ratnayake N.P.** (2019). Production of industry-specific quartz raw material using Sri Lankan vein quartz. *Environ Earth Sci* 78: 58. <https://doi.org/10.1007/s12665-019-8060-3>
10. Ratnayake, A. S., Sampei, Y., & Ratnayake, N. P. (2019). Characteristics of sedimentary organic matter and vascular plants in tropical brackish Bolgoda Lake, Sri Lanka:

Implications for paleoecology and chemotaxonomy. *Regional Studies in Marine Science*, 30,

11. Yokoyama Y, Hirabayashi S, Goto K, Okuno J, Sproson AD, Haraguchi T, **Ratnayake N** & Miyairi Y (2019). Holocene Indian Ocean sea level, Antarctic melting history and past Tsunami deposits inferred using sea level reconstructions from the Sri Lankan, Southeastern Indian and Maldivian coasts. Eds: Carlson A, Dutton A, Long A & Milne G *Quaternary Science Reviews*, 2019. <https://doi.org/10.1016/j.quascirev.2018.11.024>
12. W.A. Panchala Weerakoon, Neha Aggarwal, Neerja Jha, H.A.H.Jayasena, Harinam Joshi, Deepthi Yakandawala, Rohana Chandrajith, K.V. Gayantha Sashika Perera, **Nalin Prasanna Ratnayake**. (2019) Reconstruction of the Upper Gondwana palaeoclimates based on palynostratigraphy, palynofacies and sedimentology of the Jurassic sequences in the Tabbowa Basin, Sri Lanka *Journal of Asian Earth Sciences*, 172, pp.264-278. <https://doi.org/10.1016/j.jseaes.2018.09.004>
13. **Ratnayake, N. P.**, Ratnayake, A. S., Azoor, R. M., Weththasinghe, S. M., Seneviratne, I. D. J., Senarathne, N., ... & Dushyantha, N. (2019). Erosion processes driven by monsoon events after a beach nourishment and breakwater construction at Uswetakeiyawa beach, Sri Lanka. *SN Applied Sciences*, 1(1), 52.
14. Amalan, K., Ratnayake, A. S., **Ratnayake, N. P.**, Weththasinghe, S. M., Dushyantha, N., Lakmali, N., & Premasiri, R. (2018). Influence of nearshore sediment dynamics on the distribution of heavy mineral placer deposits in Sri Lanka. *Environmental Earth Sciences*, 77(21), 737.
15. **Ratnayake, N. P.**, Ratnayake, A. S., Keegle, P. V., Arachchi, M. M., & Premasiri, H. M. R. (2018). An analysis of beach profile changes subsequent to the Colombo Harbor Expansion Project, Sri Lanka. *Environmental Earth Sciences*, 77(1), 24.
16. Ratnayake, Amila Sandaruwan, **Nalin Prasanna Ratnayake**, Yoshikazu Sampei, A. V. P. Vijitha, and Sanjeevani Disna Jayamali. (2018) Seasonal and tidal influence for water quality changes in coastal Bolgoda Lake system, Sri Lanka. *Journal of Coastal Conservation* (2018): 1-9.
17. S.M. Weththasinghe, A.S. Ratnayake, N. Dushyantha, N , G.V.I. Samaradivakara, A.V.P. Vijitha, N.P. Ratnayake (2018). Sub-bottom features and physical properties of water of the Tangalle Bay, Sri Lanka. *Journal of Geological Society of Sri Lanka*. Vol. 19-2 (2018), 17-27
18. Ratnayake, A. S., Sampei, Y., **Ratnayake, N. P.**, & Roser, B. P. (2017). Middle to late Holocene environmental changes in the depositional system of the tropical brackish Bolgoda Lake, coastal southwest Sri Lanka. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 465, 122-137.

19. A.S. Ratnayake, N. Dushyantha, N. De Silva, H.P. Somasiri, N.N. Jayasekara, S.M. Weththasinghe, G.V.I. Samaradivakara, A.V.P. Vijitha, **N.P. Ratnayake** (2017). Sediment and physicochemical characteristics in Madu-ganga estuary, southwest Sri Lanka. *Journal of Geological Society of Sri Lanka* Vol. 18-Issue 2 (2017), 43-52
20. N. Dushyantha, P.V.A. Hemalal, C.L. Jayawardena, A.S. Ratnayake, H.M.R. Premasiri, **N.P. Ratnayake** (2017). Nutrient characteristics of lake sediments around Eppawala phosphate deposit, Sri Lanka. *Journal of Geological Society of Sri Lanka* Vol. 18-Issue 2 (2017), 33-42.
21. U Premarathne, N Suzuki, **N Ratnayake**, C Kularathne. (2016). Burial and thermal history modelling of the Mannar Basin, offshore Sri Lanka. *Journal of Petroleum Geology*, 39 (2), 193-213.
22. J.M.S.T.W. Jayasinghe, A.C. Kurukulasuriya, W.M.T.U. Jayasinghe, M.A.D.M.G. Wickrama, A.M.A.Damith M. Senadhira and N.P. Ratnayake (2016). Pore-Pressure and Fracture Pressure Gradient Prediction Model for Few Exploration Blocks in Mannar and Cauvery Basins, Sri Lanka. *Annual Sessions of IESL*, pp (235-242).
23. Upul Premarathne, Noriyuki Suzuki and **N.P. Ratnayake**. (2015). Modelling of Hydrocarbon Generation, Migration and Accumulation in the Northern Part of Mannar Basin, Offshore Sri Lanka. *Journal of Geological Society of Sri Lanka*. Volume 17 Issue J.W. Herath Felicitation Volume. P. 141-158.
24. Amalan, K, **Ratnayake, NP** and Weerawarnakula, S. (2014). Prospection sand resources at the continental shelf in offshore Galle, Sri Lanka. *Journal of Geological Society of Sri Lanka*. Volume 16 Issue P.G. Cooray Memorial Volume. P. 65-73
25. **Ratnayake NP**, Puswewala UGA, Chaminda SP, Ekanayake EMTM and Jayawardene MN. (2014). Evaluation of the potential of sea sand as an alternative to river sand for concrete production in Sri Lanka. *Journal of Geological Society of Sri Lanka* Vol. 16, Issue P.G. Cooray Memorial Volume 109-117
26. **NP Ratnayake**, KBA Silva, IGIK Kumar. (2013) Chloride contamination in construction aggregates due to periodic saline water intrusion: a case study in the Kaluganga River Estuary, Sri Lanka. *Environmental Earth Sciences*, Vol 69: (issue 8) 2529-2540.
27. Amo, M., Suzuki, N., Shinoda, T., **Ratnayake, N. P.** and Takahashi, K. (2007). Diagenesis and distribution of steranes in Late Miocene to Pliocene marine siliceous rocks from Horonobe (Hokkaido, Japan). *Organic geochemistry*, 38(7), 1132-1145.
28. **Ratnayake, N. P.**, Suzuki, N., Okada, M., & Takagi, M. (2006). The variations of stable carbon isotope ratio of land plant-derived n-alkanes in deep-sea sediments from the Bering Sea and the North Pacific Ocean during the last 250,000 years. *Chemical geology*, 228(4), 197-208.
29. **Ratnayake, N. P.**, Suzuki, N., & Matsubara, M. (2005). Sources of long chain fatty acids in

deep sea sediments from the Bering Sea and the North Pacific Ocean. *Organic geochemistry*, 36(4), 531-541.

30. **Ratnayake, N. P.**, Sampei, Y., Tokuoka, T., Suzuki, N., & Ishida, H. (2005). Anthropogenic impacts recorded in the sediments of Lunawa, a small tropical estuary, Sri Lanka. *Environmental Geology*, 48(2), 139-148.
31. Kehelpannala, K. V., and **Ratnayake, N. P.** (1999). Evidence for post-metamorphic metasomatism of high-grade orthogneisses from Sri Lanka. *Gondwana Research*, 2(2), 167-184.
32. **Ratnayake, N. P.** (2003) Global changes of vegetation recorded in deep-sea sediments from Subarctic Pacific Ocean during the last 250,000 years, *Ocean Monthly*, 2003 March, 59-66
33. **Ratnayake, N. P.** and Suzuki, N. (2003) Global changes of vegetation recorded in deep-sea sediments from the Sub-arctic Pacific Ocean during the last 250,000 years, *Journal of Hokkaido University*, Vol.35, No.6, 414-419 (In Japanese)

Full papers (International conference proceedings):

34. **Ratnayake, N.P.**, Amarasingha, A. V. P. , Goto, K., Haraguchi, T., (2009) Records and the environmental impacts of the 2004 Indian Ocean Tsunami at Sri Lanka. In Proceeding of International symposium on: Estimating the Recurrence interval and behavior of tsunamis in the Indian Ocean via a Survey of Tsunami related Sedimentation. (ed. Kayahara, T.) pp 33-36, March, 2009.
35. Goto, K., Haraguchi, T., **Ratnayake, N.P.**, Amarasingha, A. V. P. , Yokoyama, Y., Tsujimoto, A., Yoshinaga, Y., Takahashi, J., Imamura, I. A. (2009). Sedimentary Record of the Tsunami Recurrence in Sri Lanka. In Proceeding of International symposium on: Estimating the Recurrence interval and behavior of tsunamis in the Indian Ocean via a Survey of Tsunami related Sedimentation. (ed. Kayahara, T.). pp 38-41, March, 2009.
36. **Ratnayake, N. P.**, Suzuki, N., Sawada, K., & Okada, M. (2004). Variations of Mass Accumulation Rates of Long Chain n-alkanes in the Northern North Pacific During the Last 350 kyrs. In *Neo-Science of Natural History: Integration of Geoscience and Biodiversity Studies: Proceedings of International Symposium on " Dawn of a New Natural History-Integration of Geoscience and Biodiversity Studies" March 5-6, 2004, Sapporo* (pp. 143-146). Graduate School of Science, Hokkaido University.
37. **Ratnayake, NP.**, Weerawarnakula, S and Abeysinghe AMKB (2009) Geological Records of Tsunami in the Southern Coast of Sri Lanka, Proceedings of the DEWS Midterm Conference, 7-9th July 2009, GFZ, Potsdam, Germany.
38. Weerawarnakula, S Abeysinghe AMKB and **Ratnayake, NP.**, (2009) 2004 Boxing Day

Tsunami – Sri Lanka’s worst natural disaster, Proceedings of the DEWS Midterm Conference, 7-9th July 2009, GFZ, Potsdam, Germany.

Full papers (Refereed Local Journals or local conference proceedings):

39. Jayasinghe HGH, Samarakoon SMNM, Mohomad HH, **Ratnayake, NP**, Abeysinghe AMKB and Dushyantha NP (2020) Mineralogical Exploration for Rare Earth Element Potential in Kalutara Coastal Areas. Proceedings of ISERME 2020, Colombo, Sri Lanka.
40. Gunasekara MP, Madushani EK, Govinath J, **Ratnayake NP**, Samaradivakara GVI, Dushyantha NP, Gunasinghe GP and Silva KBA (2020) Monitoring Beach Profile Changes and Modelling Nourishment Scenarios for Ratmalana Beach, Proceedings of ISERME 2020, Colombo, Sri Lanka.
41. Batapola NM, Dushyantha NP, Premasiri HMR, Abeysinghe AMKB, Rohitha LPS, **Ratnayake, NP**, Dissanayake DMDOK, Ilankoon IMSK and Dharmaratne PGR (2020) REE Potential in Carbonatite Deposits: A Case Study of Eppawala Carbonatite. Proceedings of ISERME 2020, Colombo, Sri Lanka.
42. Ishanka WCA, Kahawala KKHB, Sandusha JAC, Hewavidana SM, Silva KBA, **Ratnayake NP** (2019) Applications of Hydrodynamics to Assess Coastal morphology to the North of Kelani River, Sri Lanka. Proceedings of ISERME 2019. Colombo, Sri Lanka
43. Yasanga SK, Udara HMD, Dilanatha, MGA, Rupasinghe MGAR, Premasiri HMR, **Ratnayake NP** (2019) Assessment of Sedimentation capacity in Rantambe Reservoir Using Acoustic Methods. Proceedings of ISERME 2019. Colombo, Sri Lanka
44. Ruwanpathirana RS, Nagasinghe RV, Welagedara WWVP, Wickrama MADMG, Senadhira AMADM, **Ratnayake NP** and Vijitha AVP (2016). Analysing the Relationship Between Skin and Formation Damage of an Oil Well (Time Dependent). Proceedings of ERE 2016. Colombo, Sri Lanka.
45. Lakmali EN, Deshapriya WGA, Jayawardene KGIA, Raviranga RMP, **Ratnayake NP**, Premasiri HMR and Senanayake IP (2016). Long Term Coastal Erosion and Shoreline Positions of Sri Lanka. Proceedings of ERE 2016, Colombo, Sri Lanka.
46. RML Udarika, EPN Udayakumara, K Amalan, **NP Ratnayake** and HMR Premasiri (2016). Comparison of Heavy Mineral Composition along Mahaweli River with Placer Deposits at North East Coast of Sri Lanka. International Symposium on Agriculture and Environment. University of Ruhuna, Sri Lanka 2016, 141-143
47. Azoor R.M. De J. Seneviratne M.T.M.R.I.C. , Saranya R. , Thenugaadevy P. , Gamage G.S.M., Premasiri H.M.R. and **Ratnayake N.P.** (2015). Evaluation of the beach nourishment project at Palliyawatta-Uswetakeiyawa Sri Lanka. International Conference

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