



Department of Geology
Faculty of Science / University of Peradeniya



Dr. Nadeesha H. Koralegedara

B.Sc. (Perad.), M.S., Ph.D. (Cincinnati, USA)

Senior Lecturer

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About Me

I am a senior lecturer attached to the Department of Geology, University of Peradeniya, Sri Lanka. I am dedicated to nurturing the next generation of geoscientists and environmental stewards. I believe in fostering a stimulating learning environment that encourages critical thinking, inquiry-based learning, and hands-on field experiences. My goal is to equip students with the knowledge and skills needed to tackle real-world environmental issues through a solid foundation in geology and interdisciplinary approaches. My research is mainly focused on Environmental Geology / Low temperature Geochemistry. I am particularly fascinated by how geological processes influence environmental change and vice versa, with a keen focus on low-temperature geochemistry as a tool for unraveling complex environmental phenomena.

Higher Education Qualifications



PhD

University of Cincinnati
USA
(2016)



MSc

University of Cincinnati
USA
(2011)



BSc

University of Peradeniya
Sri Lanka
(2007)

Awards, Scholarships, Memberships & Fellowships

-  Excellence in Teaching Award - 2024 - University of Peradeniya
-  Excellence in Research - 2024 - University of Peradeniya
-  NRC merit award for Scientific Research - 2019
-  Certificate of merit award for outstanding oral presentation titled “Leachability of metals from FGD gypsum used in agricultural purpose” – awarded by the American chemical society, division of environmental chemistry. Received March 16 -20, 2014.
-  Presidential award for scientific publications – awarded by National Research Council (NRC) of Sri Lanka. Received January 17, 2014
-  University award for academic excellence – University of Peradeniya, Sri Lanka, received 2008.
-  • P.W. Vitanage memorial scholarship for academic excellence - awarded by Geological Society of Sri Lanka (GSSL), received 2007.

Positions Held

-  Senior Lecturer (ii)- (2017 December - Present)
-  Co-Editor - Journal of Geological Society of Sri Lanka (JGSSL)- (2018 February - 2020 February)
-  Grant coordinator - AHEAD-DOR (Geology)- (2018 May - 2023 December)
-  Secretary - Environmental Science Program- (January 2020 - March 2024)
-  Senior Treasurer - Environmental Science Society of University of Peradeniya- (2020 - 2024)
-  Senior Student Counselor - University of Peradeniya- (2019 - present)

My Teachings

-  APS4092: Industry and the Environment
-  ENS4233: Waste and Waste Management
-  GEO1013: Geological Processes
-  GEO1041: Earth Materials
-  GEO2023: Introductory Petrology
-  GEO3052: Sedimentary petrology
-  GEO4073: Quaternary Geology
-  GEO4123: Advanced Sedimentary Petrology

Research Interests (Research Fields/ Projects)

Surface geochemistry, Environmental Geology, Waste Management, Value addition to minerals, Microplastics

Ongoing Research and Projects

-  **Development of a natural filter for antibiotics removal and in-situ degradation**
-  **Microplastics degradation in soil using geological materials**
-  **Assessment of aquifer quality in relation with chronic kidney disease with unknown etiology in dry zone of Sri Lanka through an integrated approach using isotopes and hydrogeochemistry**
-  **Utilization of red earth deposit in northwestern coastal belt as an economic deposit**
-  **Ni- nanoparticle synthesis from Serpentinite soils**

Key Publications



Nothing to show under this subheading !!!

Conferences



35th Annual Technical Sessions of Geological Society of Sri Lanka

HELD AT : Oak Ray Hotel, Kandy, Sri Lanka - (February 22nd, 2019)

TOPIC : *Accumulation of elements in Ipomea aquatica and Amaranthus spinosus growing at municipal solid waste dumping site, Gohagoda, Kandy, Sri Lanka*



249th American chemical society (ACS) National Meeting

HELD AT : Denver, CO, USA - (March 22-26, 2015.)

TOPIC : *Use of Flue Gas Desulfurization (FGD) gypsum as an in-situ heavy metal stabilizer in contaminated soil*



243rd GSA National Meeting,

HELD AT : Minneapolis, MN, USA - (September 25-29, 2011)

TOPIC : *Chemical, Mineralogical and Textural changes of Kope Formation shale*

My Publications

Please goto the website.

<https://sci.pdn.ac.lk/geology/staff/Nadeesha-Koralegedara>