

Sunil B.M., Associate Professor

EDUCATION

Ph.D.	Civil Engineering	2009	NITK-Surathkal
M.Tech	Civil Engineering	2003	NITK-Surathkal
B.E.	Civil Engineering	2000	Mangalore University

ACADEMIC POSITION

NITK-Surathkal, Department of Civil Engineering

Associate Professor	05/18 – present	(Geotechnical Engineering Section)
Assistant Professor	11/09 – 04/18	
Lecturer	11/06 – 11/09	
Research Associate	10/00 – 09/01	
Assistant Lecturer	01/04 – 06/04	

AREAS OF INTEREST

Environmental **G**eotechnology
Ground Improvement **T**echniques
Unsaturated **S**oil **M**echanics

HONORS AND ACHIEVEMENTS

- Chairman, Institution of Engineers India (IEI) Mangalore Chapter.
- Scroll of Honour – for Outstanding Contribution to the cause of Engineering and Nation Building, Institution of Engineers (India)
- Technical committee member for assessing damage caused by MSW landfill at Mangalore-2019.
- Member BOS – Civil Engineering Department, MITE, Moodabidri
- Curriculum and laboratory development. Lead contributor to environmental geotechnology course at NITK-S.
- Collaborative research with Prof. John Eric Bolander, University of California, Davis, USA - 2016
- Collaborative research with the Department of Civil Engineering, Kagoshima University, Japan.
- Collaborative research with the Department of Civil Engineering, Kumamoto University, Japan.
- Visited Kyoto University & Osaka University for research interaction with Faculty of International repute.
- Setup New Environmental Geotechnology Laboratory.

- Reviewer recognition: Reviewed manuscripts submitted to various Elsevier & Springer Journals, Arabian Journal of Geosciences, Soil Research, Journal of Waste Management etc.
- Joint Organizing Secretary, 10th International Symposium on Low Land Technology (10th ISLT), Mangalore, India, 09/2016. International Association of Lowland Technology (IALT) Department of Civil Engineering NITK-S, and Institute of Lowland and Marine Research (ILMR), Japan[Sponsored by: TEQIP II, NITK & ILMR, Japan].
- Volunteered technical visits and conferences at NITK-S
- Chair, NITK-DBCE International Conference on Trending Moments & Steer Forces., Goa, 11/2019.
- Hon. Secretary of Institution of Engineers (India) - Mangalore local Centre (2016 to 2018).
- Participated in various International Conferences and represented NITK-S.

PROFESSIONAL AND INSTITUTIONAL SERVICE

Chairman, Institution of Engineers India (IEI) - Mangalore Chapter – 10/2021

Vice Chairman, Career Development Centre (CDC) - 07/2021

Department Coordinator of preparations for program accreditation review by NBA.

Faculty Advisor

Routine and Expert Consultancy Assignments undertaken by the Department.

Manuscript review for International Journals 2007- present

Soil Research

Journal of Material Cycles and Waste Management (Springer)

Journal of Water and Health (IWA Publishing)

Journal of Advances in Environmental Research, South Korea

Journal of Environmental Informatics

Soils and Foundations

Journal of Engineering Geology (Elsevier)

Cements and Concrete Composites

Geotechnical and Geological Engineering (Springer)

Journal of Building Engineering

External reviewer for Ph.D examinations, VTU Colleges

Resident Engineer - 9/ 2017 to 1/ 2019.

Faculty in-charge Estate and Works: 4/2011 to 4/ 2014.

Warden NITK, Hostels: 2010 - 2014

Ph.D Guidance :

03 – Completed

07 – Ongoing

M.Tech Guidance:

Over 50

R&D Projects

Disaster Resilience Building Construction Practices on Hilly Slopes of Bhutan-A research Compliance and Recommendation for National Adaptation.

Industry Sponsored research project "Studies on the Usage of Granulated slag in Infrastructure and Construction Projects", Funded by Kirloskar Ferrous Industries Koppal.

“Investigation of Ground Water Contamination due to Organic Compounds in D.K. and Udipi Districts”, supported by the *Ministry of Human Resources and Development (MHRD)*

“Groundwater Contamination and Heavy Metal Retention by Soils in the Solid Waste Disposal Area” supported by NITKS

SELECTED RECENT PUBLICATIONS

C.M. Aswathy, **Sunil B.M.**, Effect of ammonia on the hydraulic conductivity and adsorption characteristics of lithomargic clay – bentonite barrier in landfills, (2022) Journal of Environmental Chemical Engineering, (10) 2022, 108750, ISSN 2213-3437, <https://doi.org/10.1016/j.jece.2022.108750>. Available online 13 October 2022

Ujwala Shenoy, K.S. Babu Narayan and **Sunil B.M.**, (2022). Utilization of Discrete Element method in multi-phase soil modelling for soil slope stability analysis - Arabian Journal for Science and Engineering, <https://doi.org/10.1007/s13369-022-07394-0>

Nagaraju, T.V.; **Sunil B.M.**; Chaudhary, B.; Ravindran, G. (2022). Assessment of Environmental Impact of Aquaculture Ponds in the Western Delta Region of Andhra Pradesh. Sustainability **2022**, 14, 13035. <https://doi.org/10.3390/su142013035>.

Nagaraju, T.V., **Sunil B.M.**, Chaudhary, B. (2021). Swell-Compressibility Behavior of Geopolymer Blended Expansive Clays. In: Hazarika, H., Madabhushi, G.S.P., Yasuhara, K., Bergado, D.T. (eds) Advances in Sustainable Construction and Resource Management. Lecture Notes in Civil Engineering, vol 144. Springer, Singapore. https://doi.org/10.1007/978-981-16-0077-7_42

Anjali M.S., Poorani M., Shrihari S., **Sunil B.M.** (2020). “Assessment of Ferrous Slag with Relevance to Physico-chemical Properties.” In: Kalamdhad A. (eds) Recent Developments in Waste Management. Lecture Notes in Civil Engineering, Vol 57. Springer, Singapore https://doi.org/10.1007/978-981-15-0990-2_30

Sunil B.M., Prakrithi V and K.S. Babu Narayan (2020). Use of slag-media filter for treating drinking water, WEENTECH Proceedings in Energy Vol.6 (1), 1-13. <https://doi.org/10.32438/WPE.0420>.

Berhe, K.T., **Sunil B.M.**, & S. Shrihari (2020). Challenges of Eco-friendly Solid Waste Disposal in Ethiopia: The Case of Hawassa Industrial Park. Proceedings of the Geoenviromet-2020 Conference, February 17–21, 2020 (pp. 228–234). New Delhi, IN: Network of Experts and Resources for Subsurface Investigations and

Remediation of Contaminated Sites (NERCS).

Anjali, M. S., Shrihari, S. and **Sunil, B. M. (2019)**. “Potential valorization of ferrous slag in the treatment of water and wastewater: A Review.” *J. Advances in Environmental Research*, Vol. 8, No. 1, 55-69. DOI: <https://doi.org/10.12989/aer.2019.8.1.055>.

Anjali, M. S., Shrihari, S. and **Sunil, B. M. (2019)**. “Experimental studies of slag filter for drinking water treatment.” *J. Environmental Technology & Innovation*, Elsevier, Vol. 15 (2019) 100418 (Aug. 2019). <https://doi.org/10.1016/j.eti.2019.100418>.

Anjali M.S., Poorani M., Shrihari S. and **Sunil B.M, (2019)**” Assessment of Ferrous Slag with Relevance to Physico-chemical Properties”, Lecture Notes in Civil Engineering, Vol. 1.,pp. 377 - 384; https://doi.10.1007/978-981-15-0990-2_30

Sunil B.M., Manjunatha L.S., and Subhash C Yaragal (2017). Durability studies on concrete with partial replacement of cement and fine aggregates by fly ash and tailing material *Advances in Concrete Construction*, Vol. 5, No. 6 (2017) 671-683 DOI: <https://doi.org/10.12989/acc.2017.5.6.671>

Praveen and Sunil B.M., (2016). Potential Use of Waste Rubber Shreds in Drainage Layer of Landfills – An Experimental Study, *J. Advances in Environmental Research*, Vol. 4, No. 3 (2016) 188-199, DOI: <http://dx.doi.org/10.12989/aer.2015.4.3.197>

Sunil B.M., and A.V. Deepa (2016). “Influence of Drying Temperature on Three Soils Physical Properties” *Geotech Geol Eng* (2016) 34:777–788, DOI 10.1007/s10706-016-0001-2.

Sunil B.M. (2015). Review on performance of geosynthetic liners in municipal solid waste landfills, *Japanese Geotechnical Society Special Publication of The 15th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering*, pp. 2368-2372; 2015. <https://doi.org/10.3208/jgssp.IGS-21>

Sunil B.M., and Saifiya Faziludeen (2015). Removal of hexavalent chromium Cr (VI) by adsorption in blended lateritic soil, *J. Advances in Environmental Research*, Vol. 4, No. 3 (2015) 197-210, DOI: <http://dx.doi.org/10.12989/aer.2015.4.3.197>

Manjunatha L.S., **Sunil B.M.** (2014). “ Geotechnical properties of mine tailings- A laboratory study, *International Journal of Advanced Structures and Geotechnical Engineering*, Vol.3 (2), 183-187, April 2014.

Sunil B.M., and Krishnappa H (2012). Effect of Drying on on the Index Properties of Lateritic Soils, *J. Geotech. and Geol. Eng*, Springer, 30(4): 869-879.

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