Brief Profile

Sunil B.M.

Assistant Professor of Civil Engineering

Field of Specialization: -

Geotechnical Engineering (in Civil Engineering)

Industry:

• QC Engineer (June 03 - Dec. 03), PUNJ LLOYD Ltd.

Interest:

- Geoenvironmental Engineering
- Ground Improvement Techniques
- Unsaturated Soil Mechanics

Education

- Ph.D (09) NITK-S
- M Tech (03) NITK-S
- B Eng (99) KREC, Mangalore University

PUBLICATIONS

- **Sunil B.M.,** Manjunatha L.S., Subhash C Yaragal (2017). Durability studies on concrete with partial replacement of cement and fine aggregates by fly ash and tailing material, *J. Advances in Concrete Construction*, (in press)
- Sunil B.M., and Praveen (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.
- **B.M. Sunil** (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
- **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

- **Sunil B.M.,** Manjunatha L.S., Lolitha Ravi, Subhash C Yaragal (2015). Potential Use of Mine Tailings and Fly Ash in Concrete, *J. Advances in Concrete Construction*, *Vol. 3*, *No. 1* (2015) 55-69, DOI: http://dx.doi.org/10.12989/acc.2015.3.1.55
- Sitaram Nayak, **Sunil B.M.** and Allamaprabhu (2014). Assessment of blended lithomargic clay as landfill liner materital, Jr. of Current Advances in Civil Engineering, Vol. 2 (4), Oct. 2014 pp 102-117, American V-King Scientific Publishing.
- 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 three soils physical properties, *J. Geotech. and Geol. Eng*, Springer, 30(4): 869-879.
- A.K. Prabhu, **Sunil B.M.**, and Nayak Sitaram, (2012). "Geotechnical characteristics of lithomargic clay blended with marine clay as landfill liner material", international Journal of Earth Sciences and Engineering, Vol. 5, No.6 (01) pp 1803-1808 (Dec. 2012).
- Sitaram Nayak, **Sunil B.M.**, Shrihari S. and P.V. Sivapullaiah (2010). "Interactions Between Soils and Laboratory Simulated Electrolyte Solution" International Journal of Geotechnical and Geological Engineering, Springer Netherlands. Vol.28, , pp.899-906, 2010; DOI 10.1007/s10706-010-9333-5.
- **Sunil B.M,** Shrihari S. and Sitaram Nayak (2009). "Shear strength characteristics and chemical characteristics of leachate contaminated lateritic soil ", International Journal of Engineering Geology, Elsevier Publications Vol.106, No.1, pp.20-25, May 2009.
- Sitaram Nayak, **Sunil B.M.** and Shrihari S. (2007). "Hydraulic and compaction characteristics of leachate-contaminated lateritic soil", International Journal of Engineering Geology, Elsevier Publications Vol. 94/3-4, pp.137-144, June 2007.
- **Sunil B.M.,** Sitaram Nayak and Shrihari S. (2006). "Effect of pH on the geotechnical properties of laterite", International Journal of Engineering Geology, Elsevier Publications Vol. 85, No.1, pp. 197-203, May 2006.

- Anjana M and B.M. Sunil (2017). Stabilization of Expansive Clays using Granulated Blast Furnace Slag and Polypropylene Fibres, *Proceedings of 5th International Engineering Symposium*, Kumamoto University, *Japan*, March 1-3, 2017.
- Prateek Pranab , **B.M. Sunil** and Subhash C Yaragal (2016). Beneficial use of recycled aggregates and waste rubber shreds in Drainage layer of landfills, Proceedings of the 10th International Symposium on Low Land Technology (ISLT 2016), 15-17th Sep. 2016, Mangalore, India.
- B.M. Sunil (2015). Review on performance of geosynthetic liners in municipal solid waste landfills, Proceedings of The 15th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering- New Innovations and Sustainability 9-13 November, 2015, Fukuoka, JAPAN. pp. 247.

- Subhash Yaragal, Kiran S and **Sunil B.M.** (2015). Effect of elevated temperature on the performance of concrete using manufactured sand, *Proceedings of 5th International Workshop* on "Performance, Protection & Strengthening of Structures under Extreme Loading (PROTECT20 15), Michigan State University, USA, June 28-30 2015, 148-155.
- **Sunil B.M.,** Deepthi K. Achar, and Anil S. D'Souza (2015). Study on unlined rock caverns for storage of crude oil and stability analysis using numerical methods, *Proceedings of 4th International Engineering Symposium*, Kumamoto University, *Japan*, March 4-6, 2015, pp C-7-3-7.
- **Sunil B.M.,** and V.V.Mayya (2015). Heavy metal contamination of Soils, *Proceedings of 4th International Engineering Symposium,* Kumamoto University, *Japan*, March 4-6, 2015, pp C-7-1-6.
- **Sunil B.M.,** Madhura B and Balasubramanya M (2015). Study on the Utilization of Unconventional Materials as a Substitution Material for Fine Aggregates in Concrete, *Proceedings of 4th International Engineering Symposium,* Kumamoto University, *Japan*, March 4-6, 2015, pp C-6-1-6.
- **Sunil B.M.,** and Rangnath P. Aithal (2015). Hazardous Waste Management, *Proceedings of 4th International Engineering Symposium,* Kumamoto University, *Japan*, March 4-6, 2015, pp C-7-2-5.
- Sruti Pillai, Anju E P, **Sunil B.M.** and Shrihari S (2014). Soil pollution near a municipal solid waste disposal site in India. *Proceedings of the International Conference on Biological, Civil and Environmental Engineering* (BCEE-2014), March 17-18, 2014 Dubai (UAE). pp 157-161.
- Varghese Meera and **Sunil B.M.**, (2014). Organic Contaminant adsorption in soils, Proceedings of the First Annual Conference on Innovations and Developments in Civil Engineering, ACIDIC-2014NITK, Surathkal, India. 19-20 May 2014.
- Lolitha R, **Sunil B.M.** and Manjunath L.S (2014), Utilization of iron ore mine tailings in concrete, *Proceedings of the First Annual Conference on Innovations and Developments in Civil Engineering, ACIDIC-2014NITK, Surathkal, India.* 19-20 May 2014.
- **Sunil B.M., (**2013), "Remediation and rehabilitation of contaminated sites- A brief review, *Proceedings of the National Conference on New Horizons in Civil Engineering (NHCE)*-12th-13th April, 2013, Manipal, India, pp. 352-360.
- **Sunil B.M.** and S. Shrihari, (2013). "Compatible Technology for Disposal and Utilization of Solid Waste" *Proceedings of the National Colloquium A3C 12*: January 11-12, 2013, Mangalore, India, pp 80-85.
- Shivashankar R., Sitaram Nayak and Sunil B.M, (2013). "Geotechnical Engineering Practices through Case Studies" *Proc. of National Colloquium A3C 12*: January 11-12, 2013, Mangalore, India,pp. 86-94.

- A.K. Prabhu, **Sunil B.M.**, and Sitaram Nayak, **(**2013**)**, "Suitability of lithomargic clay blended with black cotton soil as a landfill liner material. *Proceedings of National Conference on New Horizons in Civil Engineering (NHCE*)- 12th-13th April, 2013, Manipal, India, pp. 341-350.
- Manjunatha L.S., **Sunil B.M.,** G.Ashwarthama and Samir Kumar S., (2013), "Index and Chemical properties of mine tailings A laboratory study" Proceedings of National Conference on Recent Advances Civil Engineering 29th-30th April, 2013, Belgaum, India, pp. 6-10.
- A.K. Prabhu, **Sunil B.M.**, and Nayak Sitaram, (2012), "Geotechnical characteristics of lithomargic clay blended with marine clay as landfill liner material", *Proceedings of World Conference on Applied Sciences and Engineering Technology*, Vijayawada, Andhra Pradesh, India, August, 2012.
- **Sunil B.M.,** Shrihari S and Sitaram Nayak (2008), "Soil-leachate interaction and their effects on hydraulic conductivity and compaction characteristics, *Proceedings of 12th International Conference of IACMAG*, Goa, India, pp. 200, October 2008.
- **Sunil B.M.,** and K.S. Babu Narayan, (2008) "Use of Case Histories to Enhance Practical Geotechnical Engineering". *Proceedings of the 6th International Conference on Case Histories in Geotechnical Engineering*, Arlington, VA, August 11-16, 2008.
- **Sunil B.M.,** S, Shrihari, K.S. Babu Narayan and Subhash C. Yaragal, (2006), "Environmental Impact and Management Strategies During Highway Construction Projects", *Proceedings National Conference on Environmental Conservation* September 2-3 (2006), BITS-Pilani, India. pp 683-687.
- Sunil B.M. and Shrihari, S. (2005) "Ground Water Pollution in the Coastal Region of Karnataka

 a Case Study", Proceedings of National Conference on Synergic Solutions for Sustainable Development Prescription for Prosperity", N.I.T.K. Surathkal, 28-30 December, pp 194-196.
- **Sunil B.M.** and Shrihari, S. (2004) "Effect of Wastewaters on the Geotechnical Properties of Laterite", *Proceedings of the 4th. B.G.A. Conference on Geo-Environmental Engineering*, Cardiff, U.K., 28-30 June 2004.

Teaching (UG/PG/PhD)

- Soil Reinforcement and Geosynthetics (GT808)
- Ground Improvement Techniques (GT705)
- Environmental Geotechnology (CV800)
- Applied soil engineering (CV321)
- Soil Mechanics (CV252)
- Soil Mechanics Laboratory (CV267)
- Computer Lab (GT706)
- Geotechnical Lab (GT701)

Recent R&D Projects

• Use of Stabilized Slag in Infrastructure Projects - Kirloskar Ferrous Industries Ltd.

Administration

- Faculty in-charge Estate and Works: April, 2011 to April, 2014.
- Warden NITK, Hostels: 2010 2014
- Coordinator CAD LAB-II: January 2007 to 2014.
- Faculty Incharge of geotechnical laboratory

Recent Ph.D supervision

- 2017 -18 Ujwala Shenoy
- 2016 -17 Kalay Tesfaye
- 2016-17 Anjali Retheesh
- 2015-16 Poorani M

Recent Post Graduate Project Supervision

- 2017 Abhijith E R
- 2017 Prakrithi V
- 2017 Fathimajumna K
