

Dr. T Vamsi Nagaraju

Dean (R&D)

S.R.K.R Engineering College

Bhimavaram 534204, Andhra Pradesh, INDIA

E-Mail: varshith.varma@gmail.com; tvnraju@srkrec.edu.in

Mobile: +919949636738

GoogleScholar: [T Vamsi Nagaraju](#)

Scopus Id: [57245912100](#)

ORCID: [0000-0002-1437-6477](#)

LinkedIn: [T Vamsi Nagaraju](#)



Dr. T. Vamsi Nagaraju is the Dean of Research and Development at SRKR Engineering College, Bhimavaram, India. He holds an M. Tech from Andhra University, Andhra Pradesh, and a Ph.D. from the National Institute of Technology Karnataka (NITK), Surathkal, India. His research interests are Environmental Geotechnology, Cleaner Materials, Sustainable Aquaculture, and the application of Machine Learning in Civil Engineering.

Dr. Vamsi has received several prestigious awards, including the bi-annual Young Geotechnical Engineer Award from the Indian Geotechnical Society for his work in 2019 and 2020 and the Young Researcher Award from the STEM Research Society, hosted by NIT Jalandhar. He has also received multiple best paper awards at international conferences. He has published more than 50 SCOPUS/SCI-indexed publications and is a recognized researcher.

Additionally, Dr. Vamsi has reviewed over 100 papers for leading publishers such as Elsevier, IEEE, Springer, Wiley, and Taylor & Francis. He serves as an Editor for the *Discover Sustainability* (Springer), *Scientific Reports* (Nature), and the *Springer Water* series. He is also a technical committee member for various international conferences. Dr. Vamsi is also active in consultancy works, providing expertise in geotechnical investigations for roads, railways, and buildings.

Significant Publications (2023-2024)

1. Revathi, B., Gobinath, R., Bala, G. S., **Nagaraju, T. V.**, & Bonthu, S. (2024). Harnessing explainable artificial intelligence (XAI) for enhanced geopolymers concrete mix optimization. *Results in Engineering*, 103036. (SCI, IF: 6.0, Q1)
2. Vydehi, P., Ravindran, G., Shyamala, **Nagaraju, T. V.**, G., Bala, S., Mekala, M., & Karri, R. R. (2024). Aerobic granular sludge-based sustainable wastewater treatment: Process, bottlenecks, and knowledge gap through scientometric perspective. *Journal of Hazardous Materials Advances*, 100462. (SCI, IF: 5.4, Q1)
3. **Nagaraju, T. V.**, Sunil, B. M., Chaudhary, B., Gobinath, R., & Bala, S. (2024). Exploring the Impact of Aquaculture Sludge on the Swell-Shrink Behavior of Expansive Clays. *Case Studies in Chemical and Environmental Engineering*, 100897. (Scopus, Q1)
4. Gottumukkala, S. B., **Thotakura, V. N.**, Gvr, S. R., Chinta, D. P., & Park, R. (2024). Balancing aquaculture and estuarine ecosystems: machine learning-based water quality indices for effective management. *Environmental Science and Pollution Research*, 1-17 (SCI, IF: 5.9, Q1).
5. Isleem, H. F., Qiong, T., Chukka, N. D. K. R., Kumar, R., **Nagaraju, T. V.**, & Hamed, A. Y. (2024). Machine learning and nonlinear finite element analysis of fiber-reinforced

polymer-confined concrete-steel double-skin tubular columns under axial compression. *Structural Concrete*. (SCI, IF: 3.0, Q1)

6. **Vamsi Nagaraju, T.**, & Sunil, B. M. (2024). Briefing: Intensive inland aquaculture ponds: challenges and research opportunities. *Environmental Geotechnics*, 1–4. <https://doi.org/10.1680/jenge.23.00090>. (SCI, IF: 2.4, Q2)
7. Dayal, A., Bonthu, S., **Vamsi Nagaraju T.**, Saripalle, P., & Mohan, R. (2024). Deep learning for multi-horizon water level forecasting in KRS reservoir, India. *Results in Engineering*, 101828. (SCI, IF: 5.0, Q1)
8. **Nagaraju, T. V.**, Malegole, S. B., Chaudhary, B., Ravindran, G., Chitturi, P., & Chinta, D. P. (2023). Novel assessment tools for inland aquaculture in the western Godavari delta region of Andhra Pradesh. *Environmental Science and Pollution Research*, 1-16. (SCI, IF: 5.9, Q1)
9. **Nagaraju, T. V.**, Bala, G. S., Bonthu, S., & Mantena, S. (2023). Modelling biochemical oxygen demand in a large inland aquaculture zone of India: Implications and insights. *Science of The Total Environment*, 167386. (SCI, IF: 9.8, Q1)
10. **Nagaraju, T. V.**, Chaudhary, B., Prasad, C. D., & Gobinath, R. (2023). Prediction of ammonia contaminants in the aquaculture ponds using soft computing coupled with wavelet analysis. *Environmental Pollution*, 121924. (SCI, IF: 9.9, Q1)
11. Mohan, R., Chakrawarthy, V., **Nagaraju, T. V.**, Avudaiappan, S., Awolusi, T. F., Roco-Videla, Á., ... & Kozlov, P. (2023). Performance of recycled Bakelite plastic waste as eco-friendly aggregate in the concrete beams. *Case Studies in Construction Materials*, e02200. (SCI, IF: 6.2, Q1)
12. **Nagaraju, T. V.**, Sireesha Mantena., Gobinath R., Sridevi Bonthu., & Alisha, S. S. (2023). Geopolymer stabilized soils: Influencing factors, Strength development mechanism and Sustainability. *Journal of Taibah University for Science*, Taylor and Francis, <https://doi.org/10.1080/16583655.2023.2248651> (SCI, IF: 3.3, Q1)
13. **Nagaraju, T. V.**, Bahrami, A., Prasad, C., Mantena, S., Biswal, M., & Islam, M. (2023). Predicting California Bearing Ratio of Lateritic Soils Using Hybrid Machine Learning Technique. *Buildings*, 13(1), 255. (SCI, IF: 3.8, Q1)
14. **Nagaraju, T. V.**, Mantena, S., Azab, M., Alisha, S. S., El Hachem, C., Adamu, M., & Murthy, P. S. R. (2023). Prediction of high strength ternary blended concrete containing different silica proportions using machine learning approaches. *Results in Engineering*, 17, 100973. (SCI, IF: 5.0, Q1)
15. **Nagaraju, T. V.**, Bahrami, A., Azab, M., & Naskar, S. (2023). Development of sustainable high performance geopolymer concrete and mortar using agricultural biomass-A strength performance and sustainability analysis. *Frontiers in Materials*, 10. (SCI, IF: 3.2, Q2)
16. Venkata Rao, M., Sivagamasundari, R., & **Vamsi Nagaraju, T.** (2023). Achieving Strength and Sustainability in Ternary Blended Concrete: Leveraging Industrial and Agricultural By-Products with Controlled Nano-SiO₂ Content. *Cleaner Materials*, 100198. (Scopus, Q1)
17. Panda, G.P.; Bahrami, A.; **Nagaraju, T.V.**; Isleem, H.F. (2023). Response of High Swelling Montmorillonite Clays with Aqueous Polymer. *Minerals*, 13, 993. (SCI, IF: 2.5, Q2)

18. Raju, G. K., **Nagaraju, T. V.**, Jagadeep, K., Rao, M. V., & Varma, V. C. (2023). Waste-to-energy agricultural wastes in development of sustainable geopolymer concrete. *Materials Today: Proceedings*. (**Scopus, Q2**)
19. Raju, J. N. S. S. N., **Nagaraju, T. V.**, Varma, V. C., Alisha, S. S., & Jagadeep, K. (2023). Eco-efficient biowaste and aqua waste as cementitious material in high performance concrete. *Materials Today: Proceedings*. (**Scopus, Q2**)
20. Varma, V. C., **Nagaraju, T. V.**, Raju, J. N. S. S. N., Alisha, S. S., & Chaitanya, M. S. K. (2023). Understanding the potential role of precursor content in the geopolymer concrete strength development. *Materials Today: Proceedings*. (**Scopus, Q2**)
21. Chaitanya, M. S. K., **Nagaraju, T. V.**, Gadhiraaju, L. V. K. R., Madepalli, V. R., & Jampana, S. N. R. (2023). Strength and micro-structural performance of geopolymer concrete using highly burned rice husk ash. *Materials Today: Proceedings*. (**Scopus, Q2**)
22. K. Jagadeep, **Nagaraju, T. V.**, M. S. K. Chaitanya., Venkata Rao., & G. L. V. Krishnam Raju. (2023). Effective utilization of agricultural ashes in development of sustainable geopolymer concrete. *Materials Today: Proceedings*. (**Scopus, Q2**)