

CURRICULUM VITAE

Dr. G. SRIDHAR, B.E., M.Tech., Ph.D.,

Assistant Professor I

Department of Civil Engineering

National Institute of Technology Karnataka, Surathkal

Mangalore, Karnataka.



ADDRESS

PHONE

E-MAIL ID

No: 406, Civil Annex
Dept. of Civil Engineering
NITK Surathkal, Mangalore
Karnataka, India, Pin code – 575025

08242473603

sridhar@nitk.edu.in

CAREER VISION

To enhance and fine tune my skills on teaching, research and consultancy and contribute to the development of students and healthy society.

EDUCATION

Program	Institution	Year of completion
Ph. D in Geotechnical Engineering	Indian Institute of Technology Madras and National University of Singapore (IITM-NUS)	July 2015
M. Tech in Geotechnical Engineering	Indian Institute of Technology Madras, Chennai	July 2010
B.E in Civil Engineering	Mepco Schlenk Engg College, Sivakasi (Affiliated To Anna University)	May 2008

EMPLOYMENT

Employer	Position Held	Date of Joining	Date of Leaving
NITK, Surathkal	Assistant Professor	30-12-2019	Till date
BITS Pilani - Dubai Campus	Assistant Professor	02-07-2017	26-12-2019
NIT Andhrapradesh	Assistant Professor (Adhoc)	04-01-2017	31-05-2017
Dept of Civil Engg, IIT Madras	Senior Project Officer	01-07-2016	31-12-2016
Dept of Civil Engg, IIT Madras	Senior Project Officer	14-10-2015	30-04-2016

RESEARCH INTEREST

- Experimental Geotechniques
- Soft Clay Engineering.
- Ground Improvement.
- Physical Modelling (1-g and Centrifuge).
- Numerical Modelling (Finite Element)
- Geosynthetics and its applications
- Sustainable construction materials
- Shallow, Deep and Offshore wind turbine foundation.

Sridhar Gangaputhiran

RESEARCH GRANT

Title	Funding Agency	Amount, Rs	Duration
New resilient breakwater for safety of port and Harbour against Tsunami (CO-PI), 2022-2025	Ministry of Ports, Shipping and Waterways	45.0 lakhs	3 years
Numerical Modelling of Surcharge Preloading with Vertical Drains. (PI), 2018-2019	BITS Pilani, under Research Initiation Grant	4,00,000	2 years

INDUSTRIAL CONSULTANCY

- Involved in consultancy for government and private organizations worth **Rs 50 lakhs on laboratory testing of soil and geosynthetics, design of shallow foundations, retaining walls, slope stability analysis, ground improvement measures and reinforced soil structures**

LIST OF PUBLICATIONS

INTERNATIONAL JOURNAL

- Babita, S., Sridhar, G. (2026).** “Experimental and Numerical Studies on Plate with Ribs–Monopile Foundations for Extra-Large Offshore Wind Turbines.” *International Journal of Geomechanics.*, 26(11), <https://doi.org/10.1061/IJGNALGMENG-1354> (SCI)
- Babita, S., Sridhar, G. (2025).** “Novel foundation system for high-capacity wind turbine: Experimental and numerical study.” *Marine Structures.*, 107, <https://doi.org/10.1016/j.marstruc.2025.103987> (SCI)
- Athira, S., Sridhar, G..** Utilization of Iron Ore Tailing in Controlled Low-Strength Material-Development and Characterization. *Int. J. of Geosynth. and Ground Eng.* 11, 67 (2025). <https://doi.org/10.1007/s40891-025-00673-4>
- Athira, S., and Sridhar, G. (2025).** “Comprehensive Evaluation of Iron Ore Tailing and Cement Treated Lithomargic Soil for Pavement Application.” *International Journal of Geosynthetics and Ground Engineering*, 11, 13. <https://doi.org/10.1007/s40891-025-00626-x> (Impact factor - 2.4)
- Athira, S., Sridhar, G. and Packiam, S. (2025).** “Comprehensive Assessment on Utilization of Iron Ore Tailing as Backfill Material in Mechanically Stabilized Earth Wall.” *Indian Geotechnical Journal*, 55, 636–651. <https://doi.org/10.1007/s40098-024-01001-9> (Impact factor - 1.5)
- Sridhar, G., R. G. Robinson and K. Rajagopal (2023)** Influence of type of drainage boundary on coefficient of horizontal consolidation. *Proceedings of the Institution of Civil Engineers - Ground Improvement*, 177(3), 211-222 (10.1680/jgrim.22.00055). (Impact factor - 1.5)
- Raheena, M., G. Sridhar and R. G. Robinson, (2019)** Simplified Apparatus for CRS Consolidation Testing of Soils. *Geotechnical Testing Journal, ASTM*, 42(3), 817-828. (SCI)
- Sridhar, G., R. G. Robinson and K. Rajagopal (2018)** Horizontal Coefficient of Consolidation from Inward and Outward Flow Tests. *Proceedings of the Institution of Civil Engineers - Ground Improvement* 171(3), 159-166. (Scopus)
- Sridhar, G., R. G. Robinson and K. Rajagopal (2016)** Properties of Soil after Surcharge or Vacuum Preloading. *Proceedings of the Institution of Civil Engineers - Ground Improvement*, 169(3), 217-230. (Scopus)
- Sridhar, G., R. G. Robinson, K. Rajagopal and R. Radhakrishnan (2015)** Comparative study on horizontal coefficient of consolidation determined using Rowe and conventional consolidation cell. *International Journal of Geotechnical Engineering*, 9(4), 388-402. (Scopus)
- Sridhar, G. and R. G. Robinson (2013)** Flexible wall permeameter to measure the hydraulic conductivity of soils in horizontal direction. *Geotechnical Testing Journal, ASTM*, 36(3), 442-447. (SCI)
- Sridhar, G. and R. G. Robinson (2011)** Determination of radial coefficient of consolidation using log t method. *International Journal of Geotechnical Engineering*, 5(4), 373-381. (Scopus)

1. **Raheena, M., G. Sridhar and R. G. Robinson**, (2019) Constant Rate of Strain Consolidation Testing using Conventional Fixed Ring Consolidation Cell. *Indian Geotechnical Journal*, **49**(2), 141-150. (Scopus)
2. **Ganesh Kumar, S., G. Sridhar, R. Radhakrishnan, R. G. Robinson and K. Rajagopal** (2015) A case study of vacuum consolidation of soft clay deposit. *Indian Geotechnical Journal*, **45**(1), 51-61. (Scopus)

INTERNATIONAL AND NATIONAL CONFERENCE

1. **Sunkad, R.Y., Balulmath, A.B., Gangaputhiran, S. (2026)**. Waste Foundry Sand-Based Flowable Fill for Geotechnical Engineering Applications. In: Baadiga, R., Satyam, N., Peddinti, P.R.T. (eds) Latest Advances in Field Monitoring, Instrumentation, and Data-Driven Geotechnical Engineering. IYGEC 2025. Lecture Notes in Civil Engineering, vol 838. Springer, Singapore. https://doi.org/10.1007/978-981-95-7956-3_28 (Scopus)
2. **Asiya, A., Satheesh, A., Sridhar, G. (2026)**. A Comprehensive Analysis on Index and Engineering Properties of Air-Dried and Oven-Dried Soil Samples. In: Parthasarathy, C.R., Sunil, B.M., Kadabinakatti, S., Nainegali, L., Kolathayar, S. (eds) Sustainable Practices in Geotechnical Engineering. ISOG 2024. Lecture Notes in Civil Engineering, vol 798. Springer, Singapore. https://doi.org/10.1007/978-981-95-6059-2_4
3. **Sah, B., Sridhar, G. (2025)**. Response of Offshore Wind Turbine Monopile Foundation Under Action of Wind Load and Sea Waves: Numerical Analysis. In: Dixit, M.S., Jaiswal, S.S., Satyam, N., Singh, A.P., Maji, V.B. (eds) Proceedings of the Indian Geotechnical Conference (IGC 2024), Volume 7. IGC 2024. Lecture Notes in Civil Engineering, vol 703. Springer, Singapore. https://doi.org/10.1007/978-981-96-7787-0_27 (Scopus)
4. **Mahesh, D., Sridhar, G. (2025)**. Critical Review and Finite Element Analysis of Smear Zone in Soft Clay Improved by Prefabricated Vertical Drains. In: Tyagi, A., Mishra, A. (eds) Ground Improvement I. IGC 2023. Lecture Notes in Civil Engineering, vol 662. Springer, Singapore. https://doi.org/10.1007/978-981-96-7598-2_10 (Scopus)
5. **R.G. Robinson, G. Sridhar, R.P. Aparna (2025)**. "Consolidation under radial drainage: Some insights." *GeoVadis.*, CRC Press, [10.1201/9781003645917-5](https://doi.org/10.1201/9781003645917-5) (Scopus)
6. **Kapile, P., Sridhar, G. (2025)**. Comparative Study of Settlement Performance of Stone Column and Vertical Drains: A Review. In: Premalatha, K., Maji, V.B., Muttharam, M., Robinson, R.G. (eds) Recent Advances in Geotechnical Engineering, Volume 2. WIGC 2024. Lecture Notes in Civil Engineering, vol 578. Springer, Singapore. https://doi.org/10.1007/978-981-96-2038-8_14 (Scopus)
7. **Athira, S., Sridhar, G. (2025)**. A Critical Analysis of Curve Fitting Procedures Used in Evaluating Co-Efficient of Consolidation of Soils. In: Premalatha, K., Maji, V.B., Muttharam, M., Robinson, R.G. (eds) Recent Advances in Geotechnical Engineering, Volume 2. WIGC 2024. Lecture Notes in Civil Engineering, vol 578. Springer, Singapore. https://doi.org/10.1007/978-981-96-2038-8_12 (Scopus)
8. **Rao, M.S., Sridhar, G. (2025)**. Finite Element Modelling of Foundation on Soft Clay Improved by Geocell and Boulder-Sand Layer: A Comparative Study. In: Shah, D.L., Shukla, J., Choudhury, D. (eds) *Deep Foundations for Infrastructure Development in India, Volume 2. DFIIIndia 2023*. Lecture Notes in Civil Engineering, vol 620. Springer, Cham. https://doi.org/10.1007/978-3-031-77933-6_22 (Scopus)
9. **Rao, M.S., and Sridhar, G. (2025)**. Comparative Study of Analytical and Numerical Modelling of Bearing Pressure of Shallow Foundation. In: Jose, B.T., Sahoo, D.K., Vanapalli, S.K., Solanki, C.H., Balan, K., Pillai, A.G. (eds) *Proceedings of the Indian Geotechnical Conference 2022 Volume 10. IGC 2022*. Lecture Notes in Civil Engineering, vol 538. Springer, Singapore. https://doi.org/10.1007/978-981-97-6172-2_15 (Scopus)
10. **Annapurna Basayya Balulmath, Sridhar, G, and Saranya P (2024)**. A Critical Review on Potential Use of Waste Foundry Sand in Geotechnical and Pavement Applications. In: Jose, B.T., Sahoo, D.K., Shukla, S.K., Krishna, A.M., Thomas, J., Veena, V. (eds) *Proceedings of the Indian Geotechnical Conference 2022 Volume 8. IGC 2022*. Lecture Notes in Civil Engineering, vol 492. Springer, Singapore. https://doi.org/10.1007/978-981-97-2704-9_30 (Scopus)
11. **Athira, S and Sridhar, G (2023)**. A Critical Review on Potential Use of Iron Ore Tailings as Backfill Material. In: Kasinathan Muthukkumaran, Ravi Sankar Jakka, C. R. Parthasarathy, B. Soundara (eds). *Soil*

Behavior and Characterization of Geomaterials. Lecture Notes in Civil Engineering, 2022, vol 1. Springer, Singapore. <https://doi.org/10.1007/978-981-19-6513-5> (Scopus)

12. **Kasyap Vasudevan, A S and Sridhar, G, (2021).** Finite Element Modelling of Laboratory One Dimensional Consolidation of Soft Clays. *Indian Geotechnical Conference- Trichy*.
13. **Reshma, P R and Sridhar, G, (2021).** Numerical Modelling of Mechanically Stabilized Earth Walls for Slope Protection. *Virtual Conference on Disaster Risk Reduction (VCDRR 2021)*.
14. **Sridhar, G, (2020).** Numerical Modeling of Centrifuge Experiment on Vacuum Consolidation of Soft Clay. *Advances in Geo-Science and Geo-Structures – Jamshedpur*.
15. **Sridhar, G and R. G. Robinson, (2010).** Strength and Compressibility behaviour of Soft Clay after Vacuum Preloading. *Indian Geotechnical Conference- Bombay*, Vol. II, Theme-8.
16. **Sridhar, G. and Veena, U (2013).** Pneumatic Consolidometer for Testing Large Size Consolidation Specimen, *4IYGEC*, 17-18 May, Chennai, 17-20.

COURSES TAUGHT (PG)

- Basic Geomechanics and Shallow Foundation
- Finite Element Method for Geotechnical Engineers
- Critical State Soil Mechanics

COURSES TAUGHT (UG)

- Soil Mechanics – Theory and Laboratory
- Foundation Engineering
- Civil Engineering Materials
- Engineering Mechanics
- Engineering Graphics and Building Drawing

ADMINISTRATIVE RESPONSIBILITIES

- **Faculty Advisor** (2021-2023 & 2025-2027). MTech Geotechnical Engineering- NITK.
- **Warden (2024-2025), First Block, NITK.**
- **Coordinator for Fine arts club of Staff recreation Club (2023-2026).**
- **Laboratory In-charge** (2021-2027). Advanced Geotechnical Engineering Laboratory- NITK.
- **Coordinator** (2020-2027). Analytics, Accreditation, and Ranking Systems - NITK
- **Institute Library Committee member** (2018). BITS Pilani - Dubai Campus.
- **Convener - Department Research Committee** (2018-2019). BITS Pilani - Dubai Campus.

PH. D GUIDANCE

- **Athira, S.** Utilization of Iron Ore Tailings as Structural Fill Material. 2025.
- **Babita Sah.** Experimental and Numerical Analysis of Offshore Wind Turbine Monopile Foundation (Ongoing)
- **Roopa B K.** Iron Ore Tailings Utilization in Pavement Application. (Ongoing)

MTECH GUIDANCE

- **Completed - 17**
- **Ongoing - 3**
- **MTech (Research) Completed – 4**

LABORATORY DEVELOPMENT

- Major contribution in the establishment of New Geotechnical and Concrete Laboratory at BITS Pilani, Dubai Campus. Contributions include identification of equipment's for UG courses, short listing of quotation, planning and development of laboratory space, location and other facilities.

OUTREACH ACTIVITIES

- Reviewer of Journals such as Indian Geotechnical Journal, ASTM - Journal of Testing and Evaluation, Proceedings of the Institution of Civil Engineers - Ground Improvement, Int. Journal. of Geosynthetics and Ground Engineering, etc.

SKILLS

- Design and Fabrication of Test Setups for Geotechnical Lab and sufficient experience to develop a new Geotechnical Engineering Laboratory Facility.
- Six years of Working Experience in Geotechnical Laboratory Testing (IITM).
 - Have working experience in consolidation testing and triaxial testing, Bishop-Wesley stress path apparatus, cyclic triaxial apparatus, flexible wall permeability apparatus, instrumented radial consolidation testing.
- One Year Working Experience in Geotechnical Centrifuge facility at **National University of Singapore (NUS), as a part of Joint Ph. D Programme.**
 - Worked on development of strong box, pore pressure and stress transducer calibration and instrumentation.
 - Testing with T-Bar penetrometer for strength profiling of clay deposit.
- Application Software skills: **FEM based ABAQUS.**

SCHOLASTIC ACHIEVEMENTS

- Awarded **Silver medal for Scoring centum in Physics and Class First in Biology in HSC (2004).**
- Awarded **Silver Medal for 30th Rank in B.E** out of 1597 students from Colleges Affiliated to Anna University (Academic year 2004-2008).
- Secured **All India Rank 144 in GATE-2008.**
- Awarded **Rajinikant Gandhi Memorial Award - Silver Medal** for the best academic record in M. Tech Geotechnical Engineering, Batch 2008-2010.
- **IGS-Mr. H.C. Verma Diamond Jubilee Award (2015)** for "Innovative Instrument Design" for the paper entitled "Flexible Wall Permeameter to Measure the Coefficient of Permeability in Horizontal Direction" published in Geotechnical Testing Journal, ASTM.
- **IGS-AIMIL Biannual Award** for the Best Paper (2016) titled " A Case Study of Vacuum Consolidation of Soft Clay Deposit" Published in the Indian Geotechnical.
- **IGS-Baroda Chapter Young Geotechnical Engineer Award (2018)** for the Best Paper on Ground Improvement (Paper titled "Properties of Soil after Surcharge or Vacuum Preloading".)
- **MHRD, Government of India and National University of Singapore (NUS) Research Scholarship** for pursuing Ph.D at IIT Madras and National University of Singapore (2010-2015).

Sridhar Gangaputhiran