

Name: Dr. Kshitija Nadgouda (knadgouda@spce.ac.in)

Education:

- B. E (Civil): Sardar Patel College of Engineering, Mumbai University (1997)
- M. S. (Civil): Lehigh University, USA (2000)
- Ph. D. in Earthquake Geotechnical Engineering from IIT Bombay (2022)

Experience:

- Langan Engineering and Environmental Services (NJ, USA) – Staff Engineer -2 yrs
- ENGEO Incorporated (CA, USA) Staff Engineer -2 years
- Freelancing consultant (Mumbai) 1 year
- Sardar Patel College of Engineering (Mumbai) Ad hoc faculty -2 years
- Sardar Patel College of Engineering (Mumbai) Assistant Professor -15+ years

Publication Details:

International Conference:

- Nadgouda, K. A., and Hegde, R. A. (2010, December). The effect of lime stabilization on properties of black cotton soil. In *Indian Geotechnical Conference* (pp. 511-514).
- Nadgouda, K. (2014). Coconut fibre reinforced concrete. In *Thirteenth IRF International Conference, 14th September*, International Conference on Advances in Science, Engineering and Technology, ICASET – Chennai, September 2014, Pages 5-7. ISBN: 978-93-84209-51-3
- Nadgouda, K., & Choudhury, D. (2019, March). Seismic bearing capacity factor N_{γ} for shallow strip footing using modified pseudo-dynamic method. In *Geo-Congress 2019: Earthquake Engineering and Soil Dynamics* (pp. 12-21). Reston, VA: American Society of Civil Engineers. doi: 10.1061/9780784482100.002.
- Nadgouda, K., & Choudhury, D. (2019). Seismic bearing capacity factor of dry cohesionless soil under surficial strip footing. In *The 16th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering (16ARC)*.
- Idiculla, G. T., Nadgouda, K., & Dasaka, S. M. (2020). Numerical Modelling for the Investigation of Soil Arching in Dense Sand. In *Geotechnical Characterization and Modelling* (pp. 969-980). Springer, Singapore. Published as book chapter of conference proceedings.
- Aherkar, P. S., Murudi, M. M., and Nadgouda, K. (2023, December). Response Spectrum Analysis for Soft Storey Determination. In *Structural Engineering Convention* (pp. 127-134). Singapore: Springer Nature Singapore.
- Desai, D., Jambhulkar, V., Rathod, A., Sawant, Y., and Nadgouda, K. (2024, February). Optimisation of Pile Foundations in Bridges Using Soil-Structure Interaction—A Case Study. In *International Conference on Advances in Concrete, Structural, & Geotechnical Engineering* (pp. 165-177). Singapore: Springer Nature Singapore.
- Divekar, P., Nadgouda, K., and Murudi, M. (2024, March). Analysis of pile foundation in liquefied soil with encased stone column. In *AIP Conference Proceedings* (Vol. 2985, No. 1). AIP Publishing

National Journal:

- Nadgouda, K. (2015). The Use of Pervious Concrete In Rainwater Management. Nirma University Journal of Engineering and Technology (NUJET), 3(1), 21-24.

International Journal:

- Sabat, V., Shaikh, M., Kanap, M., Chaudhari, M., Suryawanshi, S., and Nadgouda, K. (2015). Use of iron ore tailings as a construction material. International Journal of Conceptions on Mechanical and Civil Engineering, 3(2), 1-21.
- Nadgouda, K., & Choudhury, D. (2021). Seismic bearing capacity factor $N_{\gamma e}$ for dry sand beneath strip footing using modified pseudo-dynamic method with composite failure surface. International Journal of Geotechnical Engineering, 15(2), 171-180.
- Nadgouda, K., & Choudhury, D. (2023). Combined seismic bearing capacity factor using modified pseudo-dynamic approach. Geotechnical and Geological Engineering. Accepted for publication on 14th Jan 2023. (Submitted June 2020)

Other professional activities

- Executive Committee Member of Indian Geotechnical Society – Mumbai Chapter (IGS-Mumbai Chapter) from 2014 to 2018 and 2025 onwards. Also Treasurer from 2007 to 2014.
- Actively involved in the organization of, and overall coordination of Indian Geotechnical Conference (IGC-2010) hosted by IGS Mumbai Chapter in December 2010.
- Organized several technical lectures for Indian Geotechnical Society Mumbai Chapter regularly from 2007 to 2016 as Treasurer of the society and executive committee member thereafter.
- Team Member and registration in-charge for SPICON 2012 – International conference organized by Sardar Patel College of Engineering in May 2012
- Delivered a lecture at AICTE sponsored one week staff development program on “Earth Retaining Structures & Centrifuge Modeling Applications”, at Government Polytechnic, Bicholim, Goa between 23rd May to 27th May 2011.
- Visiting faculty at VJTI for teaching Foundation Engineering to B. Tech. students (2011)
- Part of organizing committee for International Geotechnical Engineering Conference on Sustainability in Geotechnical Engineering Practices and Related Urban Issues, jointly organized by the Indian Geotechnical Society (IGS), Indian Geotechnical Society Mumbai Chapter (IGS Mumbai Chapter) in association with International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), held on September 23-24 at Ramada Powai Hotel and Convention Centre, Mumbai.
- Delivered guest lecture to third year students at VIVA Institute of Technology, Virar on “Applications in Geotechnical Engineering” on 20th September 2019.
- Delivered guest lecture at Shri Vile Parle Kelavani Mandal’s Shri Bhagubhai Mafatlal Polytechnic on 28th March 2023.
- Delivered expert lecture on the occasion of Engineer’s Day at Rajarshi Shahu College of Engineering, Tathawade, Pune, on 15th September 2023

- Delivered Karl Terzaghi Memorial lecture at Mukesh Patel School of Technology Management and Engineering, Mumbai, organized by ASCE-CESA –International Students Chapter on 20th October 2023
- Delivered expert lecture in online mode on “Modern Techniques in Geotechnical Engineering” on 19th April 2024 in symposium on Advancement in Geotechnical Engineering organized by Kolhapur Institute of Technology’s College of Engineering in association with IGS Pune Chapter.
- Site visit for third year UG students to Shreeyan Heights, Charkop, to observe Combined Piled Raft Foundation construction for G + 40 structure in March 2025
- Site visit for third year UG students to SPIT entrance, 17th to 20th March 2025 to observe pile drilling for building extension.
- Organised expert lecture by Dr. A. Juneja on “” for ground improvement elective students

Consultancy & Testing:

- Extensive field experience in USA related to site investigations
- Involved in hydrology studies for Alamo Creek in California.
- Performed calculations for consolidation settlement within Bay mud induced due to proposed grading.
- Performed slope stability analysis using Slide, GSLOPE and XSTABL software.
- Compiled geotechnical reports summarizing site investigation, exploration and recommendations.
- Reviewed foundation and grading plans designed by the Civil Engineer to determine compliance with recommendations provided in the geotechnical study report.
- Analyzed bearing capacity and performed settlement calculations.
- Performed pavement design calculations using AASHTO method
- Geotechnical consultancy and testing for various private agencies in India.
- Peer Review for MCGM on various storm water drain projects in Mumbai
- Third party technical audit for Construction of Sanitary Landfill at Municipal Solid Waste Facility at Uttan in Mira Bhayandar Municipal Corporation area
- Drafted Structural audit guidelines for National Bank for Agriculture and Rural Development (NABARD)
- Conducted third party technical audit of self-audit reports of the red category industries located in the MMR area for Maharashtra Pollution Control Board (MPCB)

Courses attended:

- ISTE approved one week Short Term Training Program (STTP) on “Geo-technology for infrastructure development” at SVNIT, Surat, from January 4, 2010 to January 8, 2010.
- One week Short Term Training Program (STTP) on “Use of IT in Civil Engineering” at NITTTR, Pune, from July 19, 2010 to July 23, 2010.
- Workshop on “Recent Advances in Large and Deep Foundations” on September 16th, 2010
- ISTE approved one week Short Term Training Program (STTP) on “Risk Assessment and Management in Geotechnical Engineering” at IIT Bombay, from March 14, 2011 to March 18, 2011.

- One week Short Term Training Program (STTP) on “Remote Sensing & Geographic Information System & its applications” at NITTTR, Pune, from June 11 to June 15, 2012
- Two days workshop on Motivation and Attitude Changing, 8th and 9th Aug. 2012
- TEQIP_II sponsored one week Short Term Training Program (STTP) on “Geotechnical Investigations, Interpretations and Improvements” at SVNIT, Surat, from October 18 to October 22, 2013.
- TEQIP_II sponsored one week Short Term Training Program (STTP) on “Incorporation of Pedagogy in Engineering” at IISc, Bangalore from February 3 to February 7, 2014.
- 3-day training program under TEQIP-II on “Objectives and Outcome based Education System with Special Emphasis on Feedback and Assessment of PEOs and POs” at Sardar Patel College of Engineering from July 10 to July 12, 2014
- International Conference DFI 2014, Deep Foundation Technologies for Infrastructure Development in India, held from September 19 to September 20, 2014 at IIT, Delhi
- TEQIP_II sponsored one week Short Term Training Program (STTP) on “Best Practices in Outcome Based Curricula Design and Pedagogy Alignment” at YASHADA, Pune, from January 9 to January 13, 2015
- TEQIP_II sponsored one week Short Term Training Program (STTP) on “Achieving Academic Excellence” by IIM Raipur, from July 13, 2015 to July 18, 2015.
- One-day workshop on “Advances in Soil Structure Interaction and Deep Foundations” by International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), in Pune on 16th December 2015.
- Two-day workshop sponsored by TEQIP-II on “Technical Aspects in Design and Construction of Bridges” by Sardar Patel College of Engineering, Mumbai on 22nd and 23rd April 2016.
- TEQIP-II sponsored one week Short Term Training Program (STTP) on “Transformational Leadership and Change Management” by Jaipur Productivity Centre, Jaipur held at Mussoorie, from May 9, 2016 to May 13, 2016.
- One week course on “Deep Foundations of Mega Structures” by Global Initiative for Academic Networks (GIAN) at IIT Bombay from August 27, 2018 to September 1, 2018.
- AICTE funded two week FDP on “Applications of GPS and Remote Sensing in Civil Engineering” from 6th Jan to 18th Jan 2020 at Sardar Patel College of Engineering, Mumbai.
- TEQIP-III online certification on “Digital Transformation in Teaching Learning Process” from April 6th to April 22nd, 2020.
- 12 week NPTEL online certification on “Geotechnical Engineering -1” from Jan to April 2020.
- One-week FDP on Geo-Sciences in Engineering 2020” organized online by Government College of Engineering, Karad and Walchand College of Engineering from June 9th to June 13th, 2020.
- 3-day workshop on “Design Thinking for Educators in the New Normal” conducted online by Sardar Patel College of Engineering, Mumbai from 28th Sept to 30th Sept 2020 under TEQIP-III Twinning activity.
- 3-day workshop on “Robust Design Method” organized online by Sardar Patel College of Engineering, Mumbai from 28th Jan to 1st Feb 2021 under TEQIP-III Twinning activity.
- One-week online faculty development programme on “Developing Interpersonal Skills and Effective Communication Intelligence” organized by AICTE Training and Learning

Academy (ATAL) from 6th December to 10th Dec 2021 by Sardar Patel College of Engineering, Mumbai.

- One-week online faculty development programme on “Inculcating Universal Human Values in Engineering” organized by AICTE from 18th July 2022 to 22nd July 2022.
- 2 day workshop on “Training of Trainers (ToT) Workshop on Geotechnical Earthquake Engineering” at IIT Bombay organized by National Disaster Management Authority Project on Development of Resource Material on Earthquake Engineering and IIT Bombay from 6th to 7th February 2023.
- 12 week NPTEL online certification on “Strategies for Sustainable Design” from Jan to April 2023 and scored in top 5%.
- One-week online faculty development programme on “Urban Infrastructure, Sustainability and Climate Change” organized by AICTE Training and Learning Academy (ATAL) from 8th December to 13th Jan 2024 by Sardar Patel College of Engineering, Mumbai.
- One-week online short term course on “Recent Advances in Transportation Geotechnics: Industry Perspective” organized by Dr. B. R. Ambedkar National institute of Technology, Jalandhar in association with IGS, Jalandhar from 24th to 28th June 2024
- 8 week NPTEL online certification and faculty development program on “Sustainable Engineering Concepts and Life Cycle Analysis” from July to September 2023.
- 8 week NPTEL online certification and faculty development program on “Remote Sensing and GIS” from July to September 2024 and scored in top 2%.
- 12 week NPTEL online certification and faculty development program on “Retrofitting and Rehabilitation of Civil Infrastructure” from January to April 2025