

Nribojyoti Biswas

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CV Date: 10/08/2024

EDUCATION

Ph.D., Civil Engineering, Texas A&M University, College Station, TX, 2022

M.Tech, Civil Engineering, Indian Institute of Technology, Kharagpur, 2017

B.E., Civil Engineering, Indian Institute of Engineering Science and Technology, Shibpur, 2013

EXPERIENCE

2024-present Assistant Professor of Civil & Environmental Engineering, University of Massachusetts Lowell

2023-2024 Senior Research Engineer, Texas A&M University, College Station, Texas

2022-2023 P

- o Transportation Geotechnics
- o ASCE Journal of Geotechnical and Geoenvironmental Engineering
- o ASTM Advances in Civil Engineering Materials
- o Transportation Research Record / Journal of Transportation Research Board
- o Springer Nature Scientific Reports
- o International Journal of Pavement Research and Technology
- o Geotextiles and Geomembranes
- o ASTM Geotechnical Testing Journal
- o International Journal of Pavement Engineering
- o ICE Proceedings of Civil Engineering Ground Improvement
- o Transport- Proceedings of the ICE

PUBLICATIONS

[Google Scholar](#)

8. Khan, M.A., Puppala, A.J. Biswas, N, and Congress, S.S.C. 2023. Evaluation of structural performance of the geocell reinforced flexible pavement Transportation Geotechnics, <https://doi.org/10.1016/j.trgeo.2023.101021>
- 9.

12. Jang, J., Puppala, A., Biswas, N, Chakraborty, S., and Radovic, M. 2022. Utilization of Metakaolin-Based Geopolymers for Stabilization of Sulfate-Rich Expansive Soils. In Geo Congress 2022. American Society of Civil Engineers, Reston, VA. pp. 2312
13. Khan, M.A., Puppala, A., Biswas, N, Congress, S.S.C., and Jafari, K.H. 2022. Analytical Approach to Estimate the Load-Bearing Capacity of Subgrade Soil with a Geotextile Reinforced Base Layer. In Geo Congress 2022. American Society of Civil Engineers, Reston, VA. pp. 380

PRESENTATIONS

Keynotes

- “Role of Silica-Based Admixtures for Effective Stabilization of Problematic Soils”
Young Researcher Special Speaker^{2nd} International Conference on Construction Resources
for Environmentally Sustainable Technologies, Fukuoka, Japan, November 2023
- “Chemical Stabilization of Problematic Soils with Traditional Calcium-Based and Nontraditional
Stabilizers”
Cement Stabilization & RCC Conference, Arlington, Texas, September 2022

Workshops

- “Integrated Approach for Geotechnical and Hydrodynamic Analyses in Coastal Residential Built
Infrastructure: A Holistic Perspective”
Coastal Research and Education Actions for
Transportation Equity (CREATE): A USDOT Title University Transportation Center
San Marcos, Texas, July 2024.
- “Opportunities, Challenges, and Perspectives on Base and Subgrade Stabilization with
Nontraditional Stabilizers”
Transportation Research Board Annual Meeting,
Washington DC, January, 2024.
- “Application of wicking geotextile for pavement infrastructures on expansive soils”
Transportation Research Board Annual Meeting, Washington, DC, January, 2022

Conference Presentations

- “Role of Silica-rich Admixtures and Geopolymers for Effective Stabilization of Problematic Soils
with a Focus on Sustainability and Durability”
20th Arizona Pavements/Materials
Conference, Memorial Union (MU), ASU at the Tempe Campus, 2023
- “Performance of Low Volume Roads Built Over Expansive Soils Reinforced with Wicking
Geotextiles”, 13th International Conference on Low Volume Roads, Cedar Rapids, Iowa
2023
- “Effects of Traffic Loading Magnitude and Frequency on the Performance of Geotextile
Reinforced Flexible Pavements”
ASCE Geo-Congress, Los Angeles, CA, 2023
- “Evaluating the Performance of Wicking Geotextile in Providing Drainage for Flexible
Pavements Built over Expansive Soils”
Transportation Research Board Annual Meeting,
Washington DC, 2021.
- “Depth of Influence of a Wicking Geotextile below the Flexible Pavement Constructed over
Expansive Subgrade”
Geosynthetic Conference, Kansas 2021.
- “Utilization of Silica-Based Admixture to Improve the Durability of Liner Treated Expansive
Soils”