

## Publication Details

### Department of Civil Engineering:

Name of the Faculty: Dr. Abir Sarkar

Designation: Assistant Professor

Department: Civil Engineering



### **Journal Articles**

- Mukul Bisui, Shaswata Chatterjee, Abir Sarkar, & Rohit Ralli. (2024). **Numerical and experimental analysis of vibration mitigation using a series of hollow boreholes.** *Journal of Vibration Engineering & Technologies*, 12, 8941. <https://doi.org/10.1007/s42417-024-01302-6>
- Rahul Barman, Abir Sarkar, & Debjit Bhowmik. (2024). **Composite sand-crumb rubber and geofoam wave barrier for train vibration.** *Geotechnical and Geological Engineering*, 42, 2321–2343. <https://doi.org/10.1007/s10706-023-02674-4>
- Abir Sarkar, Rahul Barman, & Debjit Bhowmik. (2021). **Numerical investigation on vibration screening using geofoam and sand-crumb rubber mixture infilled trench.** *International Journal of Geosynthetics and Ground Engineering*, 7, Article 84. <https://doi.org/10.1007/s40891-021-00329-z>

### **Book Chapters**

- Sunil Priyadarshi, Samir Kumar, & Abir Sarkar. (2025). **Optimizing the use of reclaimed paving materials in granular sub-base for road construction: An extensive analysis.** In *International Book Chapter* (ISBN: 978-10-3298-036-2). <https://doi.org/10.1201/9781003595745>
- Samir Kumar, Sunil Priyadarshi, & Abir Sarkar. (2025). **Innovative solutions for sustainable construction: A comprehensive study on environmental challenges,**

**structural optimization, and performance evaluation of bubble deck slabs in concrete construction.** In *International Book Chapter* (ISBN: 978-10-3298-036-2)

<https://doi.org/10.1201/9781003595745>

- Ashim Roy, Abir Sarkar, & Ashes Banerjee. (2025). **Optimized water supply network design for rural West Bengal: A case study.** In *International Book Chapter* (ISBN: 978-10-3298-036-2), <https://doi.org/10.1201/9781003595745>
- Samir Kumar, Sunil Priyadarshi, & Abir Sarkar. (2025). **Review paper on eccentric wings in bridge deck.** In *International Book Chapter* (ISBN: 978-10-3298-036-2) <https://doi.org/10.1201/9781003595745>
- Rejina Yasmin, Abir Sarkar, Ashes Banerjee, & Nilanjan Tarafder. (2024). **Dynamic seismic analysis of multi-storied buildings having different heights for all seismic zones in India.** In *International Book Chapter* (ISBN: 978-93-6135-058-0), <https://doi.org/10.22271/ed.book.2863>