

Name of Faculty Dr. Angshuman Das

Designation Assistant Professor

Nature of Job/Appointment Regular

Date of Joining 01-12-2022

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Education Qualifications	Name of the Degree	Class
Ph. D.	Doctor of Philosophy (Civil and Environmental Engineering)	Awarded
PG	M. Tech. (Soil Mechanics and Foundation Engineering)	Distinction
UG	B. Tech. (Civil Engineering)	Distinction

#### Work Experience

Teaching	1 year 6 Months
Research	1.5 years
Industry	9.5 Months
Others	--

Area of Specialization Clay Minerology, Soil Stabilization, Soil Dynamics, Nonlinear soil response, Artificial Intelligence, liquefaction mitigation, and Constitutive Modelling

Professional Memberships 1. IGS Life membership (Membership no-15420)

Responsibilities held at Institution Level 1. SUDHEE Technical Committee member.

Responsibilities held at Department Level 1. Co-ordinator for Civilizations 2024  
2. Faculty-in-charge for Geotechnical Engineering Lab.  
3. NBA coordinator

Research Guidance Completed Guiding 03 UG Projects, currently 2 more UG projects is going on

Awards Received IGS-AIMIL Biennial award 2022

Courses Handled at Under Graduate / Post Graduate Level. Ground Improvement Techniques, Foundation Engineering, Engineering Geology Lab, Geotechnical Engineering, Airports, Railways and Waterways, Geotechnical Engineering Lab, Strength of Material 2, Disaster Risk Reduction Management, Environmental Science

Advanced Foundation Design for PG

No. of Papers Published	National Journals – 02	International Journals – 08
	National Conference – 12	International Conference – 06

1979

Technology Transfer

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Invited Speaker

As a Resource person delivered a talk on ""Real-Time Monitoring of Vibroflotation induced Ground Vibration"" on 10-01-2023 in the Conference on "Mechanical & Structural Integrity" organized by AIRM Institute.

No. of Books/Chapters Published with details

As a Resource person delivered a talk on ""Application of GeoStudio on slope stability analysis"" on 22-11-2023 in the three week practice oriented internship program on "SASCE-2023" organized by CED, CBIT. Book Chapter Publications

1. Sravya, S., Das, A., Jadda, K., & Gundavaram, D. (2023, July). 2D Analysis of Slope Stability Using Limit Equilibrium Analysis and Finite Element Analysis. In International Conference on Interdisciplinary Approaches in Civil Engineering for Sustainable Development (pp. 201-213). Singapore: Springer Nature Singapore.
2. A. Das, R. Deb, and S. Banerjee, "Prediction of Cyclic Behaviour of Quaternary Alluvial Soil using Finite Element Approach", published in conference proceedings, 7th ICGRE'22, Lisbon, Portugal
3. Das, and P. Chakraborty, "Simple Statistical Models to Predict the Cyclic Behaviour of Cohesionless Soil in Quaternary Alluvium", published in conference proceedings (CAJG 2020), Sousse, Tunisia.
4. P. Chakraborty, and A. Das, "Free Field Ground Vibration Due to Ground Improvement Induced Vibration", In Challenges and Innovations in Geomechanics. Springer, 978-3-030-64518-2. (2021). [https://doi.org/10.1007/978-3-030-64518-2\\_93](https://doi.org/10.1007/978-3-030-64518-2_93)
5. P. Chakraborty, A. Das, and Anil, "Effect of Soil Grain Size on Liquefaction Strength of Sandy Soil", In: Latha Gali M., Raghuvver Rao P.(eds) Geohazards. Lecture Notes in Civil Engineering, vol 86. Springer, Singapore. (2020). [https://doi.org/10.1007/978-981-15-6233-4\\_38](https://doi.org/10.1007/978-981-15-6233-4_38)
6. P. Chakraborty and A. Das, "Liquefaction Strength Assessment of Cohesionless Soil in IIT Patna Campus", In Advances in Concrete, Structural & Geotechnical Engineering. Bloomsbury, India. (2018).

Details of Short-Term Training Programs / Faculty Development

1. Organized online workshop on "Intellectual Property Rights (IPRs) and IP Management for Start Up" in BIET, Hyderabad.
2. Organized a five days workshop on "Innovative Ideas and Application of Engineering Drawing and AutoCAD Software" in BIET, Hyderabad
3. Participate in one day FDP on 'Values & Spirituality in Education for a Better Tomorrow' on Sat, 7th Jan'23
4. As a co-ordinator organized a 15 days internship Program on "Software Applications for Sustainable Water Resources Management" in CBIT, Hyderabad
5. As a convenor organized a 15 days internship Program on "Software Applications for Sustainable Civil Engineering" in CBIT, Hyderabad

#### International/National Journals from 2017

1. A. Das, P. Chakraborty, R. Deb and S. Banerjee "Prediction of Large Strain Cyclic Behavior of Sand Using Artificial Neural Network Approach", Int J Adv Eng Sci Appl Math 14, 60–79 (2022). <https://doi.org/10.1007/s12572-022-00322-3>
2. A. Das, and P. Chakraborty, "Simple Models for Predicting Cyclic Behaviour of Sand in Quaternary Alluvium", Arabian Journal of Geosciences, 15, 385 (2022). <https://doi.org/10.1007/s12517-022-09639-6>
3. A. Das, and P. Chakraborty, "Artificial Neural Network and Regression Models for Prediction of Free Field Ground Vibration Parameters Induced from Vibroflotation", Soil Dynamics and Earthquake Engineering, 148, 106823 (2021), <https://doi.org/10.1016/j.soildyn.2021.106823>
4. A. Das, and P. Chakraborty, "Large Strain Dynamic Behaviour of Quaternary Alluvium Sand with Emphasis on Empirical Pore Water Pressure Generation Model", Published in European Journal of Environmental and Civil Engineering, 1-24, (2021), <https://doi.org/10.1080/19648189.2021.1916605>
5. A. Das, P. Chakraborty, and R. Popescu, "Assessment of Lumped Particles Effect on Dynamic

- Behaviour of Fine and Medium Grained Sand", Bull Earthquake Eng, 19, 745–766 (2021), 10.1007/s10518-020-01012-w
6. P. Chakraborty, N. Nilay, and A. Das, "Effect of Silt Content on Liquefaction Susceptibility of Fine Saturated River Bed Sands", Int J Civ Eng, 19, 549-561 (2021), 10.1007/s40999-020-00574-9
  7. P. Chakraborty, A. R. Roshan, and A. Das, "Evaluation of Dynamic Properties of Partially Saturated Sands Using Cyclic Triaxial Tests", Indian Geotech J, 50, 948-962 (2020), 10.1007/s40098-020-00433-3
  8. A. Das, and P. Chakraborty, "Influence of Motion Energy and Soil Characteristics on Seismic Ground Response of Layered Soil", Int J Civ Eng, 18, 763–782 (2020), 10.1007/s40999-020-00496-6
  9. A. Das, and P. Chakraborty, "One-Dimensional Seismic Energy Transmission along Heterogeneous Layered Soil", International Journal of Students' Research in Technology & Management, 4(3), 49-55, 2016) 10.18510/ijstrtm.2016.43
  10. Das, A. and Soni, D.K. (2015). Variation in the properties of kaolinite by varying the percentage of ground granulated blast furnace slag (GGBS) and lime added in kaolinite. International J. of Electronics, Electrical and Computational System, IJECS, ISSN 2348-117X, Volume 4, Special Issue.

#### International/National Conferences

1. A. Das, B. K. Dudam, K. Jadda, Sai Vamsi V., Nikitha G.. "Improvement of Hydraulic and Aggregate Properties of Locally Available Lump Soil Using Rice Husk Ash and Lime". IGC-2023, IIT Roorkee, India.
2. B. Jayadeep, A. Das, D. Bharath Kumar. "Assessment of Water Quality Index (WQI) and Pollution Mapping of Pashmalyam Lake of Patancheru Industrial Belt Hyderabad". HYDRO 2023. NIT Warangal, India.
3. S. Sravya, A. Das, K. Jadda, D. Gundavaram, "2-D Analysis of Slope Stability Using Limit Equilibrium Analysis and Finite Element Analysis", IACESD-2023, Bangalore, India.
4. A. Das, R. Deb, and S. Banerjee, "Prediction of Cyclic Behaviour of Quaternary Alluvial Soil using Finite Element Approach", 7th ICGRE'22, Lisbon, Portugal
5. R. Roshan, A. Das, and P. Chakraborty, "Effect of Variabilities in Motion Characteristics and Bedrock Depth on Seismic Ground Response Assessment", MedGU-21, Istanbul, Turkey.
6. Das, and P. Chakraborty, "Simple Statistical Models to Predict the Cyclic Behaviour of Cohesionless Soil in Quaternary Alluvium", 3rd Conference of the Arabian Journal of Geosciences (CAJG 2020), Sousse, Tunisia.
7. P. Chakraborty, and A. Das, "Free Field Ground Vibration due to Ground Improvement Induced Vibration", 16th Conference on Computer Methods and Advances in Geomechanics (IACMAG-2020), Torino, Italy.
8. A. Das, and P. Chakraborty, "One Dimensional Seismic Response Analysis of Heterogeneous Layered Soil", 15th Conference on Computer Methods and Advances in Geomechanics (IACMAG-2017), Wuhan, China
9. K. Venugopal, A. Das, S. Nallurri "Use of Simple Statistical approach for Hydrological Forecasting of River flows in to Almatti Dam and Groundwater Levels in Andhra Pradesh", ICIET-2022, JNTUH, Hyderabad, India.
10. A. Das and S. Banarjee, "Review of Unit Cell Concept in the Design of Ground Improvement Techniques", 8IYGEC-2021, IIT Madras, India
11. P. Chakraborty, A. Das, and Anil, "Effect of Soil Grain Size on Liquefaction Strength of Sandy Soil", IGC-2018, IISC Bangalore, India
12. P. Chakraborty, and A. Das, "Liquefaction Strength Assessment of Cohesionless Soil in IIT Patna Campus", ASCGE-2018, BITS Pillani, India
13. A. Das, and P. Chakraborty, "Impact of Frequency Content in Input Motion on Seismic Response of Layered Soil", IGC-2017, IIT Guwahati, India
14. A. Das, and P. Chakraborty, "Numerical Determination of the Effect of Seismic Frequency Content in Free Field Dynamic Response of Layered Soil", Conference on Numerical Modeling in Geomechanics (CoNMIg-2017), IIT Roorkee, India
15. A. Das, and D.K. Soni (2015). "Using Regression Analysis to Find the Variation in the Various Properties of Kaolinite Due to Adding Various Percentages of Lime and GGBS in Kaolinite." IGC-2015, Pune, Maharashtra, India.
16. A. Das, and D.K. Soni (2015). "Variation in the Properties of Kaolinite by Varying the Percentage of Ground Granulated Blast Furnace Slag (GGBS) and Lime Added in Kaolinite. In International Conference on Emerging Trends of Engineering, Science, Management and Its Application (ICETESMA-15), JNU, Delhi.
17. A. Das, and D.K. Soni (2014). "Effect of the Ground Granulated Blast Furnace Slag (GGBS) and Lime Mix on the Hydraulic Conductivity of Expansive Clay." RTCCE-2014, MNIT Allahabad, Allahabad,
18. A. Das, and D.K. Soni (2014). "A Comparative Study on the Effect of the Ground Granulated Blast Furnace Slag (GGBS) and Lime Mix on the Hydraulic Conductivity, Optimum Moisture Content and Dry Density of Expansive Clay". NIT-MTMI, Hamirpur.