

Name of Faculty Dr. Angshuman Das

Designation Assistant Professor

Nature of Job/Appointment Regular

Date of Joining 01-12-2022

E-mail angshumandas\_civil@cbit.ac.in



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	11 Months
Research	1.5 years
Industry	9.5 Months
Others	--
Area of Specialization	Clay Mineralogy, Soil Stabilization, Soil Dynamics, Nonlinear soil response, Artificial Intelligence, liquefaction mitigation, and Constitutive Modelling
Professional Memberships	IGS Life membership (Membership no-15420)
Responsibilities held at Institution Level	SUDHEE Technical Committee member.
Responsibilities held at Department Level	1. Co-ordinator for Civilizations 2023 2. Faculty-in-charge for Geotechnical Engineering Lab. 3. NBA coordinator
Research Guidance	Guiding 03 UG Projects
Awards Received	1. 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
No. of Papers Published	National Journals – 02 International Journals – 08
Projects Carried out	National Conference – 10 International Conference – 05
Patents	--
Technology Transfer	--
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. 1. 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 2. 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.
No. of Books/Chapter Published with details	

Details of Short-Term Training  
Programs / Faculty Development

3. 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)
4. P. Chakraborty, A. Das, and Anil, "Effect of Soil Grain Size on Liquefaction Strength of Sandy Soil", In: Latha Gali M., Raghuveer 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)
5. 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)
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

Details of Journal Publications/  
Conferences (National and  
International)

**International Journal from the year 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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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 from the year 2017**

1. A. Das, R. Deb, and S. Banerjee, "Prediction of Cyclic Behaviour of Quaternary Alluvial Soil using Finite Element Approach", 7th ICGRE'22, Lisbon, Portugal
2. 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.
3. 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.
4. 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.
5. 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
6. 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.

7. A. Das and S. Banarjee, "Review of Unit Cell Concept in the Design of Ground Improvement Techniques", 8IYGEC-2021, IIT Madras, India
8. P. Chakraborty, A. Das, and Anil, "Effect of Soil Grain Size on Liquefaction Strength of Sandy Soil", IGC-2018, IISC Bangalore, India
9. P. Chakraborty, and A. Das, "Liquefaction Strength Assessment of Cohesionless Soil in IIT Patna Campus", ASCGE-2018, BITS Pillani, India
10. A. Das, and P. Chakraborty, "Impact of Frequency Content in Input Motion on Seismic Response of Layered Soil", IGC-2017, IIT Guwahati, India
11. 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
12. 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.
13. 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.
14. 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,
15. 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.

