

RESUME

Name: Dr. Sujit Kumar Dash
Address for Communication Associate Professor
Department of Civil Engineering
IIT Kharagpur
Kharagpur – 721 302
INDIA
e-mail address sujit@civil.iitkgp.ernet.in
Telephone No. 91-3222-282418 (O)
91-3222-282419 (R)
Fax No. 91-3222-282254
Date of Birth 27th May 1971



Details of Academic Qualifications

Examination	Institution	Year of passing	Percentage of marks	Division
B.E. (Civil Engg.)	Utkal University, Orissa.	1993	79	First (Hons.)
M.E. (Soil Mechanics & Foundation Engg.)	National Institute of Technology Rourkela	1996	75	Not awarded
PhD in the area of Geotechnical Engg.	Indian Institute of Technology Madras, Chennai.	2001	Degree by Research	

Professional Experience

- Associate Professor in the Department of Civil Engineering IIT Kharagpur, May 2012-till date.
- Associate Professor in the Department of Civil Engineering IIT Guwahati, May 2007-May 2012.
- Visiting Fellow, Centre for Geomechanics and Railway Engineering at University of Wollongong, Australia, Dec. 2009-June 2010.
- Assistant Professor in the Department of Civil Engineering IIT Guwahati, August 2003 – May 2007.
- Lecturer in the Department of Civil Engineering University College of Engineering Burla, India, September 2002 - August 2003.
- Post-doctoral Research Associate in the Department of Civil Engineering, Indian Institute of Science Bangalore, November 2001 - August 2002.
- Project Associate in the Department of Civil Engineering, I.I.T. Madras, Chennai, February 1996 - July 1996.

Research area

Reinforced soil structures, Shallow foundation, Seismic soil liquefaction.

Courses Taught

Soil Mechanics, Advanced Foundation Engineering, Reinforced Soil Structures, Engineering Drawing.

List of Publications

Refereed Journals

1. Biswas, A., Murali Krishna A. and **Dash, S.K. (2015)** “Behavior of geosynthetic reinforced soil foundation systems supported on stiff clay subgrade” *Int. Journal of Geomechanics*, ASCE. DOI: 10.1061/(ASCE)GM.1943-5622.0000559.
2. **Dash, S.K.** and Hussain, M. (2015) “Influence of lime on shrinkage behaviour of soils.” *Journal of Materials in Civil Engineering*, ASCE, (doi.10.1061/(ASCE)MT.1943-5533.0001301).
3. Deka S., **Dash, S. K.** and Sreedeeep S., (2015). Strength of lime-treated fly ash using bentonite. *Geotechnical Engineering*, Journal of the South East Asian Geotechnical Society, Vol.46,No.3, pp. 73-81.
4. Biswas, A., Ansari, M.A., **Dash, S. K.** and Murali Krishna, A. (2015) “Behavior of geogrid reinforced foundation systems supported on clay subgrades of different strengths.” *International Journal of Geosynthetics and Ground Engineering*, Springer (DOI 10.1007/s40891-015-0023-5).
5. Hussain, M. and **Dash S.K.** (2014) “The influence of lime on the compaction behavior of soils.” *Environmental Geotechnics*, Journal of Institution of Civil Engineers London, doi.org/10.1680/envgeo.14.00015.
6. Ravi K., **Dash, S.K.**, Vogt S. and Braeu, G. (2014) “Behaviour of geosynthetic reinforced unpaved roads under cyclic loading” *Indian Geotechnical Journal*, Journal of Indian Geotechnical Society, Springer, Vol.44, No.1, pp.77-85.
7. Biswas, A., Murali Krishna, A. and **Dash, S.K.** (2013) “Influence of Subgrade Strength on the Performance of Geocell-Reinforced Foundation Systems” *Geosynthetics International*, Journal of International Geosynthetics Society, Vol. 20, No.6, pp.376-388.
8. **Dash, S.K.** and Bora, M.C. (2013) “Improved Performance of Soft Clay Foundation using Stone Columns and Geocell-Sand Mattress” *Geotextiles and Geomembranes*. Journal of International Geosynthetics Society Vol. 41, pp. 26-35.
9. **Dash, S.K.** and Bora M.C. (2013) Influence of geosynthetic encasement on the performance of stone columns floating in soft clay.” *Canadian Geotechnical Journal*, Journal of National Research Council Canada, Vol. 50, No.7, pp. 754-765. (Scopus: 1)
10. **Dash, S.K.** and Amol, S. (2012) “Performance improvement of railway ballast using geocells” *Indian Geotechnical Journal*, Journal of Indian Geotechnical Society, Springer, Vol.42, No.3, pp.186-193.
11. Nimbalkar S., Indraratna, B., **Dash, S.K.** and Christie, D. (2012) Improved Performance of Railway Ballast under Impact Loads using Shock Mats. *Journal of*

- Geotechnical and Geoenvironmental Engineering*, ASCE, Vol.138, No.3, pp.281-294. (Scopus: 4)
12. **Dash, S.K.** (2012) Effect of geocell type on load carrying mechanism of geocell reinforced sand foundations. *International Journal of Geomechanics*, ASCE, Vol.12, No.5, pp.537-548. (Scopus: 1)
 13. **Dash, S.K.** and Hussain, M. (2012) Lime Stabilization of Soils: Reappraisal. *Journal of Materials in Civil Engineering*, ASCE, Vol. 22, pp. 533-538. (Scopus: 5)
 14. Raghukanth, S.T.G., Dixit, J. and **Dash, S.K.** (2011) Ground motions for scenario earthquakes at Guwahati city. *Acta Geodaetica et Geophysica Hungarica*, Vol.46, No.3, pp.326-346.
 15. **Dash, S.K.** (2010) Influence of relative density of soil on performance of geocell reinforced foundations. *Journal of Materials in Civil Engineering*, ASCE, Vol. 22, No. 5, pp. 533-538. (Scopus: 3)
 16. Raghukanth, S.T.G., and **Dash, S.K.** (2010) Evaluation of Seismic Soil-Liquefaction at Guwahati City. *Journal of Environmental Earth Sciences*, Vol. 61, No.2, pp. 355-368.
 17. Raghukanth, S.T.G., and **Dash, S.K.** (2010) Deterministic Seismic Scenarios for North East India. *Journal of Seismology*. Vol.14, No.2, pp.143-167. (Scopus: 4)
 18. Madhavi Latha, G., **Dash, S.K.** and Rajagopal, K. (2009) Numerical Simulation of the Behaviour of Geocell Reinforced Sand in Foundations. *International Journal of Geomechanics*, ASCE, Vol.9, No.4, pp.143-152. (Scopus: 9)
 19. Sireesh, S., Sitharam, T.G. and **Dash, S.K.** (2009) Bearing Capacity of Circular Footing on Geocell-Sand Mattress Overlying Clay Bed with Void. *Geotextiles and Geomembranes, Journal of International Geosynthetics Society*, Vol.27, No.2, pp.89-98. (Scopus: 29)
 20. Deka S., Sreedeeep S., and **Dash, S. K.** (2009) Re-evaluation of Cone Penetration Liquid Limit Based on Free Swell Property of Soil. *Geotechnical Testing Journal, ASTM*, Vol.32, No.6., pp.1-6. (Scopus: 1)
 21. **Dash, S.K.**, Reddy, P. D. and Raghukanth, S.T.G. (2008) Subgrade modulus of geocell-reinforced sand foundation. *Ground Improvement, Journal of Institution of Civil Engineers London*. Vol.161, No.2, pp. 79-87.(Scopus: 4)
 22. Madhavi Latha, G., **Dash, S.K.** and Rajagopal, K. (2008) Equivalent Continuum Simulations of Geocell reinforced Sand beds Supporting Strip Footings. *Geotechnical and Geological Engineering An International Journal*, Springer, Vol. 26, No.4, pp.387-398.(Scopus: 6)
 23. Raghukanth, S.T.G., and **Dash, S.K.** (2008) Stochastic modeling of SPT-N value and evaluation of probability of liquefaction at Guwahati city. *Journal of Earthquake and Tsunami*, World Scientific Publishing, Vol.2, No.3 pp.175-196. (Scopus: 1)
 24. Raghukanth, S.T.G., Sreelatha, S. and **Dash, S.K.** (2008) Ground motion estimation at Guwahati city for a M_w 8.1 earthquake in the Shillong plateau. *Tectonophysics, International Journal of Geotectonics and the Geology and Physics of the Interior of the Earth*, Elsevier, Vol.448, pp. 98-114.(Scopus: 8)

25. **Dash, S. K.**, Rajagopal, K. and Krishnaswamy, N.R. (2007) Behaviour of geocell reinforced sand beds under strip loading. *Canadian Geotechnical Journal*, Journal of National Research Council Canada, Vol. 44, No. 7, pp. 905-916.
26. Sitharam, T.G., Sireesh, S. and **Dash, S.K.** (2007) Performance of surface footing on geocell-reinforced soft clay beds. *Geotechnical and Geological Engineering An International Journal*, Springer, Vol. 25, No. 5, pp. 509-524.
27. Sitharam, T.G., Sireesh, S. and **Dash, S.K.** (2005) Model studies of a circular footing supported on geocell-reinforced clay. *Canadian Geotechnical Journal*, Journal of National Research Council Canada, Vol.42, No.2, pp.693-703.
28. **Dash, S.K.**, Rajagopal, K. and Krishnaswamy, N.R. (2004) Performance of different geosynthetic reinforcement materials in sand foundations. *Geosynthetics International*, Journal of International Geosynthetics Society, Vol.11, No.1, pp. 35-42.
29. **Dash, S.K.**, Sireesh, S. and Sitharam, T.G. (2003) Model studies on circular footing supported on geocell reinforced sand underlain by soft clay. *Geotextiles and Geomembranes*, Journal of International Geosynthetics Society, Vol. 21, No.4, pp.197-219.
30. **Dash, S.K.**, Sireesh, S. and Sitharam, T.G. (2003) Behaviour of geocell reinforced sand beds under circular footing. *Ground Improvement*, Journal of International Society of Soil mechanics and Geotechnical Engineering Vol. 7, No. 3, pp.111-115.
31. **Dash, S.K.**, Rajagopal, K. and Krishnaswamy, N.R. (2001) Strip footing on geocell reinforced sand beds with additional planar reinforcements. *Geotextiles and Geomembranes*, Journal of International Geosynthetics Society, Vol. 19, No. 8, pp.529-538.
32. **Dash, S.K.**, Krishnaswamy, N.R. and Rajagopal, K. (2001) Bearing capacity of strip footings supported on geocell-reinforced sand. *Geotextiles and Geomembranes*, Journal of International Geosynthetics Society, Vol. 19, No. 4, pp.235-256.
33. Madhavi Latha, G., **Dash, S.K.**, Rajagopal, K. and Krishnaswamy, N.R. (2001) Finite element analysis of strip footing on geocell reinforced sand beds. *Indian Geotechnical Journal*, Journal of Indian Geotechnical Society, Vol.31, No.4, pp.454-478.

Papers Communicated

1. Choudhury, A.K., Dash S.K. "Load Carrying Mechanism of Vertical Plate Anchors in Sand" *Int. Journal of Geomechanics*, ASCE.
2. Priyadarshee, A. and Dash, S.K. "Performance of geocell reinforcement with granular soil" *Ground Improvement*, Proc. of the Institution of Civil Engineers, London.
3. Prashanth, V., Murali Krishna, A., Dash, S.K. (2016). Pullout tests using modified direct shear test setup for measuring soil-geosynthetic interaction parameters. *International Journal of Geosynthetics and Ground Engineering*, Springer

Refereed Conference Proceedings

International

1. Dixit, J., Raghukanth, S.T.G., **Dash, S.K.** (2014). Spatial distribution of seismic site coefficients for Guwahati city. *Proc.16th Int. Association for Mathematical Geosciences - Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment: Challenges, Processes and Strategies*, IAMG 2014- 117654.
2. Hussain, M. and **Dash, S.K.** (2012) Compaction characteristics of lime treated soils. *Proceedings of the International Conference on Ground Improvement and Ground Control, Wollengong, Australia*, pp. 1095-1100, doi:10.3850/978-981-07-3560-9 04-0410.
3. **Dash, S.K.**, Dutta, S., Sreedeeep, S. and Rao, G.V. (2011) Design of a bank protection system on river Brahmaputra at Jamuguri. *Proceedings of the International seminar 'Geosynthetics India' 11*, IIT Madras, Chennai, India, September 23-24, pp. 3-8.
4. **Dash, S.K.** (2008) Study on performance of geocell reinforced foundation beds with different type of geocells. *Proceedings of the Fourth European Geosynthetics Conference, EuroGeo4, Edinburg, Scotland*, September 7-10, Paper No.294 (CD proceedings).
5. Sireesh, S., Sitharam, T.G., **Dash, S.K.** and Puppala, A.J. (2007) Geocell reinforced sand mattress spanning over an underground circular void in soft clays: Model studies. *Proceedings of the 13th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering*, December 10-14, 2007, Kolkata, India, Vol. 1, Part II, pp. 1017-1020 (paper no. 241 in CD).
6. **Dash, S.K.** (2007) Effect of Soil dilation on performance of geocell reinforced sand beds. *Proceedings of 5th International Symposium on Earth Reinforcement (IS Kyushu 07)* Fukuoka, Kyushu, Japan, November 14-16, pp. 629-632.
7. S.T.G. Raghu Kanth, S. Sreelatha and **Dash, S.K.** (2007) Ground motion estimation at Guwahati city from M_w 8.1 earthquake in the Shillong plateau. *Proceedings of the 3rd Indo German Workshop and theme meeting on Seismic Safety of Structures, Risk Assessment and Disaster Mitigation*, Mumbai, March 12-13, pp.35-44.
8. Ramanjaneyulu, C., Hussain, M. and **Dash, S. K.**(2006) Mechanism of Volume Expansion in Soil. *Proceedings of the 2nd International Congress on Computational Mechanics and Simulation*, Guwahati, December, CD Proceeding, P21.
9. Jyostna, P., Sreedeeep, S. and **Dash, S. K.** (2006) A study on controlling mechanisms and critical evaluation of methods used for determining liquid limit of active fine-grained soil. *Proceedings of the 2nd International Congress on Computational Mechanics and Simulation*, Guwahati, December, CD Proceeding, P26.
10. **Dash, S.K.**, Madhavi Latha, G. and Rajagopal, K.(2006) Numerical Modeling of Geocell Reinforced Soil Foundations. *Proceedings of the 2nd International Congress on Computational Mechanics and Simulation*, Guwahati, December, Vol.2, 1895-1898.
11. **Dash, S. K.**, Rajagopal, K. and Krishnaswamy, N.R. (2004) Load carrying mechanism of geocell reinforced earth slabs supporting a strip footing. *Proceedings of*

the *Third European Geosynthetics Conference*, Munich, Germany, March, Vol.2, pp. 681-682.

12. **Dash, S. K.**, Rajagopal, K. and Krishnaswamy, N.R. (2004) Geocell reinforced sand - A composite material. Proceedings of the *International e-Conference on Modern Trends in Foundation Engineering: Geotechnical Challenges and Solutions*, IIT Madras, January 26-30, Paper No.3.2.
13. **Dash, S. K.**, Krishnaswamy, N.R. and Rajagopal, K. (2001) Comparison of geocell, planar and randomly reinforced earth slabs. Proceedings of the *International Conference on Civil Engineering*, Bangalore, July, pp.870-877.
14. Krishnaswamy, N.R., Pitchumani, N.K., Rajagopal, K. and **Dash, S.K.** (2000) Geocell-reinforced foundation beds. Proceedings of the *2nd Asian Geosynthetics Conference*, Kuala Lumpur, May, Vol.2, pp.85-90.
15. Krishnaswamy, N.R., Rajagopal, K. and **Dash, S.K.** (2000) Behaviour of geocell-soil composite system in foundations. Proceedings of the *45th Congress of the Indian Society of Theoretical and Applied Mechanics* - an International meet, Sivakasi, December, pp. 17-24.

National

1. Choudhary, A.K. and Dash, S.K. (2014). Pullout behavior of vertical plate anchor embedded in sand. *Proceedings of Indian Geotechnical Conference*, Kakinada.
2. Bora, M. C. and **Dash, S.K.** (2014). Regression model for floating stone column improved soft clay. *Proceedings of Indian Geotechnical Conference*, Kakinada.
3. Biswas, A., Krishna, A.M., **Dash, S.K.** (2013). Applicability of planar geogrid reinforcement in geocell-reinforced foundation systems. e-Proceedings of Indian Geotechnical Conference, Roorkee, Paper No. 175, pp.1-6.
4. Priyadarshiee, A., **Dash, S.K.** (2013). Behaviour of geocell reinforced granular soils. e-Proceedings of Indian Geotechnical Conference, Roorkee, Paper No. 178, pp.1-6.
5. Baglari, D, **Dash, S.K.** (2013) Improvement of expansive soil by lime and reinforcement. Proceedings of Indian Geotechnical Conference, Roorkee, Paper No. 207, pp.1-6.
6. Choudhary, A.K, **Dash, S.K.** (2013) Uplift behaviour of horizontal plate anchor embedded in geocell-reinforced sand. Proceedings of Indian Geotechnical Conference, Roorkee, Paper No. 235, pp.1-5.
7. Bora, M. C. and **Dash, S.K.** (2012) Floating stone columns in soft clay with unreinforced and geocell reinforced sand cushion. *Proceedings of Indian Geotechnical Conference*, Delhi, pp.255-260.
8. Biswas, A., **Dash, S.K.** and Krishna, M. A. (2012) Parameters influencing the performance of geocell-reinforced foundation system: A brief review. *Proceedings of Indian Geotechnical Conference*, Delhi, pp.365-368.
9. Hussain, M. and **Dash, S.K.** (2012) Shrinkage behaviour of soils. *Proceedings of Indian Geotechnical Conference*, Delhi, pp.388-391.
10. Hussain, M. and **Dash, S.K.** (2011) Swelling behaviour of soils. Proceedings of *Indian Geotechnical Conference*, Kochi, December.

11. Bora, M. C. and **Dash, S.K.** (2010) Load deformation behaviour of floating stone columns in soft clay. *Indian Geotechnical Conference, Bombay*, December, pp.251-254.
12. Hussain, M. and **Dash, S.K.** (2010) Influence of lime on plasticity behaviour of soils. *Indian Geotechnical Conference, Bombay*, December, pp.537-540.
13. Hussain, M. and **Dash, S.K.** (2009) Influence of lime on compaction behaviour of soils. *Indian Geotechnical Conference, Guntur*, December, pp.15-17.
14. Raghukanth, S.T.G., Dixit, J. and **Dash, S.K.** (2009) Estimation of site amplification factors for Guwahati city. *Indian Geotechnical Conference, Guntur*, December, pp.527-530.
15. Dixit, J, Raghukanth, S.T.G. and **Dash, S.K.** (2009) Influence of local soil deposits on the ground response at Guwahati city. Proceedings of the National conference on computer modeling and simulation in computational mechanics, NERIST Itanagar, March, pp.200-210.
16. Hussain, M. and **Dash, S.K.** (2008) Bearing Capacity Improvement of Liquefiable Soil using Lime Stabilisation. Proceeding of the *National seminar on earthquake hazard and disaster management of North Eastern states of India*, NIT Silchar, October, pp. 131-136.
17. **Dash, S. K.**, Rajagopal, K. and Krishnaswamy, N.R. (2008) Contact pressure on subgrade soil underlying geocell mattress. Proceedings of *Indian Geotechnical Conference, Bangalore*, December, pp.226-229.
18. Ravi, K., Braeu, G., Vogt, S. and **Dash, S.K.** (2008) Behaviour of Geosynthetic reinforced unpaved road subbase under cyclic loading. Proceedings of *Indian Geotechnical Conference, Bangalore*, December, pp.214-217.
19. **Dash, S. K.**, Rajagopal, K. and Krishnaswamy, N.R. (2008) Contact pressure on subgrade soil underlying geocell mattress. Proceedings of *Indian Geotechnical Conference, Bangalore*, December, pp.226-229.
20. **Dash, S. K.** and Rajagopal, K. (2006) Influence of soil density on the performance of geocell reinforced sand foundations. Proceedings of the *Indian Geotechnical Conference, Chennai*, December, pp.581-582.
21. Sireesh, S., Sitharam, T.G. and **Dash, S.K.** (2006) Influence of footing size on behavior of geocell reinforced sand foundations. Proceedings of the *Indian Geotechnical Conference, Chennai*, December, pp.591-592.
22. Sireesh, S., Sitharam, T.G. and **Dash, S.K.** (2005) Load tests on geocell reinforced soft clay foundations. Proceedings of the *Indian Geotechnical Conference, Ahmedabad*, December, pp.261-264.
23. Sabat, A.K., Behera, S.N. and **Dash, S.K.** (2005) Effect of flyash-marble powder on the engineering properties of an expansive soil. Proceedings of the *Indian Geotechnical Conference, Ahmedabad*, December, pp. 269-272.
24. **Dash, S. K.**, Krishnaswamy, N.R. and Rajagopal, K. (2005) Influence of geocell material on performance of geocell reinforced sand foundations. Proceedings of the *National Symposium on Prediction Methods in Geotechnical Engineering*, Chennai, June, pp.A2.1-4.

25. **Dash, S.K.**, Lenka, B.P., Sahoo, T., Senapati, O., Mishra, S., Patra, M. and Patro, A. (2005) Tensile strength of cement stabilised flyash-a material for highway construction. Proceedings of the *National Conference on Advances in road Transportation*, Rourkela, February, pp. 502-508.
26. **Dash, S.K.**, Sireesh, S., Sitharam, T.G. and Vinod, J.S. (2005) Improvement of bearing capacity of layered soil beds using geocell reinforcement. Proceedings of the *All India Seminar on Advances in Geotechnical Engineering*, Rourkela, January, pp.71-77.
27. **Dash, S. K.**, Rajagopal, K. and Krishnaswamy, N.R. (2004) Load dispersion in geocell reinforced sand foundations. Proceedings of the *National Symposium on Advances in Geotechnical Engineering*, Bangalore, July, pp.151-154.
28. Sireesh, S., Sitharam, T.G., Vinod, J.S. and **Dash, S.K.** (2003) Behaviour of circular footing on geocell reinforced sand underlain by soft clay. Proceedings of the *Indian Geotechnical Conference*, Roorkee, December, pp.355-358.
29. **Dash, S.K.**, Sireesh, S. and Sitharam, T.G. (2002) Bearing capacity of circular footing on geocell reinforced sand beds. Proceedings of the *Indian Geotechnical Conference*, Allahabad, December, pp.577-578.
30. **Dash, S. K.**, Rajagopal, K. and Krishnaswamy, N.R. (2001) Influence of additional planar reinforcement on the behaviour of geocell mattress. Proceedings of the *Indian Geotechnical Conference*, Indore, December, pp.278-279.
31. Krishnaswamy, N.R., Rajagopal, K. and **Dash, S.K.** (2000) Bearing capacity tests on geocell-reinforced sand. Proceedings of the *Indian Geotechnical conference*, Bombay, December, pp.333-334.
32. **Dash, S.K.** and **Dash, P.K.** (1996) Influence of strain rate on shear parameters of sand. Proceedings of the *Indian Geotechnical Conference*, Madras, December, pp.162-164.

Technical Report

1. Sitharam T.G., Govindaraju L. and **Dash, S.K.** (2002) Dynamic properties of soils and liquefaction behaviour of sands. *Research report* submitted to the Department of Science and Technology, Seismology Division, Government of India, New Delhi.
2. **Dash, S.K.** (2006) Effectiveness of Reinforcement in Highway Subbase under Cyclic Loading. *Research report* submitted to Center for Geotechnical Engineering, Technical University Munich, Germany.
3. **Dash, S.K.**, Dutta, S., Sreedeeep S. and Rao, G.V. (2008) Bank protection of terminal/inland port of river Brahmaputra at Jamuguri. *Design Report # IWAI/GHY/Terminal/3(13)/General/2006-07/965a*, submitted to the Inland water ways authority of India, Guwahati, Ministry of Shipping, Govt. of India.
4. Dutta, S., **Dash, S.K.**, Sreedeeep S. and Rao, G.V. (2008) River Training Work for Maintaining Navigational flow depth in Brahmaputra at Garimari. *Design Report # IWAI/GHY/Terminal/3(13)/General/2006-0/965b*, submitted to the Inland water ways authority of India, Guwahati, Ministry of Shipping, Govt. of India.
5. **Dash S. K.** (2009) Geocell-reinforced sand foundation on soft clay: Behaviour under Cyclic Loading. *Research report (SR/FTP/ETA-23/2005)* submitted to Department of Science and Technology, SERC Division, Government of India, New Delhi.

6. **Dash S. K.** and Babu GLS (2011) Soil nailing for slope stabilization in the section Ch 119/100 to Ch 119/595 in Lumding-Silchar gauge conversion project of North East Frontier Railway. *Design Report # W/29/CON/L-S/TUNNEL*, submitted to Chief Engineer/CON/I, North East Frontier Railway, Maligaon, Guwahati.

Awards and Recognitions

1. **Indian Geotechnical Society – Z-Tech. Biennial award** for the paper “Madhavi Latha, G., Dash, S.K., Rajagopal, K. and Krishnaswamy, N.R. (2001) Finite element analysis of strip footing on geocell reinforced sand beds. *Indian Geotechnical Journal* Vol.31, No.4, pp.454-478.” Adjudged as the **best paper** on “Geosynthetics and Allied Construction Products” published through Indian Geotechnical Society for the years 2000-2001.
2. **Indian Geotechnical Society – Z-Tech. Biennial award** for the paper “Sireesh, S., Sitharam, T.G., Vinod, J.S. and Dash, S.K. (2003) Behaviour of circular footing on geocell reinforced sand underlain by soft clay. *Proceedings of the Indian Geotechnical Conference*, Roorkee, December, pp.355-358.” Adjudged as the **best paper** on “Geosynthetics and Allied Construction Products” published through Indian Geotechnical Society for the years 2002-2003.
3. Awarded **German Academic Exchange Service (DAAD) Fellowship** for the year 2006, for research stay at Technical University Munich, Germany.
4. Awarded **Endeavour Research Fellowship of Government of Australia**, for the year 2009, to carry out research work in Research Centre for Geomechanics and Railway Engineering at University of Wollongong, Australia.
5. Cited in the Australian and the Asia Pacific Directory of Academics.
6. Reviewed papers for
 - Journal of Materials in Civil Engineering, ASCE
 - Journal of Environmental Geology, Springer
 - HIKE Transactions, Journal of the Hong Kong Institution of Engineers
 - International Journal for Numerical and Analytical Methods in Geomechanics, Wiley
 - Natural Hazards and Earth System Sciences, Journal of the European Geosciences Union
 - American Journal of Engineering and Applied Sciences,(AJEAS)
 - Geomechanics and Engineering, An International Journal; Techno-press
 - Engineering computations
 - Journal of Testing and Evaluation, American Institute of Physics
 - Geosynthetics International, Journal of International Geosynthetics Society.
 - Soils and Foundations, Journal of Japanese Geotechnical Society
 - Indian Geotechnical journal
 - Geotextiles and Geomembranes, Journal of International Geosynthetics Society.
 - Journal of Zhejiang University-SCIENCE A, Springer.
 - Journal of Mechanical Science and Technology, Springer.
 - Sadhana - Academy Proceedings in Engineering Sciences, Springer.
 - International Journal of Engineering, Science and Technology (IJEST)

- Indian Geotechnical Journal, Springer
- Ground Improvement, Proceedings of the Institution of Civil Engineers London.
- Geotechnical Engineering Journal, Southeast Asian Geotechnical Society (SEAGS)
- Engineering Geology, Elsevier.
- Journal of Hydraulic Engineering ASCE
- Sadhana - Academy Proceedings in Engineering Science
- Journal of Advanced Research, Elsevier
- Applied Clay Science, Elsevier
- Int.Jn. of Geo Engg., Springer
- Canadian geotechnical journal
- ASCE, Journal of Materials

Project

Sponsored Research

1. Geocell-reinforced sand foundation on soft clay: Behaviour under Cyclic Loading, Department of Science and Technology Govt. India. (Principal investigator).
2. Analysis of water balance in rice agriculture system using distributed hydrologic model, ISRO Ahmedabad-IIT Guwahati collaboration project. (Co-investigator).
3. Application of geocell reinforcement for performance improvement of anchored foundations under uplift, SRIC, IIT Kharagpur. (Principal investigator).

4. Consultancy

5. Soil investigation for coffer-dam of Mangdechhu Hydroelectric Project, Bhutan. Sponsoring Agency: NHPC Govt. of India, (Principal investigator).
6. Investigations on the bridge foundation over river Killing on NH-37 regarding the accident on 17th May 2007. Sponsoring Agency: NHAI Govt. of India, (Principal investigator).
7. Bank protection of terminal/inland port on river Brahmaputra at Jamuguri, Sponsoring Agency: IWAI Govt. of India, (In collaboration with IIT Delhi)
8. River training work for maintaining navigational flow depth in river Brahmaputra, Sponsoring Agency: IWAI Govt. of India (In collaboration with IIT Delhi).
9. Slope stabilization measures in Lumding-Silchar gauge conversion project in Northeast Frontier Railway. Sponsoring Agency: Northeast Frontier Railway, Govt. of India, (In collaboration with IISc. Bangalore).
10. Recommendation for foundation of the zonal office building, Doordarsan, Guwahati. Sponsoring agency: Prasar Bharati, Guwahati, (Principal investigator).
11. Evaluation of Modulus of Elasticity of Rail Track Formation. Sponsoring agency: HMBS Textiles Pvt Ltd. Delhi, (Principal investigator)

12. Laboratory scale evaluation of Ev2 for a railway formation at Agartala. Sponsoring agency: C.E. Testing Company Pvt. Ltd. Kolkata. (Principal investigator)

Short Term Course Conducted

Geotechnical Earthquake Engineering, under *NPEEE*, 31st May to 4th June 2004.

Invited Lecture

- At Technical University Munich Germany on “Geocell Reinforced Foundation Beds”
- At Technical University Munich Germany on “Effectiveness of Reinforcement in Highway Sub-base under Cyclic Loading”
- In training programmes for practicing engineers.
- In short term courses under quality improvement programme of IIT Guwahati

Professional Body membership

- Life member of the Indian Geotechnical Society – LM 2463
- Life member of the Institution of Engineers, India – A512895/2
- Member of International Society of Soil Mechanics and Geotechnical Engineering - IND060147
- Cited in the Australian and the Asia Pacific Directory of Academics

PhD Thesis Guidance

1. Monowar Hussen “Stabilisation of expansive soil using residual soil and lime” – *Status: **Awarded*** (Independent Guidance)
2. Meenaxi Rai “Geocell-sand mattress overlying soft clay subgrade: behaviour under circular loading” –*Status: **Awarded*** (jointly with Dr. T. Lyngdoh)
3. Mukul Bora “Performance improvement of weak clay foundation using stone column and geocell-sand mattress.” *Status: **Awarded*** (Independent Guidance)
4. *Shailen Deka* “Performance enhancement of expansive soil by application of flyash and lime” *Status: **Awarded*** (jointly with Dr. S. Sreedeeep)
5. *Akash Priyadarshee* “A study on strength and stiffness improvement of sand using geocell-fiber composite reinforcement” *Status: **Awarded*** (Independent Guidance)
6. *Awdhesh Kumar Choudhary* “Investigations on performance of geocell reinforced anchored foundations” *Status: in progress*(Independent Guidance)
7. *Anjan Majee* “Settlement Analysis of Reinforced Soil Foundation Beds” *Status: in progress*(Independent Guidance)
8. *Kousik Halder* *Status* “Performance of foundations on geogrid reinforced slope” *in progress* (Joint Guidance)

M. Tech. Thesis Guidance

1. C. Ramanjaneylu “Swell-Shrink behaviour of fine grained soils” *Status: Awarded.* (Independent Guidance)
2. J. Pegu “Re-evaluation of plasticity characteristics of fine grained soils” *Status: Awarded* (jointly with Dr. S. Sredeep)
3. Ravi K. “Effectiveness of reinforcement in highway subbase under cyclic loading” – *Status: Awarded.* (jointly with Prof. N. Vogt, TU Munich Germany)
4. Sakhare Pravin V. “Behaviour of reinforced soil beds under cyclic loading: Large scale tests”. *Status: Awarded.* (jointly with Prof. N. Vogt, TU Munich Germany)
5. Jagabandhu Dixit “Seismic site coefficient at Guwahati city” *Status: Awarded.* (jointly with Dr. Raghukanth)
6. Syam P.S. “Bearing capacity of geocell reinforced foundation” *Status: Awarded.* (Jointly with Dr. Rajib Bhattacharjee)
7. Sindhe Bhusan Vilas “Modulus of elasticity of geocell reinforced foundation beds” *Status: Awarded.* (Jointly with Dr. Rajib Bhattacharjee)
8. S. Amol “Performance improvement of ballsted rail track using geocell reinforcement” *Status: Awarded* (Independent Guidance).
9. Prabhudutta Pradhan “Development of a constitutive model for geocell encased soil” *Status: Awarded* (Independent Guidance).
10. Harinarayan N.H. “Study of cohesionless soils reinforced with randomly distributed fibers.” *Status: Awarded.* (Independent Guidance).
11. Ansari A. “Bearing capacity of foundations on layered soil with geogrid reinforcement” *Awarded.* (Independent Guidance).
12. Dipjyoti Baglari “Behaviour of lime stabilized reinforced expansive soils” *Awarded.* (Independent Guidance).
13. P. Satyapraksh (2013) “Mechanical behaviour of fiber reinforced soils” *Status: Awarded* (Independent Guidance).
14. Hemanth P. (2014) “Performance improvement of expansive soil stablised with lime and cement: A comparative study.” *Status: Awarded* (Independent Guidance).
15. Ranjan Halder (2014) “Performance evaluation of fiber reinforced flyash.” *Status: Awarded* (Independent Guidance).
16. Sajmi S. (2015) “Strength characteristics of fiber reinforced cement stabilized flyash” *Status: Awarded* (Independent Guidance).
17. Sittanandan M. (2015) “Strength deformation behavior of geocell reinforced granular soil” *Awarded* (Independent Guidance).
18. Mridul Mandal (2016) “Performance improvement of railway formation with geogrid reinforcement” (Independent Guidance).

Curriculum Development

- Member of the curriculum development committee for post graduate programme in Geotechnical Engineering at IIT Guwahati.

Service

- Faculty In charge, Geotechnical Engineering Laboratory
- Member, Post Graduate Programme Committee, Department of Civil Engineering
- Member, Institute Horticulture Committee
- Faculty Advisor to students.
- Chairman, Institute Cultural Affairs Board

List of Referees

1. Prof. K. Rajagopal
Geotechnical Engg. Division
Department of Civil Engg., IIT Madras, Chennai – 600 036.
e-mail: gopalkr@iitm.ac.in; Tel.: 044-2257 4263; Fax: 044-2257 0509
2. Prof. T. G. Sitharam
Geotechnical Engineering Division
Department of Civil Engineering
Indian Institute of Science Bangalore – 560 012
e-mail: sitharam@civil.iisc.ernet.in; Tel.: 91- 80- 223602261; Fax: 91- 80- 2360 0404
3. Prof. G.L. Sivakumar Babu
Geotechnical Engg. Division
Department of Civil Engg.
Indian Institute of Science Bangalore – 560 012

e-mail: gls@civil.iisc.ernet.in Tel.: 91-80-2293 3124; Fax: 91-80-2360 0404

I hereby certify that the information furnished as above is true to the best of my knowledge.

Date: 24th April 2016

(Sujit Kumar Dash)