Faculty Profile

Faculty Name	**Dr. Tanvi Singh**
Designation	Assistant Professor
Qualification	Ph.D, M.Tech, B.Tech
Email	hod.civil@piet.co.in
Area of Interest	Batter Piles, Machine learning, Subgrade soil, geotextile
Work Experience (Total)	6.5 years
• Teaching	6.5
• Research	4
• Industry	
• Others	
Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level	B.Tech (Geotech Engineering I &II, Transportation Engineering, structural engineering, steel structure, hydrology), M.Tech (soil Mechanics and foundation engineering)
Membership of Professional Bodies	
Research Publications	
• Research Papers UGC-CARE	**2**
• Research Papers SCOPUS	**3**
• Research Papers WoS/SCI/ABDC	**1**
• List of Publications	**Publication in International Journals** 1. Kumar S., Singh, T. & Goyal, Y. (2020) Prediction of strength enhancement of Subgrade Soil Reinforced with Geotextile Using Artificial Neural Network and M5P model tree. *European Journal of Molecular & Clinical Medicine*, *7*(8), 2728-2737. **(Scopus)** 2. Singh, T., Pal, M., & Arora, V. K.(2017) Modeling of Oblique Load Test on Batter Pile Group Based on Support Vector Machines and Gaussian Regression. *Geotechnical and Geological Engineering*, 36(3), 1597-1607 https://doi.org/10.1007/s10706-017-0413-7 (IF =1.75) (**Scopus**.)

	3. Singh, T., Pal, M., & Arora, V. K (2018) Modeling Oblique Load Carrying Capacity of Batter Pile Groups using Neural Network, Random Forest Regression and M5 Model Tree in *Frontiers Structure of Civil Engineering* , accepted on March 9, 2018 (IF=0.**72)**https://doi:10.1007/s11709-018-0505-3 (**Sci-expanded)** 4. Singh, T., Pal, M., & Arora, V. K. (2017). Ultimate Capacity of Battered Pile Groups Subjected to Oblique Pullout Loads in Sand. *International Journal of Geosynthetics and Ground Engineering*, *3*(3), 28. (2017)**(Springer publication)** DOI 10.1007/s40891-017-0103-9 5. Singh, T., & Pal, M., (2020Predicting Oblique Load Carrying Capacity of Batter Pile Groups Using Deep Neural Network and Back Propagation Neural Network (***under review)*** in Journal of Geotechnical and Geoenvironmental Engineering 6. Singh, T (2020) Prediction of strength enhancement of Subgrade Soil Reinforced with Geotextile Using SVR and GP. ***(under review)*** in International Journal of Civil Engineering *7.* Nagpal S & Singh T (2020) Machine Learning: A Tool for COVID-19 ***(under review)*** *Monitoring Diabetes &1metabolic Syndrome: Clinical Research & Review*
Book and Chapter Publications	
• Books Authored published by International Publishers	**1**
• Books Authored published by National Publishers	
• Publication of Chapter in Edited Books	
• Editor of Book by International Publishers	
• Editor of Book by National Publishers	
• Translation Work of Book	
• List of Book and Chapter Publications	Singh, T., & Pal, M. (2021). Prediction of lateral and oblique load for batter pile group using GRNN, NN, and ANFIS. In Modeling in Geotechnical Engineering (pp. 37-60).

	Academic Press https://doi.org/10.1016/B978-0-12-821205-9.00008-3
Patents	**Nil**
• Published	
• List of published patent(s)	
• Filed	
• List of filed patent(s)	
PhD Guidance	**2**
• Degree Awarded	
• Thesis Submitted	
M.Tech. Guidance	**2**
• Degree Awarded	
• Thesis Submitted	
Research Project	**NIL**
• List of Research project	
Consultancy	**NIL**
• List of Consultancy	
Awards & Honours	
• List of Awards & Honours	
Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference	**Invited lectures =4** **Resource Person=3** **Publication In Conferences=9**
• International (Abroad)	**2**
• International (Within Country)	**1**
• National	**6**
• List of published papers	1.Singh, T., Patel, M., & Behal. K (2019) Removal of Benzene and Toluene Using Bacterial Biofilters, In Proceeding of National conference on advance in chemical and environment engineering (ACEE-2018),NIT Jalandhar, India, 23rd - 24th March 2. Goyal, Y., Singh,S., Singh T(2019).Review On Use Of Geotextile To Enhance The Engineering Property Of Subgrade Soil In Proceeding of Recent Advances in Material Science and Engineering

	(RAMSE-2019), Lingayas University, Faridabad India, 28th -29th March 3. Singh, T., & Behal. K (2019) Biodegradation Of Odor Causing Compound By Bacterial Biofilters, In *Proceeding of Recent Advances in Material Science and Engineering (RAMSE-2019), Lingayas University, Faridabad India, 28th -29th March* 4. Singh, T., Pal, M., & Arora, V. K (2018) Prediction Of Oblique Load For Batter Pile Groups Using Adaptive Neuro-Fuzzy Interface System And Neural Network, In Proceeding of International conference on advance in construction materials and structure (ACMS-2018), IIT Roorkee, India, 7th-8th March 5. Singh, T., & Arora, V. K. (2017). Influence of pile inclination on batter pile groups subjected to lateral loading in sand. In Proceedings of 29th research world international conference, Las Vegas, USA, 16th–17th March. 6. Singh, T., & Arora, V. K. (2017). Effect of Batter Angle on Batter Pile Groups Subjected to Lateral Loading in Proceedings of 5th international conference on civil and urban engineering, Barcelona, Spain, 11th–13th March. 7. Alimunnisa S., Arora, V. K. Singh, T. (2017) Experimental Study of Piled Raft Foundation In Proceedings of National Conference on Recent Developments in Civil, Environmental and Geotechnical Engineering2017 MNIT, Jaipur, India, September 23-24, MNIT, Jaipur. 2017. 8. Mishra P., Arora, V. K. Singh, T. (2017) Experimental Study of Piled Raft Foundation In Proceedings of National Conference on Recent Developments in Civil, Environmental and Geotechnical Engineering2017 MNIT, Jaipur, India, September 23-24, MNIT, Jaipur. 2017.

	9. Singh T (2013) Batter Pile In Proceedings of Global Conference In Recent Trend In Civil Engineering Shree Siddhivinayak Groups Of InstitutionYamuna Nagar, Shahpur, Haryana India june 13.
Organizing National Conference/ International Conference/ FDP/STTP	**2**
• List of Conference/FDP/STTP committee	FDP on Recent Trends and scope in civil engineering
Social Contributions and Sports	**1**
• **List of Social Contributions and Sports**	Students training on Machine learning