

Faculty Profile

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| Faculty Name | Balraj Singh |
| Designation | Assistant Professor |
| Qualification | M.Tech, B.Tech |
| Email | Environmental Engineering |
| Area of Interest | Balraj.civil@piet.co.in |
| Work Experience (Total) | 05 Years |
| <ul style="list-style-type: none"> • Teaching | 05 Years |
| <ul style="list-style-type: none"> • Research | Nil |
| <ul style="list-style-type: none"> • Industry | Nil |
| <ul style="list-style-type: none"> • Others | Nil |
| Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level | Irrigation Engineering, Construction Engineering and Management, Industrial Waste Water Treatment, Sewerage and Sewage Treatment, Professional Practice Law and Ethics, Environmental Impact Assessment, Project Planning and Management and Environmental Studies |
| Membership of Professional Bodies | Nil |
| Research Publications | |
| <ul style="list-style-type: none"> • Research Papers UGC-CARE | 05 |
| <ul style="list-style-type: none"> • Research Papers SCOPUS | 07 |
| <ul style="list-style-type: none"> • Research Papers WoS/SCI/ABDC | 04 |
| <ul style="list-style-type: none"> • List of Publications | <ul style="list-style-type: none"> • Siraj Pandhiani, Parveen Sihag, Ani Bin Shabri Balraj Singh and Quoc Bao Pham. “Time-series Prediction of Streamflows of Malaysian Rivers Using Data-Driven Techniques.” Journal of Irrigation & Drainage Engineering, ASCE (2020). |

- Alireza Sepahvand, Balraj Singh, Morteza Ghobadi and Parveen Sihag. "Estimation of Infiltration Rate using Data-Driven Models." Arabian Journal of Geosciences (2020).
- Aradhana, Balraj Singh and Parveen Sihag. "Predictive Models for estimation of Labyrinth weir aeration efficiency." Journal of Achievements of Materials and Manufacturing Engineering (2021).
- Parveen Sihag, Fatemeh Esmailbeiki, Balraj Singh, Isa Ebtehaj and Hossein Bonakdari. "Modeling unsaturated hydraulic conductivity by hybrid soft computing techniques". Soft Computing (2020).
- Balraj Singh, Parveen Sihag, Abbas Parasié and Anastasia Angelaki. "Comparative Analysis of Artificial Intelligence Techniques for the Prediction of Infiltration Process". Geology Ecology and Landscapes (2020).
- Alireza Sepah Vand, Parveen Sihag, Balraj Singh, and Mehran Zand. "Comparative Evaluation of Infiltration Models." KSCE Journal of Civil Engineering (2018): 1-12.
- Balraj Singh, Parveen Sihag, Karan Singh, and Sanjeev Kumar. "ESTIMATION OF TRAPPING EFFICIENCY OF VORTEX TUBE SILT EJECTOR." International

Journal of River Basin Management just-accepted (2018): 1-38.

- Parveen Sihag, Balraj Singh, Alireza Sepah Vand, and Vahid Mehdipour. "Modeling the infiltration process with soft computing techniques." *ISH Journal of Hydraulic Engineering* (2018): 1-15.
- Balraj Singh, Parveen Sihag, and Karan Singh. "Comparison of infiltration models in NIT Kurukshetra campus." *Applied Water Science* 8 (2) (2018): 63.
- Parveen Sihag, Balraj Singh, Saurabh Gautam, and Sourav Debnath. "Evaluation of the impact of fly ash on infiltration characteristics using different soft computing techniques." *Applied Water Science* 8 (6) (2018): 187.
- Balraj Singh, Parveen Sihag, and Karan Singh. "Modelling of impact of water quality on infiltration rate of soil by random forest regression." *Modeling Earth Systems and Environment* 3.3 (2017): 999-1004.
- Balraj Singh, Parveen Sihag, Muhammed Pandhiani, Saurabh Gautam, and Sourav Debnath. "Estimation of permeability of soil using easily measured soil parameters: Assessing the artificial intelligence based models". *ISH Journal of Hydraulic Engineering*.

- Balraj Singh, Parveen Sihag and Surinder Deswal. "Modelling of the impact of water quality on the infiltration rate of the soil". Applied water science.
- Parveen Sihag, Fatemeh Esmailbeiki, Balraj Singh and Siraj Muhammed Pandhiani. "Model-based soil temperature estimation using climatic parameters: the case of Azerbaijan Province, Iran". Geology, Ecology, and Landscapes.
- Alireza Sepahvand, Balraj Singh, Parveen Sihag, Aliakbar Nazari Samani, Hasan Ahmadi and Sadat Fiz Nia. "Assessment of the various soft computing techniques to predict sodium absorption ratio (SAR)". ISH Journal of Hydraulic Engineering.
- Sumit Arora, Balraj Singh and Bavita Bhardwaj. "Strength performance of recycled aggregate concretes containing mineral admixtures and their performance prediction through various modeling techniques". Journal of Building Engineering.
- Balraj Singh. "Prediction of the sodium absorption ratio using data-driven models: a case study in Iran". Geology, Ecology, and Landscapes.
- Balraj Singh, Parveen Sihag, and Diwan Singh. "Study of Infiltration Characteristics of Locally Soils." Journal

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| | <p>of Civil Engineering and Environmental Technology, Volume1 (2014): 9-13.</p> <ul style="list-style-type: none"> • Balraj Singh, Karan Singh, Ritesh Kumar and Parveen Sihag. “Future Prediction and Trend Analysis of Temperature of Haryana.” IWRS (Accepted). • Parveen Sihag, Varun Singh, Balraj Singh, Praveen Jain. “Estimation of Impact of Impurities on Recharging Rate of Medium-Sand Filter System.” IWRS (Accepted). |
| Book and Chapter Publications | |
| • Books Authored published by International Publishers | Nil |
| • Books Authored published by National Publishers | Nil |
| • Publication of Chapter in Edited Books | Nil |
| • Editor of Book by International Publishers | Nil |
| • Editor of Book by National Publishers | Nil |
| • Translation Work of Book | Nil |
| • List of Book and Chapter Publications | |
| Patents | |
| • Published | Nil |
| • List of published patent(s) | Nil |
| • Filed | Nil |
| • List of filed patent(s) | Nil |
| PhD Guidance | |
| • Degree Awarded | Nil |
| • Thesis Submitted | Nil |
| M.Tech. Guidance | |

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| • Degree Awarded | Nil |
| • Thesis Submitted | Nil |
| Research Project | |
| • List of Research project | Nil |
| Consultancy | |
| • List of Consultancy | Nil |
| Awards & Honours | |
| • List of Awards & Honours | Nil |
| Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference | |
| • International (Abroad) | Nil |
| • International (Within Country) | Nil |
| • National | Nil |
| • List of published papers | Nil |
| Organizing National Conference/ International Conference/ FDP/STTP | |
| • List of Conference/FDP/STTP committee | Nil |
| Social Contributions and Sports | |
| • List of Social Contributions and Sports | Nil |