



DR. DEEPESH SINGH

Professional Experience:

Ph. D.	Indian Institute of Technology, Kanpur	2008
M.Tech.	Indian Institute of Technology, Delhi	2000
B.Tech	Harcourt Butler Technological Institute, Kanpur	1999

Assistant Professor	January 2006 till date
Lecturer	February 2003 to December 2005
Guest Lecturer	July 2001 to June 2002

Research Interest:

- Groundwater monitoring Network Design
- Groundwater Contamination Flow and Transport Modelling
- Non Classical Optimization Techniques
- Artificial Neural Networks
- Monsoon Forecasting Models

Honors/Awards/Medals:

- Working as **Assistant Dean of Academic Affairs.**
- Working as **Warden** of WCH-III Hostel.
- Working as Nodal Officer for student's scholarship.
- **Member** of State Technical Agency (STA) for U.P. projects Under Pradhanmantri Gramin Sadak Yojana (**PMGSY**) since last six years.
- Working as **Project Officer** by the government for state engineering college at Kannauj (U.P.).

- **Reviewed Paper:** World Applied Sciences Journal, Published by International Digital Organisation for Scientific Inforamtion, IDOSI, March 2009.
- **Editorial Board advisor** in “Vira International Journal of Engineering and Management” since January 2014.
- Worked as **Secretary** for HBTI Teachers’ Association in 2010-11.
- Worked as **Expert Member** in selection committee at various engineering colleges, atKanpur.
- **Doctoral fellowship** by MHRD, Government of India from 2002-2003
- **GATE** (Graduate Aptitude Test of Engineering) Scholarship by MHRD, Government of India from 1999-2000.
- Received **Institute Merit Scholarships** during *B.Tech.*

Professional Membership

1. Life member of The Indian Society for Technical Education (ISTE).
2. Member of Institution of Engineers (MIE).

Publication Details:

International Journals :

1. **Singh, D.,** Singh, R. K. (2013). “Non Biodegradable Contaminants Transport Modeling with Varying Transmissivity for Aquifer at West Campus HBTI Kanpur”, *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 2, Issue 10, pp. 5731-5740, October 2013
2. **Singh, D,** Datta, B. (2014). “Optimal Groundwater Monitoring Network Design for Pollution Plume Estimation with Active Sources”, *International Journal of GEOMATE*, Vol. 6, No. 2 (Sl. No. 12), pp. 864-869, Japan.

International Conferences:

1. Parmar, D.L.,**Singh, D.** and Kumar, N., (2003). “Challenges for sustainable development in the next millennium”, accepted for poster presentation, in *International conference on Energy and Environment Technologies for Sustainable Development*, oct. 8-10, MNNIT, Jaipur, India.
2. **Singh, D.,** Datta, B. (2010). “Sequential Characterization of Contaminant Plumes using Designed Monitoring Network”, in proceedings of *International conference on IAHR-APD 2010* held at Auckland, New Zealand 21-24 February 2010 (in CD).
3. **Singh, D.,** Datta B. (2012). “Linked Optimization Model for Groundwater Monitoring Network Design”, in proceedings of *International conference "ENSURE 2012:*

Environmentally Sustainable Urban Ecosystems" IIT Guwahati, Assam, India February 24-26, 2012 (in CD).

4. **Singh, D.**, Srivastava, A. (2012). "Groundwater Flow and Transport Modeling of Allen Forest, Kanpur", in proceedings of *International conference "IC-BEST 2012: International Conference on Benchmark in Engineering, Science & Technology"* B.D. College of Engineering, Sevagram, Wardha, India, 7-8 September, 2012 (in CD).
5. Singh, D., Agarwal, N., Kumar, P., Sachan, G., Abhishek, Das, S., Maurya, A.K. (2014). "Analysis of Vehicular Headway Distribution in Urban Area", in proceedings of *International Conference on Recent Trends and Challenges in Civil Engineering*, MNNIT Allahabad, India, December 12-14, 2014.
6. Singh, D., Awasthi, P., Sharma, N., Sahu, K., Mirza, M.A., Dey, S., Maurya, A.K. (2014). "Study of Vehicular Speed Distribution under Mixed Traffic Conditions", in proceedings of *International Conference on Recent Trends and Challenges in Civil Engineering*, MNNIT Allahabad, India, December 12-14, 2014.

National Conferences/ Seminars/ FDPs:

1. **Singh, D.**, Parmar, D.L., Anupama and Singh, S. (2003). "Financial viability of BOT project", In proceeding of National Conference on Advances in Civil Engineering: Perspective of Developing Countries, Vol. 2, Pg. 669-676.
2. **Singh, D.**, Khosa, R. (2003). "Forecasting of subdivision - wise monsoon rainfall modeling using artificial neural networks", in proceeding of National Conference on Advances in Civil Engineering: Perspective of Developing Countries, Vol. 2, Pg. 458-467.
3. **Singh, D.**, Maurya, A.K. (2004). "Application of cellular automata in hydrology", in proceeding of national conference on HYDRO-2004, pg. 319-323.
4. **Singh, D.**, Datta, B. (2008). "Sequential characterization of contaminant plumes using feedback information from designed monitoring network", **Faculty Development Program** on Recent Strategies for Remediation of Environmental Pollution held at Dept. of Civil Engineering, HBTI Kanpur, pp. 74-87, April 25-26, 2008.
5. **Singh, D.**, Singh, R. K. (2013). "Groundwater Flow and Pollution Modelling for west campus HBTI kanpur with varying transmissivity", **National Seminar** on Conservation and Protection of Underground Water, IE, pp. 149, September 20-21, 2013
6. **Singh, D.**, Maurya, A.K., Sarda, S.K., Budhkar A.K. (2014). "Review of Technologies Used for Green Road Design and Construction", National Conference on GEO-Environmental Issues and Sustainable Urban Development (GEN-2014), October 11-12, 2014 held at MNNIT Allahabad, India.

Courses taught/teaching

Under Graduate Level

- ICE 101/201 – Engineering Graphics
- ICE 301 – Engg. Fluid Mechanics (Theory & Lab)
- ICE 401 – Hydraulics & Hydraulic Machines (Theory & Lab)
- HCE 505/603 – Geo Technical Engg. I & II (Theory & Lab)
- HCE 8016 – Advanced Hydrology
- Building Materials & Construction (UPTU)
- Environmental Engg, I & II (UPTU)
- Estimation & Costing (UPTU)
- Water Resources Engg. I & II (UPTU)

Post Graduate Level

- QCE 106 – Environmental Chemistry and Microbiology
- QCE 207 – Groundwater Flow and Pollution Modelling
- QCE 320 – Environmental Systems Analysis
- CE 905 – Advanced Foundation Engineering
- CE 901 – Computer Methods and Computer Programming

Project/Thesis Guidance

B.Tech Students:

S.N	YEAR	TITLE OF PROJECT	STUDENTS
1	2005	Effect of height on the stresses and stability of concrete gravity dams	
2	2007	Computer based analysis of water distribution system: A case study	Ajay Sharma,Rohan Sonkar,Amit Pandey,Santosh Vajpayee,Kashitz Pratap,Shantanu Dewedi
3	2007	Design and analysis of domestic water supply scheme	
4	2008	Safe disposal of sludge (CETP, Jajmau) by landfill technique	Ajay Pal,Anand Kumar,Deepak Jaisal,Prakashchandr Gupta,Vinod Verma
5	2008	Safe disposal of sludge by hand fill technique	
6	2010	Design of flyover bridge between Jajmau and Ramadevi	Sangeet Sachan,Rudrapratap Singh,Anju Shammi,
7	2010	Ground water flow of contaminants transport modelling of east campus HBTI	Atul Singh,Nikash Pradhan,Piyush Srivastav
8	2011	Augmentation of water supply scheme of Mathura-Vrindavan	Anuj Kumar Mishra,Chandrabhanu Singh, Prsoon Uttam,Saunak Bhandari

9	2011	Design of gates of Ganga barrage	Ankit Agrawal,Ankur Dubey,Amit Gupta
10	2012	Ground water flow contaminants transporting modelling	Abhinav Srivastava,Kalpna Devi,Yashodhara Bistha,Mahesh Pradhan
11	2013	Ground water flow and transport of biodegradable contaminants	Akshat Agrawal,Dharmendra Kumar,Rajjan Singh,Subham Gupta
12	2014	Prediction of onset of flood using neural network	Bhanu Paratap Yadav,Vishwajeet Souryan,Stuti Prakash
13	2014	Ground water estimation using kriging technique	Saddam Hussain,Abhishek Tripathi,Jitendra Pradhan
14	2015	Study of vehicular speed distribution under mixed traffic condition	Pooja Awasthi,Nootan Sharma,Kuldeep Sahu,Md.Abbas Mirza
15	2015	Analysis of vehicle headway distribution in urban area	Abhishek,Grima Sachan,Naman Agrawal,Praveen

M.Tech. Students:

S.n	Year	Thesis name	Student name
1	2012	Design and economic evaluation of cellular mobile tower for different foundation type	Chandra Sen Gupta
2	2013	Ground water flow and transport modelling of non bio degradable contaminants with variable pumping rates	Kausaldendra Singh
3	2013	Analysis of non biodegradable contaminants transport in a aquifer with varying transmissivity	Ravi Kumar Singh
4	2014	Biodiesel production from waste neem oil and its characterisation	Vikas Kumar
5	2014	Biodiesel production from vegetable oil and its characterisation	Prashant Kumar Verma

Reviewer:

- Reviewed World Applied Sciences Journal, Published by Internaitonal Digital Organisation for Scientific Inforamtion, IDOSI, March 2009.
- **Editorial Board advisor** in "Vira International Journal of Engineering and Management"

Keynote/Invited/Expert Lectures:

Sl no.	Title of lecture	Organized by	Date
1	Groundwater monitoring with optimization techniques	Institution of engineers, Kanpur	23.04.08
2	Sequential cauterization of contaminant plume	CED, HBTI Kanpur	25.04.08

3	Bhujal sanrakhchan	Soil Conservation dept., CSA Kanpur	10.06.08
4	Groundwater facts and monitoring	IRDT, Kanpur	24.09.08
5	Kanpur: Groundwater facts	Chemistry deptt., HBTI Kanpur	14.11.08
6	Groundwater: Awareness facts related to agriculture	CSA Kanpur	18.12.08
7	Rain water harvesting: A practical option for drought mitigation	CED, HBTI Kanpur	18.03.9
8	Non traditional optimization techniques	Chemical Engg. deptt., HBTI Kanpur	25.03.09
9	Groundwater: Face to face with facts	CED, HBTI Kanpur	10.06.09
10	Nontraditional Optimization and Interpolation Techniques	Mathematics Dept. HBTI Kanpur	17.3.2012