Dr. Ajay Ahirwar

Research Scientist (DSS(PM), National Hydrology Project) National Institute of Hydrology, Roorkee

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Key Expertise

Hydrological Modelling (Hydrologic and Hydrodynamic), Computational programming, Soil and Water Conservation, Water Quality Modelling, Environmental flow, Decision making in basin management and planning.

Educational Qualifications

- 1. Ph.D. in Hydrology, IIT Roorkee, U.K., India in 2018.
- 2. M. Tech (Soil and Water Engineering), from CAE, J.N.K.V.V., Jabalpur with 75.70% in 2010.
- **3**. B. Tech (Agricultural Engineering) from C.A.E., J.N.K.V.V., Jabalpur (M.P) With 65.70 % in 2008.
- **4**. Passed 10+2th (PCM Stream) from M.P. Board Bhopal (Year 2001) with 63.30%.
- 5. Passed 10th from M.P. Board Bhopal (Year 1999) with 75.20%.

Professional Experience

- Research Scientist (DSS(PM), National Hydrology Project) with National Institute of Hydrology, Roorkee, India, since 26th of February 2018 till present.
- Worked as Project Officer (Soil and water conservation applications) with Foundation for Ecological Security (FES), Dahod, Gujarat, India, 16th of Aug. 2010 to 22nd of Dec. 2010

Work accomplished during current job

 Contribution of hydrologic modelling, water quality modelling, field investigation, water sampling and GIS mapping in Upper Yamuna Basin project (NHP-PDS) (2018-2020).

- Contribution of hydrologic and hydrodynamic modelling, field investigation, water sampling and GIS mapping in the National Mission for Clean Ganga (NMCG) sponsored R&D project "Environmental flow assessment for Yamuna river from Hathnikund barrage to Okhla barrage" (2019-2020).
- Developing and testing the Decision Support System Planning and Management (DSSPM)
 which is an information system that supports business or organizational decision-making
 activities to "improve the extent, quality, and accessibility of water resources information
 and to strengthen the capacity of targeted water resources management institutions in India.
 Hydrological Modelling (Hydrologic and Hydrodynamic modelling), Computational
 programming, data downloading, Soil and Water Conservation, Environmental flow,
 Water Quality Modelling, Decision making in basin management and planning etc (2018
 to present).

Software and Programming Skills

S.N.	SOFTWARES/HYDROLOGICAL MODEL	COMPUTER LANGUAGES
1	Xinanjiang Rainfall Runoff Model (PhD)	FORTRAN
2	Arc GIS	VB.NET
3	Arc SWAT Model	MATLAB
4	HEC-HMS Model	PYTHON
5	HEC-RAS Model	
6	Mike Hydro (Basin + River)	
7	ERDAS Imagine	
8	MS OFFICE	
9	ORIGIN	

Membership of professional Societies/Bodies

1. Indian Association of Hydrologist, Roorkee, (Life Member, LM-1792)

Details of Professional course / Trainings/Workshop etc.

S.NO	Duration	Training Centre	Title
1	16-20 November 2020	NIH, Roorkee Under NHP	Online training course on "Application of Water Accounting Plus (Wa+) Tool for Water Resources Management"

2	12-16	NIII D. I. II I NIID	Online training course on
	October 2020	NIH, Roorkee Under NHP	"Mike Hydro Basin"
3	3-11 October 2020	RBased Services Private Limited, New Delhi	4-Days online training program on "Introduction To Python"
4	18-29 November 2019	NIH, Roorkee Under NHP	International Training course "Hydrological Modelling for Decision Making"
5	6-7 May 2019	Civil Engineering Department, IIT Roorkee	Certificate training course "Introduction to River and Channel Modelling using the MIKE HYDRO RIVER Software"
6	13, February 2016	Department of Hydrology, Indian Institute of Technology, Roorkee, Roorkee (U.K.) India	QIP Workshop on "Modelling, Fate & Transport of Soil-Water Pollutants"
7	20-24 June, 2011	National Institute of Hydrology, Roorkee & Indian Association of Hydrologists, Roorkee (U.K.) India	National workshop on "Advance Soft Computing Techniques in Hydrology and its Applications"
8	June 2009	Foundation for Ecological Security (FES), Ujjain (M.P.)	Summer Field Training on "Village Survey for Planning of various Watershed interventions and their feasibility at Agar and Tarana project area"
9	June, 2006	Water Resources Division, Indian Institute of Remote Sensing, Dehradun (U.K.) India	Summer Field Training on "Study of Remote Sensing and GIS and determination of Infiltration rate & Hydraulic conductivity in part of Solani Watershed"
10	June, 2004	Northern Region Farm Machinery Training & Testing Institute, Government of India, Ministry of Agriculture (Department of Agriculture & Co-operation) Tractor Nagar, Hisar (Haryana)	Summer Field Training on "1. Selection, Operation, Maintenance and Repair of Tractor and Agriculture Implements, Including I.C. Engine, C.F. Pumps, Plant Protection Equipments, Straw and Grain Harvesters etc. 2. Field Practices on Tractor Operation with Different matching implements"

Extra-curricular Activities.

- 1. Assistant Warden in Radhakrishan Bhawan, IIT Roorkee in 2013-14.
- 2. NCC Combined Annual Training camp in 2003 Jabalpur M.P.

Publications

- 1. Ahirwar A., Jain M.K., Perumal M. (2018) Performance of the Xinanjiang Model. In: Singh V.P., Yadav S., Yadava R. (eds) Hydrologic Modeling. Water Science and Technology Library, vol 81. Pp (715-721), Springer, Singapore.
- Dipti Tiwari, Ajay Ahirwar and Anupma Sharma (2018), Simulation of Rainfall-Runoff Process Using HEC-HMS model for Ungauged Catchment. Fifth International Conference on Hydrology and Watershed Management, 4th – 7th December 2018, Hyderabad, India.
- 3. Ankit Chakravarti, Tamne Adunga, Megersa Kebede and Ajay Ahirwar (2016), Overland flow simulation using artificial neural networks. International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro2016), CWPRS Pune, India 8th 10th December 2016.

Personal Details

Name : Ajay Ahirwar
Sex/Marital Status : Male /Married
Date of Birth : June 2nd 1982

Father : (Late) Dwarka Prasad Ahirwar

Mother : Smt. Suhadra Bai Ahirwar

Languages Known: Hindi (Read, Write and Speak)

English (Read, Write and Speak)

Declaration

I hereby declare that all the particulars stated in this C.V. are true to the best of my knowledge and belief.