

CV (SHUBHAM TIWARI)

ACADEMIC QUALIFICATIONS AND PROFESSIONAL EXPERIENCE

- May 2023 – Till now** **Research Fellow**
CNR-IRPI, Bari, Hydrogeology Group
- July 2018 – May 2023** **Ph. D.** (Groundwater Hydrology)
Department of Hydrology, Indian Institute of Technology Roorkee, India
Supervisor: Dr. Brijesh Kumar Yadav, Professor, IIT Roorkee
- Sep 2021- Jan 2022** **Newton Bhabha Fellow**
International Water and Sanitation, Cranfield Water Science Institute, Cranfield University, United Kingdom
- July 2017- June 2018** **Assistant Professor**
Civil Engineering Department, G L Bajaj Group of Institutions, Mathura
Dr. A.P.J. Abdul Kalam Technical University, Lucknow
- 2015-2017** **MTech in Water Resources Engineering**, National Institute of Technology (NIT Meghalaya), Shillong, India
- 2010-2014** **BTech in Civil Engineering**, PSIT college of Engineering, Uttar Pradesh Technical University, India

PUBLICATIONS

- Tiwari, S., & Yadav, B. K. (2023). Assessment of Managed Aquifer Recharge in Saline Confined Aquifers for Freshwater Storage and Improved Recovery: A 3D tank study under various operational factors. *Journal of Contaminant Hydrology*. <https://doi.org/10.1016/j.jconhyd.2023.104267>
- Tiwari, S., & Yadav, B. K. (2023). 'Role of hydrogeological factors on Aquifer Storage and Recovery (ASR) performance in saline groundwater regions.' *Journal of Water Resources Planning and Management* (ASCE). <https://ascelibrary.org/doi/full/10.1061/JWRMD5.WRENG-5949>
- Tiwari, S., & Yadav, B. K. (2023). Enhanced performance of Aquifer Storage and Recovery (ASR) system in unconfined saline aquifer for different operational factors: A multi-dimensional laboratory and modeling study. *Journal of Water Resources Planning and Management* (ASCE). <https://ascelibrary.org/doi/full/10.1061/JWRMD5.WRENG-5912>
- Tiwari, S., Yadav, B. K., & Polemio, M. (2022). Performance Evaluation of Aquifer Storage and Recovery (ASR) System in Saline Groundwater Regions: Impact of Operational Factors and Well Design. *Journal of Hydrologic Engineering* (ASCE). <https://ascelibrary.org/doi/full/10.1061/%28ASCE%29HE.1943-5584.0002222>
- Tiwari, S., & Yadav, B. K. (2022). Factors influencing the site selection criteria for efficient aquifer storage and recovery (ASR) system in saline regions. *Water Science and Technology Library* (Springer). https://link.springer.com/chapter/10.1007/978-3-031-24506-0_14

- Sarmah, R., & Tiwari, S. (2018). A Two-Dimensional Transient Analytical Solution for a Ponded Ditch Drainage System under the Influence of Source/Sink. *Journal of Hydrology*. <https://doi.org/10.1016/j.jhydrol.2018.01.023>

AWARDS AND FELLOWSHIP

1. Best Paper Award at International Conference ICIWRM'22 (Integrated Water Resources Management Prospects and Challenges) at the Water Institute- A Centre of Excellence, Karunya Institute of Technology and Sciences, Coimbatore - December 2022
2. Best Poster Award during IGWC 2022 (International Groundwater Conference) – November 2022
3. Received COST fellowship (European Cooperation in Science and Technology) to attend a training school – October 2023
4. Full financial support to attend WSCC 2022 (Water Security and Climate Change), December 2022
5. Awarded Travel Grant by the Dean of Resources and Alumni Affairs (IIT Roorkee) to attend European Geosciences Union (EGU) General Assembly – 2022
6. CSIR Foreign Travel Grant (funded by Council of Scientific & Industrial Research, Government of India) to present my research at WMS DUBAI EXPO-2020, Dubai, 22-24 March 2022.
7. Awarded for winning 2nd prize in an oral presentation on Research scholar's day at the department of hydrology, IIT Roorkee, March 2021
8. Conference grant to present research at Interpore 2021 (by International Interpore society) - 2021
9. Scholarship to attend Indo-German Summer School (funded by Deutscher Akademischer Austauschdienst/ DAAD, Germany) – 2021
10. G. M. Nawathe Award with 3000 INR cash prize (awarded by The Indian Society for Hydraulics for young scientist working in the field of Water Resources) - March 2021
11. Berkner fellowship for AGU2021 Membership
12. Awarded Student Travel Grant to attend American Geophysical Union (AGU) Fall Meeting – 2021
13. Newton-Bhabha PhD Placement (funded by British Council in India and Department of Business Energy & Industrial Strategy, United Kingdom (UK)) - 2019-20
14. Best Paper Award during HYDRO 2019 (awarded by 24th HYDRO 2019- International Conference (Hydraulics, Water Resources and Coastal Engineering) - December 2019
15. Travel support to attend WSCC 2019 (funded by German Academic Exchange Service (Deutscher Akademischer Austauschdienst/ DAAD) - September 2019
16. Best Paper Award during INGWC 2018 with 3000 INR cash prize (by Association of Global Groundwater Scientist -AGGS) - December 2018
17. Graduate Aptitude Test in Engineering (GATE 2015) (exam conducted by IIT Kanpur) - 2015

CONFERENCES

1. Tiwari, S, Yadav B K (2022) "A Modified Managed Aquifer Recharge Technique for Salt-affected Groundwater Regions to Ensure Year-round Freshwater Availability" Integrated Water Resources Management Prospects and Challenges (ICIWRM'22), Coimbatore, India, 08-10 December 2022.
2. Tiwari, S, Yadav B K (2022) "Aquifer Storage and Recovery (ASR) as a Solution to Ensure Water Availability in Saline Groundwater Regions" Water Security and Climate Change Conference (WSCC), Bangkok, Thailand, 01-03 December 2022.
3. Tiwari S., Yadav B.K. (2022) "Phase-wise development of an Aquifer Storage and Recovery scheme framework for saline groundwater regions", IGWC 2022 (International Groundwater Conference), IIT Roorkee, Roorkee, India, 02-04 November 2022.
4. Tiwari, S, Yadav B K (2022) "Improving the performance of Aquifer Storage and Recovery schemes using Multiple Partially Penetrating Wells" European Geosciences Union (EGU) General Assembly, Vienna, Austria, 23–27 May 2022.
5. Tiwari S., Yadav B.K. (2022). "Factors Influencing the Site Selection Criteria for Efficient Aquifer Storage and Recovery (ASR) System in Saline Regions." International Conference on Water Resources Management and Sustainability: Solutions for Arid Regions (WMS-EXPO2020), Dubai, United Arab Emirates, 22-24 March 2022.
6. Tiwari S., Yadav B.K. (2021). "Role of Hydrogeology on the Performance of Aquifer Storage and Recovery (ASR) in Saline Regions" AGU Fall Meeting, online mode, 13-17 December 2021.
7. Tiwari, S, Yadav B K (2021) "Impact of operational factors on Aquifer Storage and Recovery (ASR) scheme" InterPore, 13th Annual Meeting, Online, 31 May–4 June 2021.
8. Tiwari, S, Yadav B K (2021) "Managed Aquifer Recharge in saline regions for enhanced recovery of freshwater" Water Security and Climate Change Conference (WSCC), Hanoi, Vietnam, 01-03 March 2021.
9. Tiwari S., Yadav B. K. (2019) "Desalinization from agricultural field through ditch drainage system" 24th HYDRO- International conference (Hydraulics, Water resources, and coastal engineering), Hyderabad, India, December 18-20, 2019.
10. Tiwari S., Yadav B.K. (2019) "Modified Managed Aquifer Recharge technique for saline groundwater regions", IGWC 2019, IIT Roorkee, Roorkee, India, 21-24 October 2019.
11. Tiwari, S, Yadav B K (2018) "Groundwater conservation for the sustainable and regenerative model for future" 2nd INGWC-18 National conference, Jalgoan, India, 18-20 December 2018.
12. Tiwari S., Gazi A.H., Dutta D. (2017) "Rainwater harvesting model in NIT Meghalaya campus" national conference on Hydrology and Watershed Management (NCHWM-2017) (under the aegis of TEQIP-II), NIT Silchar, India, 24-25 March 2017.

TRAININGS AND WORKSHOPS

- Attended Open Sense Training School, on data acquisition and OS processing conducted by Tel Aviv University, Israel, 10-12 October 2023
- Attended Hydro-JULES Summer School 2022 on Hydrogeological Modelling conducted by UK center for Ecology and Hydrology, United Kingdom, UK, 11-15 July, 2022
- One-day training with Dr Mike Jones and his team from North London Artificial Recharge Scheme (NLARS- Thames's water) UK on Aquifer Storage and Recovery technicalities and probable hurdles on November 2021

- Attended and received the batch of Expertize in “The drilling course – developing groundwater” conducted by Cranfield University and RedR UK to understand the bore well drilling practices in the field on October 2021
- Attended a training on “Enhancing Groundwater Sustainability for Climate Resilience” at University of Birmingham by Prof Yan Zheng from Southern University of Science and Technology in China on October 2021
- Participated in the IGCS-2022 Summer School on ‘Sustainable Water Management at the Saltwater – Freshwater Interface’ from 12-23 July 2021
- Participated in Global Initiative for Academic Networks (GIAN) taught by Prof S. Majid at Department of Hydrology, IIT Roorkee on February 2019
- Participation in Workshop on Research Fundamentals (by Sponsored Research and Industrial Consultancy, IIT Roorkee) on October 2018
- Participated in Global Initiative for Academic Networks (GIAN) on taught by Prof Thomas Harter at Department of Hydrology, IIT Roorkee on July 2018
- AutoCAD 2012 Certified Associate by Autodesk, USA on 2012

EXTRA ACTIVITIES

- Awarded Gold Medal in Table Tennis on the occasion of the 5th NIT Meghalaya sports meet
- Awarded for securing 1st position in Dramatics coemption held at SHISHIR17 NIT Meghalaya
- Awarded for securing the 2nd position in Stage play drama held at SHISHIR16 NIT Meghalaya
- Organized a technical event “Infraville” as “Event head” with the sponsorship of ACC at PSIT Kanpur
- Serve as reviewer for ‘Groundwater for sustainable development’ and ‘Journal of Water Resources Planning and Management.’
- Student member of the Association of Global Groundwater Scientists (AGGS)
- Student member of the American Society of Civil Engineers (ASCE)