

**ROUF AHMAD SHAH,
SCIENTIST-C, WIHG, DEHRADUN, INDIA**



Google Scholar Page: <https://scholar.google.com/citations?hl=en&user=IW8ZOwYAAAAJ>

RESEARCH GROUP: (HYDROGEOLOGY)

FIELD OF SPECIALIZATION: KARST HYDROGEOLOGY & ISOTOPE HYDROGEOLOGY

EDUCATION:

PH. D (Geology), 2017: Department of Earth Sciences, School of Earth and Environmental Sciences, University of Kashmir, Srinagar, J&K, India.

Research Topic: Hydrogeological characterisation of karst aquifer of South Kashmir, Western Himalaya, India.

M. Sc (Applied Geology), 2011: Department of Earth Sciences, University of Kashmir, Srinagar, J&K, India.

B. Sc (Geology, Geography & Chemistry), 2009: Govt. Amar Singh College, Srinagar, J&K, India.

PROFESSIONAL EXPERIENCE:

- Scientist-c (Since 01 January, 2024), Wadia Institute of Himalayan Geology, Dehradun, Uttarakhand, India.
- Scientist-B (Since 06 Nov. 2020 To 31 Dec. 2023), Wadia Institute of Himalayan Geology, Dehradun, Uttarakhand, India.
- Post-Doctoral Fellow (05-02-2018 To 05-02-2019) at Physical Research Laboratory (PRL), Ahmedabad, Department of Space (Govt. of India), 380009.
- SRF (10-09 2014-31-12- 2015), SERB-DST, GoI, Funded Research Project with DST No: SERB/F/1554/2012.
- JRF (09-09- 2012-09-09-2014), SERB-DST, GoI, Funded Research Project with DST No: SERB/F/1554/2012.

VISITING POSITIONS: NIL

TEACHING EXPERIENCE:

- Lecturer (on Contract) from 01-07 -2020 To 15-10-2020, at Department of Earth Sciences, University of Kashmir, Srinagar, J&K, India.
- Lecturer (on Contract) from 01-04-2020 to 31 -06-2020 at Govt. Degree College Ganderbal, Department of Higher Education, J&K, India.

SERVICES:

a. Supervision/Guidance to Ph.D. Students: NIL

b. Training M. Sc Dissertations (04) & Internship (07)

c. Teaching: At M.Sc. & B. Sc. Level (batch, 2017, 2018, 2019), J&K, India.

d. Membership: NIL

e. Editorial Board: NIL

f. International/National Seminars/Workshop: NIL

g. External Research Fund received & Project Handled: 01 (Ongoing)

h. Consultancy: 01 (Completed)

i. Member of important Committees: NIL

AWARDS/FELLOWSHIPS/HONORS/MEMORIAL LECTURES:

a. Awards/Medals/Prizes:

b. Fellowships:

- Post-doctoral Fellowship (01 year), PRL, Ahmedabad, India.
- Senior and Junior Research Fellow (04 year), University of Kashmir, Srinagar, India.

c. Memorial Lectures:

- Karst Geomorphology, Cave Development & Hydrological characterisation of Karst Aquifers of Western Himalayas, at Physical Research Laboratory Ahmedabad, dated 05 June, 2018

d. Recognition/Honors: Best PH. D Thesis.

COUNTRIES VISITED: NIL

NATIONAL/INTERNATIONAL (Outside, WIHG) COLLABORATION:

- Prof. R.D. Deshpande, PRL, Ahmedabad, India.
- Dr. Noble Jacob, Isotope Applications Division, BARC, Mumbai, India.
- Prof. Nico Goldscheider, Karlsruhe Institute of Technology, Germany.
- Prof. Alan E. Fryar, Deptt. of Earth and Environ. Sci., University of Kentucky, USA.
- Dr. Jerome Perrin, BRGM, Orleans Cedex, France

Inside WIHG Collaborator: NIL

PATENT: NIL -

PH.D. ADVISOR: PROFESSOR (DR.) GHULAM JEELANI.

LIST OF PUBLICATIONS

(a) SCI Papers

- **Shah RA***, Yadav JS, Rai SK, Tiwari SK (2023). Stable isotope hydrology of surface and groundwater from lower Himalaya: geo-meteorological processes and the hydraulic linkages. *Hydrol. Sci.*, 68 (1), 76-90.
- Chauhan P, Sharma J, Bhardwaj P, Mehta M, **Shah RA**, Singh O, Sain K (2023). Comparative analysis of discharge and sediment flux from two contiguous glacierized basins of Central Himalaya, India. *Environ. Monit. Assess.*, 195 (6), 729
- **Shah RA***, Rai SK, Yadav JS (2023). Understanding recharge processes and solute sources of groundwater in Karst settings of the lesser Himalaya, India. *Arab. J. Geosci.*, 16, 186
- **Shah RA***, Jeelani G, Yadav JS, & Rai SK (2022). Hydrogeochemical and stable isotopic evidences to different water origin of karst springs in the western Himalayas, India. *Environ. Ear. Sci.*, 81:(10): 297.
- Yadav JS, Tiwari SK, Rai SK, **Shah RA**, Yadav RBS, Kumar R (2022). Characterization of meteorological parameters over Dokriani Glacier catchment, Central Himalaya: implications for regional perspectives. *Meteorol. Atmos. Phys.*, 134, 88.
- **Shah RA***, Ganaie J, Yaseen S, Yadav JS, Rai SK, Tiwari SK(2021). Aquatic Geochemistry of a major freshwater lake in the Kashmir Himalaya: Solute acquisition and denudation process in the lacustrine system. *Environ. Monit. Assess.*, 193 (172), 1-15

- Jeelani G, **Shah RA**, Deshpande RD, Dimiri AP, Mal S, Sharma A (2021). Isotopic analysis to quantify the role of the Indian monsoon on water resources of selected river basins in the Himalayas. *Hydrol. Process.*, 35 (11), e14406

- **Shah RA**, Jeelani G, Goldscheider N (2018). Karst geomorphology, Cave development and hydrogeology in the Kashmir Valley, Western Himalaya, India. **Journal of Acta Carsologica**. 47:1,167-183.

- **Shah RA**, Jeelani G and Noble J (2017). Estimating mean residence time of karst groundwater in mountainous catchments of Western Himalaya, India. **Hydrological Sciences Journal**. 62:8, 1230-1242.

- Jeelani G, **Shah RA**, Deshpande RD, Frayar EA, Perrin J, Mukherjee A (2017). Distinguishing and estimating recharge to karst springs in snow and glacier dominated mountainous basins of western Himalaya, India. **Journal of Hydrology**.550: 239-252.

- Jeelani, G, **Shah RA**, Frayar EA, Deshpande, RD, Mukherjee, A, Perrin, J (2017). Hydrological processes in glacierized high altitude basins of western Himalayas. **Hydrogeology Journal**. DOI: 10.1007/s10040-017.1666-1.

- Jeelani, G, **Shah RA** and Deshpande, RD (2018). Application of water isotopes to identify the sources of groundwater recharge in a mountainous catchment of western Himalaya. *Journal of Climate Change*. 4 (1):37-47.

- Lone SA, Jeelani G, Deshpande, RD, **Shah RA** (2017). Evaluating the sensitivity of glacier to climate based on stable water isotopes and remote sensing. **Journal of Environmental Earth Sciences**. 76:598, DOI: 10.1007/s12665-017-0937-6.

- Jeelani G, Deshpande R D, **Shah RA** and Hassan W (2017). Influence of southwest monsoons in Kashmir Valley, western Himalayas. **Journal of isotopes in Environmental and Health Studies**. 53(4): 400-412.

- Jeelani G, **Shah RA**, Noble J and Deshpande R D (2016). Estimation of snow and glacier melt contribution to Liddar stream in a mountainous catchment, western Himalaya: an isotopic approach. **Journal of isotopes in Environmental and Health Studies**. 53(1): 18-35.

- Saleem M, Jeelani G and **Shah R A** (2015). The hydrochemistry of Dal Lake and the potential for sustainability for present, future management by using hydrochemical facies Ionic Ratios, and statistical analysis. **Journal of Environmental Earth Science**. 74(4)3301-3313.

- Jeelani G, **Shah RA** and Hussain A (2014). Hydrogeochemical assessment of groundwater in Kashmir Valley, India. **Journal of Earth System Science**. 123(5), 1031-1043.
- Sheikh J A, Jeelani G, Gavali S and **Shah RA** (2013). Weathering and anthropogenic influence on water and sediment chemistry of Wular Lake, Kashmir western Himalaya, India. **Journal of Environmental Earth Science**. 71, 2837-2846.

(b) Non-SCI Articles

- **Shah RA** and Jeelani G (2016). Vulnerability of karst aquifer to contamination: a case study of Liddar catchment, Kashmir Himalayas. **J. Himalayan Ecol. Sustainable Dev.** 11: 58-69.

(c) Chapter in Books

- Rai SK, **Shah RA**, and Das, S (2022). Cooperative management of Himalayan rivers among the riparian state: In, Current Directions in Water Scarcity Research. Tiwari AK et al. (eds), Vol. 5, p. 59-71. <https://doi.org/10.1016/B978-0-323-85378-1.00005-2>.
- Jeelani, G, **Shah R A** and Deshpande, RD (2017). Assessment of groundwater in karst system of Kashmir Himalayas. **Groundwater of South Asia**. Mukherjee A (Eds). Springer Nature, Singapore, 85-100p. Doi: 10.1007/978-981-10-3889-1_6.
- Jeelani G and **Shah RA** (2016). Delineation of point sources of recharge in karst settings. **Trends in Asian water in Environmental Science and Technology**: Futoshi Kurisu, AL Ramamnathan, Absar Kazmi and Manish Kumar (Eds) 17: 195-209p.

(d) Books-authored/Edited volume: NIL

(e) Abstract volume:

- Vulnerability of karst aquifer to contamination. *International Symposium on Sustainable Urban Environment*, 83-84p (ISSUE 2017). Tezpur University, Assam, 23-24 June, 2017
- Estimation of glacier melt contribution to Liddar stream in a mountainous catchment, western Himalaya: an isotopic approach. *International conference on Glaciology in High Mountain Asia, held at Kathmandu, Nepal March-2015 (ISSUE 2015)*.
- Distinguishing and estimation of spring recharge. A case study of Martand Karst spring Kashmir Valley. 19th National symposium on Environment: Climate Change. December, 11-13 (ISSUE 2014). MGM- Indra Gandhi University, Kottayam Kerala Karela, India.
- MRT of groundwater in Karst. Paper presented in 11th JK Science Congress 2015 on Scientific, Social and Economic dimensions of climate change held at *University of Kashmir from October 12-14, 2015*

- Hydrogeochemistry of groundwater in Kashmir Valley. *8th JK Sciences Congress 2012, India*
- Hydrogeological characterisation Martand Karst spring, western Himalaya, India. *International geographical conference (IGU) held at Srinagar.*

- Karst landscapes of Anantnag. A potential resource. *22 April 2013, Earth Day conference in J&K, Ministry of Earth Sciences, Govt. of India*

(f) Reports/Other Documents:

- Impact of climate change on groundwater resources of karst aquifer in Kashmir Valley, India.
- ERT Survey for Locating the Groundwater at Santala Devi Resort, Dehradun, Uttarakhand, India

(g) Articles in Proceeding Volumes