

Affiliation:	<b>Visiting Professor, Islamic University for Science and Technology, J&amp;K, India</b>
Formerly	<ul style="list-style-type: none"> <li><b>Professor</b>, School of Sciences, Maulana Azad National Urdu University, Hyderabad</li> <li><b>Emeritus Scientist</b>, CSIR- National Geophysical Research Institute, Hyderabad</li> <li><b>Professor (MK Gandhi Chair)</b>, Jamia Millia Islamia, New Delhi, India</li> <li><b>Chief Scientist</b>, CSIR-National Geophysical Research Institute, Hyderabad</li> <li><b>Team Leader (India)</b>, <b>Indo-French Centre for Groundwater Research, Hyderabad</b></li> <li><b>Professor</b>, Academy of Scientific and Innovative Research (CSIR-AcSIR)</li> </ul>
Ph	Cell <b>+91 9849919496</b> (Whatsapp)
	e-mails: shakeelifcgr@gmail.com, shakeelahmed@ngri.res.in, <a href="mailto:shakeelahmed@manuu.edu.in">shakeelahmed@manuu.edu.in</a> , Vidwan-ID : 286834
	Date of Birth : September 25, 1958, Place of Birth : Varanasi, U.P.
	Indian Passport No. <b>U7514230</b> Valid up to : November 11, 2030

### Educational Qualifications:

Degree/Certificate	Subject/Specialization	Year	University/Institution	Class/Grade
B.Sc.	Physics, Maths. & Geology	1977	Banaras Hindu University, <b>India</b>	First
M.Sc.Tech.	Exploration Geophysics	1980		First
U.G. Diploma	Arabic	1981		First
P.G. Diploma	Geostatistics	1985	Ecole Nationale Supérieure des Mines de Paris, <b>France</b>	Honorable
D.E.A.(Pre-Ph.D.)	Geostatistics	1985		Honorable
Doctorate (Ph.D.)	Hydrology & Quantitative Hydrogeology	1987		Honorable

### Present Position (Scientific & Managerial Responsibility):

- **Visiting Professor**, Islamic University of Science and Technology, Awantipora, J&K< India
- **Secretary**, Asian GWADI (An UNESCO Flagship Program)
- Member, **Governing Board**, UNESCO Regional Centre for Water Harvesting, Khartoum, Sudan
- Member, **Academic Council** of Islamic University of Science and Technology, J&K
- Consultant, **Delhi Jal Board** on their project of Artificial Recharge and Groundwater Enhancement
- **Section Editor** (Hydrology), Current Indian Science, Benthan Science Publisher
- **Outstation Chairman** of Earth Science (Oceanic Sc., Marine Sc., Atmospheric Science etc.) and Planetary Science Research Committee of XLVII Indian Social Science Congress

### Academic Experience:

- **Taught** Research Course Work to Doctoral Research Scholar as Professor, School of Sciences, Maulana Azad National Urdu University (MANUU), Hyderabad. Also designed syllabus and taught French language course for the 1<sup>st</sup> Semester of the newly introduced course on Proficiency in French Language in MANUU, Hyderabad.
- Developed several new courses for a proposed **center of excellence in Geo-Environmental Sciences** at the School of Sciences, Maulana Azad National Urdu University, Hyderabad.
- **Taught** water and Groundwater disaster under Climate Change and their management to MSc students at **Centre for Disaster Management**, Jamia Millia Islamia, New Delhi during 2018-2020.
- **Taught** Research Methodology, hydrogeology & Geostatistics to PhD Students as **Professor** of AcSIR at CSIR-NGRI, Hyderabad during 2013-2018 and continuing at present also.
- **Supervised** ~40 doctoral students of which 18 already got degree awarded including 3 French Students (**List at Annexure 1**). Supervised more than 75 M.Tech/B.Tech Students and 4 Post-Doctoral Fellows.
- **Visiting Fellow**, Dept. of Geology, **Aligarh Muslim University** during 2011-12.
- **Visiting Professor**, Dept. of Earth Sciences, **University of Kashmir** during 2011-13.

- Established an **Experimental Hydrogeological Park** at Chhotuppal, India for detailed Education & Research on Hard Rock Hydrogeology and linked it with **International H+ network** (<http://hplus.ore.fr>).
- Delivered a number of **Key note speeches**, invited lectures as well as training lectures to a large number of conferences, training courses etc.
- Member of the expert committee for designing and finalizing the syllabus of post-graduate courses in Earth Sciences at (1) Dept. of Earth Sciences, University of Kashmir and (2) Dept. of Earth and Atmospheric Sciences, National Institute of Technology, Rourkela.

### Administrative & Managerial Experience:

- **Managed as founder Team Leader for 19 years** (Since 1999), **Indo-French Centre** for Groundwater Research (**IFCGR**:[www.ifcgr.net](http://www.ifcgr.net)); an International Research Centre set-up at the CSIR-National Geophysical Research Institute, Hyderabad in collaboration with BRGM, France for advanced research in hard rock hydrogeology.
- **Coordinated** an important and major project viz., AQUIM; carrying out geophysical investigations at six sites in the entire country as pilot project of an **Aquifer Mapping flagship** program of Government of India through MoWR (<http://www.aquiferindia.org>).
- **Led a scientific delegation** to Tunisia to discuss the bilateral collaboration in Water science and technology during February 2010 and hosted the Tunisian delegation at CSIR-NGRI, Hyderabad during 2012.
- **Led a scientific delegation** to France to participate in UN Summit on Groundwater in UNESCO during Dec. 6-7, 2022 and in an **Indo-French workshop** at Hydrosiences, Univ. of Montpellier during Dec. 8-10, 2022.
- **Organized** a number of National and International conferences on the subject and delivered several keynote speeches (**Annexure 2**).
- **Member and/or Chair-person** of a number of internal committees for managing several activities of the organization.
- Coordinated from NGRI a joint centre; **CeGER** at the **University of Kashmir**, 2012-2015.
- Served as Chair-persons, Member as well as convener in a number of **in-house committees** of Maulana Azad National Urdu University, Hyderabad.

### Professional Experience & Responsibility:

- **Outstation Chairman** of Earth Science (Oceanic Sc., Marine Sc., Atmospheric Science etc.) and Planetary Science Research Committee of XLVII Indian Social Science Congress, February 05-09, 2024 at University of Science and Technology, Meghalaya.
- Member of the State Level Advisory Board (**SLAB**) in the Council of Science and Technology, **Govt of Telangana**.
- **Coordinator**, theme on “Non-invasive 3D Groundwater Mapping for Resource Management” in the 36<sup>th</sup> **International Geological Congress** to be held in India during Nov. 9-14, 2020.
- Appointed as **Expert** for preparing IX-IHP of UNESCO from Member State (EoMS), India.
- Member, Governing Body of UNSCO Category-II centre on Rainwater Harvesting, Khartoum, Sudan (2019 onward).
- **Mentor** for DST (GOI) **INSPIRE** program since 2009 and delivered more than 30 INSPIRE lectures on Groundwater Hydrology.
- Secretary, **Asian G-WADI**, an International program of UNESCO for Water development and Management in Semi-Arid areas (2018 onward). Member, **Advisory Committee** of Asian G-WADI during 2007-2017.
- Co-opted Member of **DST-PAC** on Earth and Atmospheric Science including Glaciology (2015-2018).
- Member of **DST-FIST** Advisory Committee on Earth and Atmospheric Sciences (2015-2019).
- Member, INSA National Committee of **IGBP-WCRP** for the year 2012-15

- Appointed **National Coordinator** for the Indo-Tunisian Collaboration in water Sciences and Technology during 2010-2012.
- **Chairman** (2009-2012), South Asian Working Group on Hard Rock Hydrogeology of IAH (HyRock).
- Member, **Editorial Board**, Intern'l Journals viz., **IJCER, IJSTRE & IJHST**
- **Member**, Task force for the 12<sup>th</sup> Five years plan for the Physical Sciences Cluster of CSIR.
- Member, FICCI Water Committee (2005-2007).
- **Associate Editor** (1999-2003), Hydrogeology Journal (Springer)
- **Secretary** (1991-2005) of Indian National Committee of the International Association of Hydrogeologists (www.iah.org)

### International Stature:

Have been involved in a number of international programs on the subject, in various capacities that can be judged with my numerous **exchange programs** (Annexure 3), recognition in the form of **International award**, executing and leading International projects and joint publications. Also earned considerable **ECF in foreign currency** for the country.

### Employment/Fellowship details:

From	To	Name of Organization	Position held
01.12.1980	23.05.1981	Banaras Hindu Univ., Varanasi, India	Research Scholar
26.05.1981	10.11.1982	CSIR-National Geophysical Research Institute, Hyderabad, India	Junior Research Fellow
11.11.1982	10.11.1987	..do..	Scientist B
31.10.1984	24.12.1987	Ecole Nationale Superieure des Mines de Paris, France (Now Mines ParisTech.)	French Govt. Ph.D. Scholarship holder
11.11.1987	10.11.1990	CSIR-National Geophysical Research Institute, Hyderabad, India	Scientist C (With merit promotion)
11.11.1990	10.11.1995	..do..	Scientist E-I
11.11.1995	10.11.2000	..do..	Scientist E-II
01.11.1996	08.02.1997	Ecole Nationale Superieure des Mines de Paris, France (Now Mines ParisTech)	Post-Doctoral Fellow
11.11.2000	10.11.2007	CSIR National Geophy. Res. Inst., Hyderabad	Scientist F
11.11.2007	30.09.2018	..do..	<b>Chief Scientist</b>
15.01.2008	24.03.2008	IWMI in an International Project on Ground water Governance in Asia and Australia	Sr. Research Project Fellow
05.12.2010	20.12.2010	Aligarh Muslim Univ., Aligarh, India	Visiting Fellow
01.01.2011	30.09.2018	CSIR Academy of Scientific and Innovative Research, New Delhi	<b>Professor (Physical Sciences)</b>
01.08.2012	31.07.2014	Kashmir University, Srinagar, India	<b>Visiting Professor</b> Department of Earth Sciences
03.10.2018	02.10.2020	Dept. of Geography, Faculty of Natural Sciences, Jamia Millia Islamia, New Delhi	<b>Professor (MK Gandhi Chair)</b> Centre for Disaster Management
01.01.2020	31.10.2020	Weather Risk Management System, Gurgaon	Consultant (Water Projects)
06.11.2020	31.10.2021	CSIR-National Geophysical Research Institute, Hyderabad	Emeritus Scientist & <b>Emeritus Professor (AcSIR)</b>
01.11.2021	25.09.2023	Maulana Azad National Urdu University, Hyderabad (MANUU)	<b>Consultant &amp; Professor</b> School of Sciences
25.04.2024	---	Islamic University of Science and Technology, Awantipora, J&K (IUST)	<b>Visiting Professor</b> , Centre for Disaster Risk Reduction

### Major Research work carried out:

- **Numerical Modeling of the aquifer systems:** Established an advanced laboratory of aquifer modeling and completed modeling of a large number of aquifers for their management studies.
- **Development and application of Theory of Regionalized Variables:** Developed several

techniques using geostatistical methods to groundwater problems particularly in parameter estimation and network optimization.

- **Hydrogeology of Crystalline rock aquifers:** Developed a number of specialized techniques to thoroughly study the highly complex and extremely heterogeneous crystalline aquifer systems and developed a **Decision Support Tool for effective management of groundwater** in such aquifers.
- **Systematic study of Arsenic and Fluoride contamination:** A detailed and systematic study was carried out to understand the genesis and regionalization of these contaminants (AS and F) and developed scientific tools for their sustainable remediation of Arsenic in Ganga basin for and Fluoride in South India.
- **Hydro-Geophysics** under **AQUIM:** Aquifer Characterization Using Advance Geophysical Techniques in Representative Geological Terrains of India. The project successfully completed and has set guidelines to upscale the Aquifer Mapping for the entire Nation.
- Natural Treatment of contaminated water specifically sewage using **Wetland** hydrogeology and **MAR**.
- Needs Assessment and Ecosystem Mapping in the Context of **Digital Disaster Risk Reduction and Risk Transfer Solutions** for Women Smallholders farmers.

### Scientific Output as Publications:

Research Papers:~273 (**SCI: 160**, Non-SCI:21, Book Chapters: 37, Proceedings: 52, others: 3)Tech. Rep: ~49, Software Package: 5, Proceedings/Books Edited/reviewed: **10**

Citation indices (<http://scholar.google.co.in/citations?user=Tuhe7iUAAAAJ>)

Citation Google Scholar (as on March 1, 2024)	Citations	h-index	I-10-index
<b>All</b>	<b>8328</b>	<b>42</b>	<b>123</b>
<b>Since 2020 (Last 5 years)</b>	<b>4031</b>	<b>32</b>	<b>87</b>

### Awards & Honours:

Young Scientist Award	Awarded by the Muslim Association for the Advancement of Science, India (MAAS) for <b>1996</b> in Physical Sciences
<a href="#">International Prize for Water Science</a>	<a href="#">Awarded by the Cannes Water Symposium, France. For the year 2004</a>
National Mineral Award	Awarded by the Ministry of Mines, Govt. of India for <b>2006</b> in Groundwater
<a href="#">HS Pareek Award</a>	<a href="#">Shared (as Co-author) for the best paper published in Jr. Geol Soc. of India during 2009 on coal geophysics</a>
Groundwater Excellence Award	Received <b>2016</b> Smt. Savitree Chadha award of Excellence in Groundwater Management awarded by the Indian National Committee of International Association of Hydrogeologists
<a href="#">NGRI-AHI National Hydrology Lecture Award</a>	<a href="#">Received NGRI-AHI National Hydrology Lecture Award 2014 by the joint association of CSIR-NGRI and Association of Hydrologists of India</a>
Anni Talwani Memorial Prize of IGU	Anni Talwani Memorial Prize for the year <b>2017</b> in recognition of outstanding contribution in the field of hard rock hydrogeology & setting up Indo-French Centre for Groundwater Research
<a href="#">National Geoscience Award (Groundwater)</a>	<a href="#">Received NGA (Team Award) for 2017 for Groundwater Exploration including project development, hydrogeological studies and management of groundwater resources. Leader of the Team</a>
4 <sup>th</sup> National Water Award (Min of Jalshakti, GoI)	Has been instrumental in developing the campus as chairman of the MANUU Jal Shakti Abhiyan Comm. for obtaining the 4 <sup>th</sup> National Water Award to MANUU in <b>2023</b> in the category of the best campus use.

FTWAS	Elected Fellow of <b>The World Academy of Sciences (TWAS)</b> , 2022
FNASc	Elected Fellow of <b>National Academy of Sciences of India (NASI)</b> , 2019
FSGI	Elected Fellow, Geological Society of India since <b>2005 (L:1362)</b> , 2005
FNESA	Elected Fellow of the National Environmental Sciences Academy, New Delhi, <b>2010</b> (No. 1513)
FAPAS/FTAS	Elected Fellow of the Andhra Pradesh Akademi of Sciences, Hyderabad since 2013 and continue as founder fellow of the <b>Telangana Academy of Sciences</b>
FISSA	Elected Fellow, Indian Social Science Academy, 2022

### Member of other Learned Societies:

- i. International Association of Hydrogeologists (Former)
- ii. International Association of Hydrological Sciences (Life Member)
- iii. American Geophysical Union (11449986/229932, Former)
- iv. Indian Geophysical Union (Life Member)
- v. Assoc of Geoscientists for International Development (Life Member)
- vi. Indian Society of Geomatics (ISG): Life Member
- vii. Association of Global Groundwater Scientists (Life Member)

### Scholarship/Recognition:

- National Loan Scholarship, Govt. of India, during 1973-74 and 1977-79
- Shakespeare's Scholarship for the year 1974-75.
- Post Graduate Merit Scholarship, University Grant Commission, during 1979-80
- Junior Research Fellowship, Council of Scientific & Industrial Research, during 1981-82
- Doctoral Research Scholarship, Govt. of France, during 1984-87
- Obtained 3 years Merit promotion from Scientist C to Scientist E1, National Geophysical Research Institute, Hyderabad during 1993-94.
- Post Doctoral Fellowship of Govt. of France during 1997-98, 2000 & 2001.
- Sr. Project Research Fellow, IWMI project on Groundwater Governance in Asia
- **Chief Guest** at the 2-day National Seminar on "Characterization of Trace Elements in Natural Compounds by Spectroscopic methods" on January 22, 2010, at SV degree and PG College (OU), Suryapet, Nalgonda, AP.
- **Chief Guest** during the Annual Day function of Arkay College of Engineering and Technology, Nizamabad, AP and delivered keynote address on March 26, 2011.
- **Chief Guest** and Keynote Speaker at a two days National Seminar on "Groundwater Assessment and Management in Decan Basaltic Terrain" during January 4-5, 2015 at the Department of Geology, Deogiri College, Aurangabad.
- **Chief Guest** and Keynote Speaker at a two-day National Conference on "Emerging Trends in Earth Sciences" during March 30-31, 2015 at the School of Earth Sciences, **Central University of Karnataka**, Gulbarga.
- **Chief Guest and Keynote Speaker** at International Conference on Water Resources, ICWR-2018 in University of Kerala, Thiruvananthapuram, March 15, 2018.
- Delivered an invited **TEDx talk on groundwater** in Hyderabad on May 6, 2018 on "**DAY ZERO**" and 2<sup>nd</sup> TEDx talk on "Water Management: An essential task for everyone, a community or an individual" on November 12, 2022.
- **Chief Guest and Speaker** at the inauguration of ICSSR sponsored 10 days (December 17-26, 2019) training program on "Research Methodology" Department of Management Studies, Pondicherry University.
- Invited as Guest of Honor during the prestigious award ceremony of 5<sup>th</sup> **Mustafa Prize**

in Isfahan, Iran during October 2, 2023 and Delivered a talk during the 9<sup>th</sup> STEP (Sci. & Tech. Exchange Program) at the School of Basic Sciences, Tarbiat Modares University, Tehran on Oct 1<sup>st</sup>, 2023.

### **Languages Known:**

**English, French**, Urdu and Hindi (fluently read, write, speak), **Arabic** (read and write)

### **Teaching/Faculty Positions:**

Teaching faculty of many Organizations during various short-term courses/ Workshops. A few of them are listed below.

1. School of Sciences, Maulana Azad National Urdu University, Hyderabad.
2. Centre for Disaster Management, Jamia Millia Islamia, New Delhi
3. AcSIR: Academy of Scientific and Innovative Research (CSIR)
4. Department of Earth Sciences, Kashmir University, Srinagar, India
5. Administrative Staff College, Hyderabad, India
6. Regional Centre for Urban Water Management, Tehran, Iran
7. Academic Staff College & Geology Dept., Aligarh Muslim University, Aligarh, India
8. Geological Survey of India, Southern Region, Hyderabad, India
9. Jawaharlal Nehru Technical University, Hyderabad, India
10. Centre for Mathematical Modeling and Computer Simulation, Bangalore, India
11. National Geophysical Research Institute, Hyderabad
12. A.P. Groundwater Department, Hyderabad
13. Centre for Geostatistics, NMDC, Ltd., Hyderabad, India
14. Rajiv Gandhi National Groundwater Training and Research Institute, CGWB
15. Water Technology Centre, ANGRAU, Hyderabad & many others

### **Current Research Interest and Specialization:**

- Application of Geostatistical methods in data collection network design and parameter estimation of Natural Systems.
- Numerical Modeling of aquifers for assessment and management of Groundwater Resources particularly in weathered-fractured coupled system and simulation of convective mass transport in aquifers.
- Hydrogeophysics specifically heli-borne geophysics for investigating the near sub-surface.

## Major Projects led by Dr. Shakeel Ahmed in the recent past:

#	Title of the Project	Partners	Funding agency & Budget	Period	Role
<b>IN-HOUSE or NETWORK</b>					
1	Delineation and Regionalization of Arsenic contaminated groundwater zones and management of groundwater resources in Middle and lower Ganga Plains	CSIR-NGRI & CGWB(NER)	CSIR ~100 Lakhs	2007-2012	Project Leader
2	High-resolution geophysical investigations to delineate cavities and vesicular basaltic zones in Deccan Traps of India for minerals and groundwater resources	CSIR-NGRI & GSDA, Maharashtra	CSIR ~50 Lakhs	2007-2012	Project Leader
3	<u>IFCGR</u> : Investigating Structure and Functioning of the Hard Rock Aquifers for groundwater management (Quantitative & Qualitative)	NGRI, BRGM	CSIR & BRGM MLP-6403-28(SA)	2012-2017 and is continuing	Team Leader (India)
<b>EXTERNALLY FUNDED (INTERNATIONAL)</b>					
4	Optimal Dev and Management of Groundwater in Weathered-Fractured coupled Aquifer	NGRI, ParisTech	CEFIPRA	50 Lakhs	Proj Leader
	<u>P2R</u> : Indo-French Network project on water science	NGRI, IISc, IRD, BRGM, CWES-KCT, INRA, IITD	<b>DST-India &amp; MAE, France</b> 8 lakhs + €1 Lakh	2006-2010	Activity Leader
5	<u>SUSTWATER</u> : Decision Support Tool for sustainable groundwater management	NGRI, BRGM, APGWD	<b>EU under FP-6</b> € 100,000	2009-2012	Project Leader
6	Groundwater monitoring network optimization and database on F and As	NGRI	<b>UNESCO</b> US\$1500	2009-2010	Project Leader
7	Coupling water flux and stable isotopes measurements to analyze irrigation efficiency in overexploited aquifers of southern India	NGRI and BRGM	<b>IAEA</b> € 15,000	2009-2011	Project Leader
8	<u>MOHINI</u> : MOdélisation intégrée des ressources en eaux des aquifères de socle : vulnérabilité aux changements globaux d'origine anthropique	NGRI, BRGM, Geoscience-Rennes & Montpellier, ITASCA, CGS-Uni Louis Pasteur	<b>ANR: France</b> In kind	2008-2011	Project Leader
9	<u>SHIVA</u> : Socio-economic Assessment of the rural Vulnerability of water users under stressors of global changes in the Hard rock area of South India	NGRI, BRGM, SIRs, LMTG, CSH, IFP & CESS	<b>ANR, France</b> € 5000	2009-2012	Activity Leader
10	Impacts of meso-scale Watershed Development in Andhra Pradesh (India) implications for designing and implementing improved WSD policies and programs	NGRI, IWMI, CRIDA, LC, ANU, CSIRO,	<b>ACIAR, Australia</b> Aus\$ 125,000	2009-2015	Proj. Leader at NGRI
11	<u>RUAF</u> : Urban waste water irrigation	NGRI, IWMI, BRGM	<b>IWMI</b> € 6,800	2009-2011	Proj. Leader: NGRI
12	<u>GRACE</u> : Hydrology and Water Resources from Space over the Indian Continent	NGRI, LEGOS	<b>IFCPAR</b> , 45 lakhs	2009-2014	Joint Collaborator
13	International Hydrogeological Park at Chhotuppal NGRI Campus, Nalgonda	NGRI, BRGM, Hydrosciences, Montpellier	<b>IFR-ILEE Res.</b> support scheme €10000-15000	2009-2014	Project Leader at NGRI
14	<u>SAPH PANI</u> : Natural water systems and treatment with water shortages in urbanized areas in India	NGRI plus 18 others	<b>EC: € 341,750</b> (Total Budget: 3.5M€)	2011-2014	Project Leader at NGRI
15	Geophysical Investigation for Groundwater Exploration in <b>South and West Niger</b> (Consultancy Project)	NGRI and WAPCOS	<b>Super Geo Drillers</b> , India US\$ 250,000	2016-2017	Project Leader

<b>EXTERNALLY FUNDED (NATIONAL)</b>					
16	AQUIM: Aquifers characterization using advance geophysical techniques in representative geological terrains of India	CGWB/MOWR	WB: HP-II INR 27 Crores	2012-2015	Project Coordinator
17	Assessing water availability & footprint and decision support tool for sustainable Sugar-cane cultivation in different parts of India	WWF, New Delhi	Dutch Bank and Robo Bank INR 1.04 Crores	2015-2018	Project Leader
18	Establishment of River-Aquifer Connectivity In Ganga-Yamuna Doab and Delineation of Possible Paleo-Rivers In Parts of Allahabad Employing High Resolution Multimoment Heliborne Geophysics	CSIR-NGRI CGWB	CGWB-MOWR INR 4.85 Crores	2016-2018	Project Coordinator
19	Geophysical Mapping to delineate suitable zones for Mega Artificial Recharge in Tapi bank areas	CSIR-NGRI	WAPCOS Ltd ~ 0.25M US\$	2016-2017	Project Coordinator
20	Geophysical Surface Resistivity Survey to pin point water well drilling sites in various districts of West Bengal under the WBADMIP	CSIR-NGRI	WAPCOS Ltd INR 0.52 Crores	2016-2017	Project Coordinator
21	High Resolution 3d Aquifer Mapping Along Tapi River, adjoining region Near Surat Employing Heliborne And Ground Geophysical Surveys	CSIR-NGRI	Surat Municipal Corporation ~0.75 M US\$	2017-2019	Project Leader
22	Development and testing of nano-geo tracers: Understanding groundwater flow dynamics and contaminants migration in various geo-environments	CSIR-NGRI & Coimbatore Agr. Centre	DST INR 25.0 Lakhs	2016-2018	Project Leader
23	Assessment of Regional Hydrological System using Space Borne Gravity Observation	CSIR-NGRI, NRSC, AU, IISc, IIT-ISM, IIT-Kharag etc	DST INR 2.0 Crores	2018-2020	Co-PI (During Submission)
24	Landscape and tectonic evolution of the Great Rann of Kachchh (GRK): Short-term (Holocene) and Long-term (50-100 ka) impact on Human Settlement & Resources	IIT Kanpur	MoES INR 90.84 lakhs	2022-2025	Advisor
<b>Projects in Pipeline</b>					
25	Projects on Potable Water in Urban and Rural regions under Grand Challenge Projects of Min of Education, GoI (Project accepted, funding awaited)	MANUU, IITH, NGRI, NRSC, JNTU, etc	MoE INR ~15.0 Crores	2024-2028	Project Leader

### Consulting Experience:

#	Organization/Client	Nature of Assignment	Duration of Assignment
1	AL-Zamil and Co. KSA	Consultant to advice on their project on Potable Water Supply to Industrial city of Jubail, KSA	6 months
2	Ar-Riyadh Development Authority (ADA), KSA	Member of Expert Committee for their project on Aquifer modeling to arrest groundwater level rise in the city of Riyadh	1 week
3	Weather Risk Management System (WRMS), Gurgaon	Guidance for groundwater information on their projects in general. Led as PI a project on "Solutions numériques de transfert de risques en situation de catastrophes naturelles pour les petits exploitants agricoles femmes" carried out in Haïti, Sénégal, Mali, Liberia & Malawi, sponsored by the UNCDF during 2021	2 years
4	M/S Super Geo Drillers, Haryana	Geophysical Investigation for Groundwater Exploration in South and West Niger	2 years
5	Delhi Jal Board	Expert Member to review their project on Groundwater Recharge	2 years



## Theses supervised

(Supervised the doctoral and postdoctoral research of the following candidates)

Doctoral: **43 (Awarded: 20, Submitted: 1)**, M. Tech/MSc: **59**, B. Tech: **25**, DEA in French: **7**, CSN [French National Program]: **3**, Trainees: > **100**

#	Name	Title of the thesis	University	Status	Present Affiliation
1	Ms. Carine Engerrand, France	Hydrogeology of Fissured crystalline hard rocks covered with thick weathered rocks in Monsoon regions: Hydrogeological studies of two watersheds in Andhra Pradesh	Université Pierre et Marie Curie, Paris, France	<b>Awarded</b> 2002	Teaching in France
2	Dewashish Kumar, India	Conceptualization and Optimal data collection for simulating flow regime in weathered-fractured aquifers for groundwater management	Osmania University	<b>Awarded</b> 2004	Scientist at CSIR-NGRI
3	Devraj de Condappa, France	Etude de l'écoulement d'eau à travers la zone non saturée à l'échelle du bassin versant d'une système d'aquifère de socle. Application à l'évaluation de la recharge du bassin versant de Maheshwaram, Inde	Université Joseph-Fourier, Grenoble, France	<b>Awarded</b> 2005	NGO
4	Faisal Kamal Zaidi, India	Characterization of crystalline hard rock aquifers through geological and hydrogeological methods	Aligarh Muslim University, Aligarh, India	<b>Awarded</b> 2006	Professor, King Saud Univ., KSA
5	Subash Chandra, India	Contribution of Geophysical investigations in Estimating Hydrogeological regime of the Aquifers in hard rock Region	Banaras Hindu Univ, Varanasi, India	<b>Awarded</b> 2006	Scientist at CSIR-NGRI
6	Ms. Tanvi Arora, India	Geophysics and geostatistics: an integrated approach for characterizing and monitoring the unsaturated zone	Osmania University	<b>Awarded</b> 2007	Scientist at CSIR-NGRI
7	Sushobhan Dutta, India	Fracture delineation and establishing their connectivity through geophysical methods and Radon gas Emanometry	Osmania Univ. 2004 (Discontinued)	Expert in France	Fugro/CGG
8	Adil Nabi Bhat, India	Optimization of Groundwater Monitoring Networks Using Geostatistics	Aligarh Muslim University	<b>Awarded</b> 2008	Scientist in ARAMCO
9	Surendra Atal, India	Investigation of Hydro-Geochemical Factors Controlling Excessive Fluoride in Granitic Hard Rock terrain: with special reference to Maheshwaram watershed, Andhra Pradesh	Osmania University	<b>Awarded</b> 2009	Geologist in GSI, India
10	Haris H. Khan, India	Assessment of groundwater pollution from distributed sources in hard rock formations	Osmania University	<b>Awarded</b> 2011	Assoc. Prof. AMU, India
11	Ms. Shazrah Owais, India	Analyzing uncertainties in groundwater balance for water management in hard rock aquifers	AMU, Aligarh 2005 (Discontinued)	Groundwater Modeler in ARAMCO, KSA	
12	Ms. Visahano Zaphu, India	Assessing groundwater quality in hard rock aquifers: Vulnerability of contaminations under the climate change	Osmania Univ. 2007 (Discontinued)	Geologist in GSI, India	
13	E. Nagaiah, India	Geological and Geophysical signatures of Zeolite cavities (filled with water and dry) in the Deccan Volcanic Province	Osmania University	<b>Awarded</b> 2013	T.O. at CSIR-NGRI
14	Fazel Tras, Iran	Determination of Anthropogenic Pollution in groundwater using geophysical methods	Osmania Univ. 2008(Discontinued)	Professor in Tehran Univ.	

15	Ms. Sarah, India	Evaluation of Groundwater Renewability under polluting Environment and Determining its Indicators for Planning and Management	Osmania University	<b>Awarded</b> 2013	Faculty at Kashmir Uni
16	Farooq Ahmad Dar, India	Hydrogeology and Water resources assessment of Karst regions of India	University of Hyderabad	<b>Awarded</b> 2014	Asst. Prof. at Kashmir Univ.
17	Mrs. Mehnaz Rashid, India	Estimating components of groundwater balance through geospatial techniques in hard rock aquifer of semiarid regions	Osmania University 2009	<b>Awarded</b> 2014	PDF in Taiwan
18	Ms. Kissa Fatima, India	Various impacts of climate variability on hydrological cycle: Ecology, Agriculture and socio-economic aspects	Osmania Univ. 2009 (Discontinued)	Asst. Manager Terra World	
19	P. Raghvendra, India	Controlling Hydrodynamics of multilayered aquifers in Ganga basin to arrest Arsenic contamination and design optimal pumping	Osmania Univ. 2010 (Discontinued)	Scientist at CGWB	
20	Tarun K. Gaur, India	Geophysical properties of the unsaturated zones indirectly providing input parameters to the Richard's equation for estimation recharge flux to the saturated zones	Osmania Univ. 2010 (Discontinued)	Geophysicist at ESSAR Oil Ltd, Durgapur	
21	Nicolas GUIHENEUF, France	Solute Transport Study in fractured crystalline rocks under tropical condition	Universite de Rennes-I 2011	<b>Awarded</b> 2015	Res. Schol. at Univ. of Rennes
22	Ms. Deepa Negi, India	Spatial distribution and temporal variation of Nitrate contamination in groundwater and its impact on the land-use	Osmania Univ 2012 (Discontinued)	Working in TERI	
23	Nazish Rana, India	Understanding the hydrodynamics of artificial recharge and simulating its impact on groundwater resources	Osmania Univ. 2012 (Discontinued)	Geologist in Jharkhand Govt.	
24	Ms. Kashish Jafri, India	Analyzing Geological and hydrogeological ambiguities in Aquifer modeling	(Discontinued)	JRF at MoES, New Delhi	
25	Deepak Kumar, India	A refined aquifer mapping through joint inversion of electrical and electromagnetic high-density data	Osmania Univ. 2014	Scientist, AMD, Hyderabad	
26	Rakesh Tiwari, India	Mapping alluvial aquifers with high density heliborne geophysical data	University of Hyderabad 2014 (Discontinued)	Scientist MoES	
27	Shiv Shankar, India	Arsenic contamination in groundwater: its origin, distribution and relation with flow dynamics	Delhi Univ. 2016 (Discontinued)	Working in Delhi University	
28	Syed Adil Mizan, India	Analyzing uncertainties in estimating fluxes of groundwater balance and its impact on groundwater prediction	Osmania Univ. 2015	<b>Awarded</b> Dec. 2019	Scientist at IWMI, New Delhi
29	Ms. Pratyusha Adep, India	Wetland hydrology and assessment of their efficacy for natural treatment of waste water	Osmania Univ. 2015 (Discontinued)	Officer in FCI, AP	
30	Md. Wajihuddin	Geological contamination on of Granitic Vadose zone for Soil Aquifer Treatment (SAT) for urban wastewater	Nanded Univ. 2016 (Discontinued)	Hydrogeologist in TSGWD	
31	Ms. Ankita Chatterjee, India	Assessment of sources and degree of geogenic contamination to groundwater both from Fluoride and Arsenic	AcSIR (NGRI) 2016	<b>Awarded</b> 2020	Teaching in IIT Goa
32	Fozail Akhtar	High Resolution Paleoclimatic and Paleomonsoonal Reconstruction during Late Quaternary Using Stable Carbon and Oxygen Isotopes in Speleothems, Lower Himalaya	AcSIR (NGRI) 2013 (Discontinued)	Geologist in Geological Survey of India	
33	Santosh Kumar Beja, India	Monthly scale paleoclimatic Reconstructions from scleractinian corals of Lakshadweep Archipelago using isotopic and Trace elemental proxies	AcSIR (NGRI) 2014	<b>Awarded</b> 2021	Lecturer in Univ. of Odisha

34	Ms. Madeleine Nicolas <b>France</b>	Connectivity and geochemical compartmentalization of a fractured crystalline aquifer in tropical semi-arid environment	Univ. of Rennes-1 France, 2016	<b>Awarded</b> 2020	BRGM
35	George Biswas, India	Mapping Variability in Structure and Functioning of Diverse Basaltic Aquifers	AcSIR (NGRI) 2016	<b>Awarded</b> 2023	Asst. Prof., Presidency Univ. Kolk.
36	Mohd Arshad	Comprehensive assessment of Managed Aquifer Recharge (MAR) in hard rock terrains and its upscaling	Andhra Univ. 2017	Discontinued Scientist, CGWB	
37	Venkatarao Ajaykumar, India	Assessing and simulating interaction between freshwater and Saline Water in Coastal Aquifers	AcSIR (NGRI) 2016	<b>Awarded</b> 2022	PDF at CSIR-NGRI
38	Mohd Naushad Ali	Eliminating bias in Numerical Modelling of Aquifers through Applications of the Theory of Reg. Variables	AcSIR (NGRI) 2017	Discontinued Geologist in GSI	
39	Abhilash Pashwan, India	Effect of Climate Variability on Groundwater Resources using Geophysical Approach	AcSIR (NGRI) 2017	In Progress	INSPIRE Fellow
40	Kamr Uzaman Khan	River Aquifer linkages in presence of Paleochannels in an inter-stream region of Allahabad	AcSIR (NGRI) 2018	Discontinued Scientist, CGWB	
41	Fauzia, India	Estimation of rainfall recharge flux to groundwater under changing climatic condition in semi-arid regions	AcSIR (NGRI) 2018	Thesis <b>Submitted</b>	SRF-INSPIRE Fellow
42	Shahwaz Khan, India	Evaluation of Fluoride Contamination and its Impact on the Sustainability of Aquifers in Weathered-Fractured Rocks	AcSIR (NGRI) 2022	In Progress	SRF, UGC
43	Hina Alam, India	Urban Water contamination due to selected contaminants and impact on its Habitants	SoS, MANUU	In Progress	Part time

**Seminar/Workshop Organized:**

1. International Workshop, IGW-89 on “**Development of appropriate methodologies for groundwater development and management in developing countries**”, during Feb. 28 – March 4, 1989 at the National Geophysical Research Institute, Hyderabad, India as Organizing Joint Secretary.
2. Commonwealth Science Council’s workshop on “**Rural Drinking Water**” during Sept. 1991 at the National Geophysical Research Institute, Hyderabad, India as Convener.
3. IAH sponsored International workshop on “**Monitoring and recharge estimation**” during January 19-21, 1994, at the National Geophysical Research Institute, Hyderabad, India as IAH representative.
4. Indo-French workshop on “**Collaboration in water science and technology**” during March 22-23, 1999 at the National Geophysical Research Institute, Hyderabad, India as Organizing Secretary.
5. Kick-off Indo-French workshop on “**Hard rock hydrogeology**” during June 19-21, 2001 at the IFCGR, National Geophysical Research Institute, Hyderabad, India as Convener.
6. **5<sup>th</sup> Anniversary of the IFCGR** and one day workshop on Hard rock Hydrogeology, March 24, 2005 at NGRI, Hyderabad
7. A 2 days workshop for Launching the project **SUSTWATER** funded by the EC under Asia Pro Eco Scheme (April 2006 to March 2008) at Hyderabad, June 8-9, 2006.
8. A 2 days National Seminar on “**Notable Research in Earth Sciences for the Socio-economic development of the Nation**”, February 19-20, 2007 at the National Geophysical Research Institute, Hyderabad as Organizing Secretary, sponsored by the ONGC Ltd.
9. International Workshop of the project **SUSTWATER**, March 3-5, 2008 at IFCGR, NGRI, Hyderabad to discuss the outcome of the project and transfer the technology to end users.
10. Indo-French workshop on Water Science and Agronomy sponsored by INRA, France, March 12-14, 2009, NGRI, Hyderabad.
11. Indo-French workshop on “Deep Earth Processes-Interaction between Solid, Fluid & Environment”, Mahabalipuram, Feb. 1-5, 2011.
12. Appointed President of Section “Geol-Geographical Sciences” in the 24<sup>th</sup> Annual Convention of the National Environmental Science Academy, Bangalore, December 2011.
13. Indo-Tunisian Workshop on Water Science and Technology as Indian Coordinator during Feb 1-5, 2012 at Hyderabad: A 12 member delegation and 20 member delegation have discussed the collaboration.
14. Indo-Danish workshop on Heliborne Geophysical Investigation during October 15, 2012 in New Delhi at Science Centre, CSIR, New Delhi.
15. Two days International Training course on Airborne geophysical investigation for mineral and groundwater, organized jointly by GSI and CSIR-NGRI during May 20-21, 2014 at Hyderabad.
16. International Training Course on Surface Geophysics sponsored by the World Bank during December 2-12, 2014 at CSIR-NGRI, Hyderabad where about 50 participants attended.
17. Training course on geophysics for the hydrogeologists for the GSDA officers during March 22-25, 2016
18. **7<sup>th</sup> Asian GWADI meeting** cum workshop during November 26-30, 2017 at CSIR-NGRI, Hyderabad.
19. **Convener**, National Seminar on “Resilience of Groundwater Resources for accommodating Changing Climate Scenarios” at Virtual Platform, February 27-28, 2021.
20. **Coordinator**, Theme 44 on “Non-invasive 3D Groundwater Mapping for Resources Management” of the 36<sup>th</sup> International Geological Congress, New Delhi, Nov. 9-14, 2020.
21. **Coordinator**, Indo-French Seminar on Impact of Climate Change on Hydrological Cycle parameters”, Montpellier, France During December 6-10, 2022 sponsored by CEFIPRA, New Delhi.

### **Membership of Scientific/Technical committees:**

1. Member of the Steering Committee, Aqua Foundation for Annual World Aqua Congress, New Delhi.
2. Member of the Committee to study feasibility, wastewater technology, cost implication etc. in A.P. constituted by the Honorable High Court of AP.
3. Member of the working group on "Integrated & Sustainable Water Resources Management by the Govt. of AP
4. Member of the FICCI Water Committee
5. Member of the Technical Coordination Working Group of AP for WENEXA-II, USAID funded project.
6. Secretary of the Scientific Advisory Committee of the UNESCO-IHP Workshop on Modelling in Hydrogeology, Dec. 2-7, 2001, Chennai, India.
7. Secretary of the Scientific Committee of the International Groundwater Conference, Feb. 20-22, 2002, Dindigul, Tamilnadu, India.
8. Member of the International Scientific Committee of the International Conference on "Hydrology of the Mediterranean and Semi-arid regions", April 1-4, 2003, Montpellier, France.
9. Member of the organizing committee, workshop on "The water crisis-Hope and Action for humanities future", NGRI, Hyderabad, November, 2002
10. Member of the National Advisory Committee of the International conference on "Hydrological Perspectives for sustainable development", Feb. 23-25, 2005, IIT, Roorkee, India
11. Member of International Scientific Advisory Committee of the International Conference on "Water Resources in the 21<sup>st</sup> Century" December 6-8, 2005, Cairo, Egypt.
12. Member of the Advisory Committee for the Seminar on "Modern Trends in Groundwater Exploration, Conservation and Protection", Osmania University, Hyderabad, India during Feb 25-27, 2005.
13. Member of the Organizing Committee, International Conference of "Hydrology and Watershed Management: Improving the water productivity in Agriculture" December 2006, at JNTU, Hyderabad, India.
14. Member of the Scientific Committee, International Conference and 150<sup>th</sup> Anniversary of Darcy's law, Dijon, France, May 29 to June 2, 2006.
15. Member of the Scientific Committee of the Joint International Convention of IAH and IAHS on "Water: A vital resource under stress-How science can help" held at Hyderabad during Sept. 6-11, 2009.
16. Member of the Scientific Committee of the International Conference on Hydrology and Watershed Management (ICHWAM), Feb. 3-6, 2010, JNTU, Hyderabad.
17. Member of the NGRI Golden Jubilee Celebration Committee and Chairman of the committee on constituting the NGRI-Golden Jubilee Award.
18. Member of the Organizing Committee, Geophysical Sciences for Energy, Climate Change and Human Society, Banaras Hindu University, December 21-23, 2010, Varanasi, India.
19. Member of the International Scientific Advisory committee of the International Conference on Groundwater in fractured rocks, Prague, Czech Republic, May, 21-24, 2012.
20. Member of the Scientific committee International Conference on "How to combine forest management, local development and protection of surface and Groundwater?", Saint Etienne, France, Oct., 2012.
21. Member, Organizing committee of National Seminar on Groundwater Governance, August 23, 2014 at New Delhi, organized by Indian National Committee of IAH.
22. Member, Organizing Committee of 3rd International Conference on Hydrology & Meteorology 2014, Sept. 15-16, 2014 at HICC, Hyderabad.
23. Vice-Chairman of the International Scientific Advisory Committee of 6th International Conference, IGWC 2015, December 9-11, 2015, SRM Univ., Chennai, India
24. Outstation Chairperson of the Research Committee on Earth Sciences including Ocean, Marine, Atmospheric and Planetary Sciences for 47<sup>th</sup> Annual Convention of Indian Social Science Academy (ISSA), during Feb 5-9, 2024 at USTM, Meghalaya.

**Visits/Research Experience abroad:**

#	Dates of Visit	Country	Purpose and work carried out	Sponsor
<b>Year 1984</b>				
1	Oct. 31, 1984 to 24, Dec. 1987	FRANCE	Carried out doctoral research at the Ecole Nationale Supérieure des Mines de Paris (Centre de Geostatistics and Centre d'Informatique Géologique), Fontainebleau and obtained degrees of D.E.A. and Doctorate. Participated in the (i) International Seminar on "Stochastic approach to Sub-surface flow", at Montvillargene, June 4-6, 1985 and (ii) Journée de Geostatistics, June 16-17, 1987	Govt. of France
<b>Year 1985</b>				
2	July 14-23, 1985	USA	Participation to the NATO Advance Study Institute, "Fundamentals of Flow & Transport in Porous Media	Univ. of Delaware & ENSMP, France
<b>Year 1987</b>				
3	June 22-26, 1987	MALAYSIA	Participation to and presentation of paper in an International Conference on "Groundwater and Environment"	Organizers
4	August 9-22, 1987	CANADA	Participation to and presentation of paper in "XIX I.U.G.G. General Assembly and discussion with Indian delegation led by the Director, NGRI	IUGG
<b>Year 1988</b>				
5	Sept. 4-14, 1988	FRANCE	Installation of a few geostatistical software at the Centre d'Informatique Géologique, ENSMP, Fontainebleau, developed during doctoral research and participation in the 3 <sup>rd</sup> International Geostatistical Congress at Avignon, Sept 4-9	Govt. of France
<b>Year 1989</b>				
6	July 6-8, 1989	FRANCE	Discussion on the research on simulating flow in low permeability rock aquifers particularly in situation of coupled weathered and fractured aquifer system at the Centre d'Informatique Géologique, Fontainebleau	Govt. of France
7	July 9-19, 1989	USA	Participated and presented papers to "28th International Geological Congress	CSIR & Govt. of France
<b>Year 1994</b>				
8	Nov. 21-25, 1994	AUSTRALIA	Participated to and presented paper during "25 <sup>th</sup> congress of International Association of Hydrogeologists"	IAH
<b>Year 1995</b>				
9	Aug. 28 - Sep. 1, 1995	ISLAMIC REPUBLIC OF IRAN	Participated and presented paper during a conference on "Water Resources Management" WRM-95, Isfahan Univ. of Technology	UNESCO
<b>Year 1996-98</b>				
10	Nov. 10, 1996 to Feb. 8, 1997	FRANCE	Carried out <b>Post Doctoral Research</b> in advanced aquifer modeling techniques and preparation of a few models using the software NEWSAM. The software was brought and installed at NGRI	PDF by Govt. of France
11	Dec. 10,	FRANCE	Development of a few additional software to the	Govt. of France

	1997 to Jan 25, 1998		modeling software and discussion regarding research work to be carried out by students from ENSMP to NGRI and from NGRI to ENSMP/UPMC	
<b>Year 2000</b>				
12	April 20, to May 06, 2000	FRANCE	Discussion on going collaboration and formulation of new projects for the newly opened Indo-French center at Hyderabad	Govt. of France
13	Nov. 15 to Dec 14, 2000	FRANCE	Discussion on future scientific work on the collaborative project on hard rock hydrogeology	Govt. of France
<b>Year 2001</b>				
14	Nov. 7-15, 2001	FRANCE	Discussion on the progress of the collaborative work and finalization of a doctoral thesis of a French student who has carried out the doctoral research in India	Govt. of France
<b>Year 2002</b>				
15	March 22 – 28, 2002	KUWAIT	Participated in an International Conference on Water Resources Management and presented a paper, Organized by the KISR	Organizers
16	May 1-31, 2002	FRANCE	Aquifer modeling studies of the Maheshwaram watershed under the Indo-French collaborative project	IFCPAR's Project
17	Sept. 15-20, 2002	FRANCE	Discussion and review of the progress of the IFCGR and extension of MoU between NGRI and BRGM	Govt. of France
18	December 16-22, 2002	EGYPT	Participated in an International conference on "Groundwater level control in the urbanized area" at Mansoura, Egypt and presented two keynote lectures and chaired a session	Organizers & UNESCO
<b>Year 2003</b>				
19	April 1-5, 2003	FRANCE	Participation in the conference Montpellier 2003 and making presentation as key note speaker and co-coordinator of the conference	IFCPAR's Project
20	December 7-12, 2003	FRANCE	Meeting with BRGM Orleans and IPGP, Paris for collaborative research. Development of models to investigate features of MARTHE, Aquifer modeling code	Govt. of France
<b>Year 2004</b>				
21	Oct. 30 -Nov. 4, 2004	FRANCE	Meeting at BRGM Orleans for progress of IFCGR and review of the MoU and visiting IPGP, Sisyphé, and CIG, Fontainebleau	Govt. of France
22	Nov. 26 – Dec. 8, 2004	ISLAMIC REPUBLIC OF IRAN	Participate in the UNESCO Regional workshop on "Water harvesting and Artificial Recharge" and also delivering a lecture series at the Ministry of Energy	UNESCO
<b>Year 2005</b>				
23	April 17 – 23, 2005	FRANCE	Meeting with Prof. G de Marsily of UPMC, Dr. Ledoux of ENSMP and participation in the Jury of a PhD viva at Université Joseph Fourier, Grenoble	Govt. of France
24	April-May 2005	PAKISTAN	Participation as resource person in the UNESCO workshop on Managing Artificial Recharge and Water Harvesting	UNESCO
25	June 29 – July 3, 2005	FRANCE	Receiving the trophy for the International Prize for Water Sciences presented during a ceremony at the 7 <sup>th</sup> Cannes Water Symposium, Cannes, France	Govt. of France
<b>Year 2006</b>				

26	May 29 – June 6, 2006	FRANCE	Participating in the 150 <sup>th</sup> Anniversary of Darcy law at Dijon and discussion for further collaboration with LEGOS, Toulouse and CEREGE, Aix en Province	Govt. of France
27	July 28 – August 3, 2006	ISLAMIC REPUBLIC OF IRAN	Participated as a resource person to a workshop on “Application of models and new techniques in groundwater management in arid and semi-arid regions”	UNESCO
28	Sept. 24 – Oct. 4, 2006	FRANCE	Participating in UNESCO workshop on Groundwater Indicator and meeting at several collaborating organizations in France	Govt. of France
<b>Year 2007</b>				
29	June 9-18, 2007	PEOPLE’S REPUBLIC OF CHINA	Participation as Resource Person in the G-WADI meeting and workshop on Aquifer Modeling	UNESCO
30	Sept. 02 – 10, 2007	FRANCE	Various meetings and discussions on the collaborative Research	Govt. of France & DST
31	Nov. 18-20, 2007	FRANCE	Discussion on the SUSTWATER project	Govt. of France
32	Nov. 20-25, 2007	MAROCCO	Various meetings interaction on the creation of a centre for Water Resources Management	Govt of France & DST
<b>Year 2008</b>				
33	Jan. 15-31, 2008	AUSTRALIA	Participation in the project work “Groundwater Governance in Asia” at the Centre for Comparative water policies and laws	IWMI
34	Feb-12-15, 2008	FRANCE	Discussion and planning meeting of collaborative projects under P2R	Govt. of France
35	March 20-24, 2008	NEPAL	For the concluding workshop of the IWMI Project on Groundwater Governance in Asia: Theory and Practice	IWMI
36	Sept. 24-Oct. 2, 2008	FRANCE	Discussion on various collaborations, finalizing the draft of the 4 <sup>th</sup> rider of the MoU between NGRI and BRGM and witness the signature at BRGM, HQ	Govt. of France
37	November 15 to 23, 2008	KINGDOM OF SAUDI ARABIA	For participation to an International Seminar on “Water and Environment” at Riyadh and also visit to the Saudi Geological Survey	Indo-French Project P2R
<b>Year 2009</b>				
38	August 16-24, 2009	FRANCE	Meeting with collaborators and completion of model of Artificial Recharge to the groundwater at Sisyphe, UPMC, Paris	Govt. of France
39	Sept. 27- Oct. 1, 2009	SUDAN	Invited to deliver keynote lectures in an UNESCO workshop on Water Resources, at Khartoum	UNESCO
<b>Year 2010</b>				
40	January 10-12, 2010	FRANCE	Meeting at Min. des’Affaires Eterangers (MAE), at Paris	Govt. of France
41	February 22-26, 2010	TUNISIA	Led a delegation of Indian scientists to the first Indo-Tunisian workshop on Collaboration in Water Science and Technology	DST
42	August 16-21, 2010	BRAZIL	2 <sup>nd</sup> International Conference: Climate, Sustainability and Development in semi-arid regions (ICID-2010), Fortaleza, Brazil for delivering an invited talk and arranging a round table	Organizers
43	December	FRANCE	Participation to the annual progress meeting of the	ANR Project



	08-14, 2010		project "SHIVA" funded by ANR, France	
<b>Year 2011</b>				
44	January 4-15, 2011	FRANCE	Participation to the collaborative project GRACE and review of the progress	IFCPAR Project
45	June 19-21, 2011	ISLAMIC REPUBLIC OF IRAN	Participation in GWADI meeting and workshop on Climate change and its impact on water resources	UNESCO
46	July 29 to August 2, 2011	KINGDOM OF SAUDI ARABIA	Participated as expert to the inception meeting of the project on "Rising Groundwater Problem in the city"	ADA, KSA.
47	September 4-11, 2011	AUSTRIA	Participation in a project meeting at the IAEA	IAEA
<b>Year 2012</b>				
48	May 8-12, 2012	SWITZERLAND	Participation in a progress meeting of EU funded project "Saph Pani"	FP7-EC Project
49	June 23-27, 2012	FRANCE	Interview meeting at UNESCO-HQ, Paris and meeting at BRGM Orleans	UNESCO
50	Nov. 18-21, 2012	FRANCE	Meeting and discussions at BRGM, Orleans for future programs of IFCCR and finalizing the 7th Rider of MoU	AQUIM Sponsored Proj.
51	November 21-23, 2012	DENMARK	Discussion and finalization of Heliborne TEM survey program at Aarhus University, GEUS and SKYTEM	..do..
<b>Year 2013</b>				
52	May 26 – June 1, 2013	GERMANY	Participation in the 3 <sup>rd</sup> Progress review meeting (M18) of EC funded project "Saphani"	FP7-EC Project
53	August 24-31, 2013	DENMARK	Participation in the 1st Indo-Danish Workshop on Heliborne Geophysics (INDANCE) as Indian Coordinator.	Govt. of Demark
54	September 16-21, 2013	PEOPLE'S REPUBLIC OF CHINA	Participation to GWADI meeting and delivering lecture in an Asian GWADI workshop at Beijing, PRC	UNESCO & ACIAR
55	Nov. 03-16, 2013	AUSTRALIA	Case study and fieldwork under ACIAR funded project in Perth and Adelaide	ACIAR
<b>Year 2014</b>				
56	May 11-17, 2014	FRANCE	Meeting of Saph Pani project as well as collaborative discussions at BRGM and UPMC, Paris	FP7-EC Project
57	July 8-9, 2014	FRANCE	To participate in the defence of a thesis as Jury member at Geosciences, Univ. of Rennes (Could not take up due to other assignement)	FP7-EC Project
58	December 13-21, 2014	USA	To deliver a lecture in AGU, fall meeting and also meeting with Professors of USGS & Univ. of Texas (Could not get Visa in time)	AQUIM Project
<b>Year 2015</b>				
59	March 21 to April 4, 2015	USA	To deliver a lecture in SAGEEP 2015 and hold discussions at the University of Texas at Austin & Univ. of Connecticut/USGS (Visit was not approved by CA)	AQUIM Project
60	June 12-16, 2015	ISLAMIC REPUBLIC OF IRAN	Participate in 6th Asian GWADI meeting (could not take up the visit due to delay in approval)	UNESCO/RCUWM
61	Dec. 13-21, 2015	USA	To deliver a key-note speech in the American Geophysical Union's fall meeting at San Francisco	Projects

<b>Year 2016</b>				
62	February 16-24, 2016	Sudan	<ul style="list-style-type: none"> <li>• To deliver an invited lecture on Managing groundwater with Climate Change adaptation is feasible through a Decision Support Tool in over-exploited crystalline aquifer in Semi-arid regions</li> <li>▪ To attend UNESCO-GWADI meeting as a member of Asian GWADI advisory Committee</li> <li>▪ Hold discussions with eminent Hydrogeologists on the Aquifer Mapping Results and collaboration</li> </ul>	UNESCO & Univ. of Khartoum
63	July 31st - August 6, 2016	Pakistan	To deliver a series of lectures in the events organized by Pakistan Water Partnership (Program got postponed)	PWP & SDPI Pakistan
64	October 25-27, 2016	People Republic of China	G-WADI program (6 <sup>th</sup> Asian GWADI Meeting)	UNESCO
<b>Year 2017</b>				
65	March 19-23, 2017	Portugal	To participate in the Workshop on “Connecting young researchers: best practices of EU-India PhD programmes” organized by the Indo-European ERA-NET INNO INDIGO, at the Foundation for Science and Technology, Portugal	EU Project INNO INDIGO
66	Sept. 20-23, 2017	Republic of South Korea	To participate and deliver an invited lecturue in 1 <sup>st</sup> Asia International Water Week at Gyeongju, South Korea	Asia Water Council
<b>Year 2018</b>				
67	Sept. 24-28, 2018	Sudan	To participate in Governing Body meeting of UNESCO-RCRWH and participating in International Seminar to deliver invited lecture	UNESCO
68	Dec. 09-15, 2018	Islamic Republic of Iran	To participate in 8 <sup>th</sup> Asian GWADI meeting, International Conference on International Drought Initiative	UNESCO
<b>Year 2019</b>				
69	July 28 – Sept. 01	USA	To participate in the convocation function of Penn State University, Visit to Maryland University etc.	Personal
<b>Year 2021</b>				
70	Jan. 15 – March 31	USA	Personal family visit	Personal
<b>Year 2022</b>				
71	January 11-15	Dubai, UAE	Personal family visit	Personal
72	December 06-11, 2022	France	Indo-French Joint workshop at Montpellier and UN Summit on Groundwater at UNESCO	Sponsored by CEFIPRA
<b>Year 2023</b>				
73	September 28 – October 4	Iran	Participate as Guest of Honour during the 5 <sup>th</sup> Mustafa Prize award ceremony at Isfahan and 9 <sup>th</sup> STEP at Tehran.	Sponsored by MSTF, Iran
<b>Year 2024</b>				
74	Feb 11-18	Germany	Personal	
75	Feb 18-25	Iceland	Personal	
76	Feb 25-Apr 14	USA	Personal	

**Other visits abroad:** Singapore, United Kingdom, Thailand, Iceland and UAE

Publication list of Dr. Shakeel Ahmed

Citation indices: <http://scholar.google.co.in/citations?user=Tuhe7iUAAAAJ>

Linkdin URL: <https://www.linkedin.com/in/shakeel-ahmed-75971330/>

ResearchGate: <https://www.researchgate.net/profile/Shakeel-Ahmed-13>

Vidwan-ID : 286834

**Book/Proceeding Edited/Reviewed:**

1. **Ahmed, S.**, Sarah, S., Rahman, A., Ahmad, S.M. (Eds.) 2025 Water Disasters: Threats and Solutions for a resilience society, under consideration for publication by Routledge Taylor & Francis Group.
2. **Ahmed, S.**, Tiwari, V.M. and Verma, S.K. (Eds.) 2025, **Discovering Aquifers in different geological environs using Heliborne Transient Electromagnetic Geophysics**, under consideration for publication by CRC, Taylor & Francis Group.
3. Talukdar, S., Shahfahad, Pal, S., Naikoo. M.W., **Ahmed, S.** and Rahman, A. (2024) Water Resources Management in Climate Change Scenario – Innovations in Geospatial Techniques and Models, **Springer Nature** Publisher.
4. Rahman, A., **Ahmed, S.**, Talukdar S., Reza, A. and Islam, M.T. (2023) Academic Guest Editors (2023) Sustainable Water Resources Planning and Management, Special Issue of **Sustainability**, MDPI, Academic Open Access Publishing.
5. **Ahmed, S.**, R., Jayakumar and A. Salih (Eds.), 2007, **Groundwater Dynamics In Hard Rock Aquifers - Sustainable Management and Optimal Monitoring Network Design** Capital Publishing Company, New Delhi, 2007, 251p (). International Edition published by **Springer**, <https://link.springer.com/book/10.1007/978-1-4020-6540-8#book-header>.
6. Eric Servat, W. Najem, Christian Leduc and **Ahmed S.** (Eds.), 2003, **Hydrology of the Mediterranean and Semi-Arid Regions**, IAHS publications No. 278, Proc. of International Conference on groundwater, Montpellier, France, April 1-4, 2003, 498p (ISSN 0144-7815).
7. Gupta, C.P., **S. Ahmed**, V.V.S. Gurnadharao and M.T. Rajan (Eds.), 1989, Proceedings of the international workshop on "Appropriate Methodologies for Development and Management of Groundwater Resources in Developing Countries", Feb. 28 to March 4, 1989, NGRI, Hyderabad, India, 3 volumes, pages 1348, published by Oxford and IBH Pub. Co., New Delhi (and also by Springer, Netherlands).
8. Dillon, P.J. and **S. Ahmed** (Eds.), Notes of Australian workshop on "Geostatistics in Water Resources", vol. 2: Practice and Water Resources case studies, Nov. 13-17, 1989, Adelaide, Australia published by Centre for Groundwater Studies, CSIRO, Australia.
9. Murali, G. and **S. Ahmed** (Eds.), Notes of the course on "Geostatistics and Stochastic Approaches in Hydrogeology", July 10-15, 1992, Hyderabad, India published by Jawaharlal Nehru Technological University, Hyderabad.
10. Reviewed and revised a book on "Hydrogeological Reconnaissance Drilling" by H. Plote translated from French into English being published by Wiley Eastern Publishers.

**Chapters in Books (44):**

1. Talukdar, S., Shahfahad, Pal, S., Naikoo. M.W., Ahmed, S. and Rahman, A. (2024) Recent Trends in Application of Geospatial Technologies and AI for Monitoring and

- Management of Water Resources, Chapter I *In* Talukdar et al (Eds.) Water Resources Management in Climate Change Scenario – Innovations in Geospatial Techniques and Models, **Springer Nature** Publisher, under review.
2. Sarah, Shah, W. and Ahmed S. (2024) Unveiling base flow dynamics in mountainous catchments: Insights from stable isotopes and SWAT modelling in the Upper Indus basin. *In* Talukdar et al (Eds.) Water Resources Management in Climate Change Scenario – Innovations in Geospatial Techniques and Models, **Springer Nature** Publisher, under review.
  3. Sarah, S., Khan, I., Imtiyaz, R., Rahman, A. and Ahmed, S. (2022) Groundwater potential in India: Challenges and threats of Climate change scenario, *In* Khare, N. (ED.) “Climate Changes – Challenges, Science, Policies and Geopolitics: Indian perspectives and Recent insights” , to be published by Taylor and Francis
  4. Arora, T. and Ahmed, S. (2023) Unsaturated pathways to Aquifers: How important are they? Chapter 4 *In* Surinaidu, L. and Bacon, CGD (Eds.) Electrical Resistivity and other Geophysical Methods for improved Modeling of Groundwater flow, **Cambridge Scholar Publishing**, UK, Pages 70-80.
  5. Tiwari V.M. and Ahmed S. (2022) India’s groundwater and its sustainability, *In* Shailesh Nayak (Guest Ed.), Special Volume on “Earth Science for Sustainable Development Goals”, J. Ind. Geophys. Union, 26(4) (2022), 315-335.
  6. Chatterjee, A., Arshad, M., Selles, A., Ahmed, S. (2019). Relation Between Water Level Fluctuation and Variation in Fluoride Concentration in Groundwater—A Case Study from Hard Rock Aquifer of Telangana, India. In: Chaminé, H., Barbieri, M., Kisi, O., Chen, M., Merkel, B. (eds) Advances in Sustainable and Environmental Hydrology, Hydrogeology, Hydrochemistry and Water Resources. CAJG 2018. Advances in Science, Technology & Innovation. Springer, Cham. [https://doi.org/10.1007/978-3-030-01572-5\\_52](https://doi.org/10.1007/978-3-030-01572-5_52)
  7. Sreedevi, P.D., Sarah, S., Ahmed, S. and Pavelic, P., (2019) Module-III: Geohydrology, Chapter IV in Reddy, R. Syme, G. and Chiranjeevi, T. (Eds.) Integrated approaches to sustainable watershed management in Xeric Environments, Elsevier, Pp: 27-38.
  8. Ahmed, S., Chandra, S., Chandra P.C. and Rajendra Prasad, P. (2019) Groundwater Prospecting: Classical to the advanced Geophysical Investigations, Chapter 7, in Majumdar and Tiwari (Eds.) “Water Futures in India: Status of Science and Technology”, Pp:181-214, published by INSA, India, IISc Press.
  9. Chatterjee. A. Arshad, Md., Selles, A and Ahmed, S. (2019) Relation between water level fluctuation and variations in Fluoride concentration in groundwater- A case study from hard rock aquifer of Telangana, India, In Chaminé, H.I. et al (eds.) “Advances in Sustainable and Environmental Hydrology, Hydrogeology, Hydrogeochemistry and Water Resources”, Advances in Science, Technology and Innovation, Springer Nature, Switzerland AG, Pages 215-221, DOI: 10.1007/978-3-030-01572-5\_52.
  10. Mondal N.C., Adike S., Anand Raj P., Singh V.S., Ahmed S., Jayakumar K.V. (2018) Assessing Aquifer Vulnerability Using GIS-Based DRASTIC Model Coupling with Hydrochemical Parameters in Hard Rock Area from Southern India. In: Singh V., Yadav S., Yadava R. (eds) Groundwater. Water Science and Technology Library, vol 76. Springer, Singapore, DOI [https://doi.org/10.1007/978-981-10-5789-2\\_6](https://doi.org/10.1007/978-981-10-5789-2_6).
  11. Boisson, A., Alazard, M., Picot-Colbeaux, G., Pettenati, M., Perrin, J., Sarah S., Dewandel, B. Ahmed, S., Maréchal, J.C. and Kloppmann, W. (2016) Percolation tanks as managed aquifer recharge structures in crystalline aquifers - an example from the Maheshwaram watershed, Chapter 7 In Thomas Wintgens, Anders Nätörp, Elango Lakshmanan and Shyam R. Asolekar (Eds.) **Natural Water Treatment Systems for Safe and Sustainable Water Supply in the Indian Context: Saph Pani**, IWA Publishing, UK. Pages:113-125, ISBN: 978178 0407104.
  12. Amerasinghe, P., Mahesh, J. Sonkamble, S., Wajihuddin, M., Boisson, A., Fahimuddin, M. and Ahmed, S. (2016) Characterization and performance assessment of natural treatment systems in a wastewater irrigated micro-watershed: Musi River case study, Chapter 11 In Thomas Wintgens, Anders Nätörp, Elango Lakshmanan and Shyam R. Asolekar (Eds.) **Natural Water Treatment Systems for Safe and Sustainable Water Supply in the Indian Context: Saph Pani**, IWA

- Publishing, UK. Pages: 177-189, ISBN: 978178 0407104.
13. Kloppmann, W., Sandhu, C., Groeschke, M., Pandian, R.S. Picot-Colbeau, G., Fahimuddin, M., Ahmed, S., Alazard, M., Amerasinghe, P., Bhola, Punit., Boisson, A., Elango, L., Feistel, U., Fischer, S., Ghosh, N.C., Grischek, T., Grutzmacher, G., Hamann, E., Nair, I.S., Jampani, M., Mondal, N.C., Monnikhoff, B., Pettenati, M., Rao, S., Sarah, S., Schneider, M., Sklorz, S., Thiery, D. and Zabel, A. (2016) Modeling of natural water treatment systems in India: learning from the Saph Pani case studies, Chapter 14 In Thomas Wintgens, Anders Nätörp, Elango Lakshmanan and Shyam R. Asolekar (Eds.) **Natural Water Treatment Systems for Safe and Sustainable Water Supply in the Indian Context: Saph Pani**, IWA Publishing, UK., Pages: 227-249, ISBN: 978178 0407104
  14. Amarasinghe, M., Sonkamble, S., Jampani, M., Wajihuddin, M., P. Elango, E., Starkl, M., Sarah, S., Fahimuddin, M. and Ahmed, S. (2016) Developing Integrated Management Plans for Natural Treatment Systems in Urbanized Areas - Case studies from Hyderabad and Chennai, Chapter 15 In Thomas Wintgens, Anders Nätörp, Elango Lakshmanan and Shyam R. Asolekar (Eds.) **Natural Water Treatment Systems for Safe and Sustainable Water Supply in the Indian Context: Saph Pani**, IWA Publishing, UK., Pages: 251-264, ISBN: 978178 0407104..
  15. Ahmed, S., Arora, T., Sarah, S., Dar, F.A., Gaur, T.K., Warsi, T. and Raghuvender, P. (2016) Viewing Sub-Surface for an Effective Managed Aquifer Recharge from a Geophysical Perspective, Chapter 18 In Thomas Wintgens, Anders Nätörp, Elango Lakshmanan and Shyam R. Asolekar (Eds.) **Natural Water Treatment Systems for Safe and Sustainable Water Supply in the Indian Context: Saph Pani**, IWA Publishing, UK., Pages: 301-315, ISBN: 978178 0407104.
  16. Boisson, A., Marechal, J.C., Perrin, J., Dewandel, B. and Ahmed, S. (2015) Impact of Vertical Geological Structure and Water Table Depletion on Indian Crystalline Aquifers, In Lollino, G. et al. (eds.), Engineering Geology for Society and Territory - Volume 3, Springer International Pub. Switzerland, Pages 583-588 (Chapter 117).
  17. Sreedevi, P.D. and Ahmed, S. (2015) Public participation in the measuring rainfall provides adequate variability assessment for estimation, In Paliwal, B.S. (Ed.) Global Groundwater Resource and Management, Scientific Publishers (India), Chapter 15, pp: 251-258, ISBN: 978-81-7233-619-6,  
[https://books.google.co.in/books?hl=en&lr=&id=YKMDwAAQBAJ&oi=fnd&pg=PA251&dq=info:IM6muCnF5vEJ:scholar.google.com&ots=6MjxzI2KNe&sig=XKPZnrIvPWPq0t4ns75L\\_tsQqjk&redir\\_esc=y#v=onepage&q&f=false](https://books.google.co.in/books?hl=en&lr=&id=YKMDwAAQBAJ&oi=fnd&pg=PA251&dq=info:IM6muCnF5vEJ:scholar.google.com&ots=6MjxzI2KNe&sig=XKPZnrIvPWPq0t4ns75L_tsQqjk&redir_esc=y#v=onepage&q&f=false)
  18. Syme, G.J., Ratna Reddy, V., Ahmed, S., Rao, K.V., Pevalic, P., Merritt, W. and Chiranjeevi, T. (2014) Analytical Framework, Study Design and Methodology, Chapter 2 In Reddy, VR and Syme, G.J. (Eds.) **Integrated Assessment of Scale Impacts of Watershed Interventions: Assessing Hydro-geological and Bio-physical Influences on Livelihoods**, Elsevier, Pages 24-57.
  19. Sreedevi, P.D., Sarah, S., Alam, F., Ahmed, S., Chandra, S. and Pavelic, P. (2014) Investigating Geophysical and Hydro-geological Variabilities and their Impact on Water Resources in the Context of Meso-Watersheds, Chapter 3 In Reddy, VR and Syme, G.J. (Eds.) **Integrated Assessment of Scale Impacts of Watershed Interventions: Assessing Hydro-geological and Bio-physical Influences on Livelihoods**, Elsevier, Pages 58-84.
  20. Pavelic, P., Xie, J., Sreedevi, P.D., Ahmed, S. and Bernet, D. (2014) Application of Simple Integrated Surface Water and Groundwater Models to Assess meso-scale watershed development, Chapter 4 In Ratna Reddy, V. and Syme, G.J. (Eds.) **Integrated Assessment of Scale Impacts of Watershed Interventions: Assessing Hydro-geological and Bio-physical Influences on Livelihoods**, Elsevier, Pages 85-99.
  21. Rao, K.V., Kranti, P., Sandeep, H., Sreedevi, P.D. and Ahmed S. (2014) Sustainable Watershed Development Methodology, Chapter 6 In Ratna Reddy, V. and Syme, G.J. (Eds.) **Integrated Assessment of Scale Impacts of Watershed Interventions: Assessing Hydro-geological and Bio-physical Influences on Livelihoods**, Elsevier, Pages 149-192.
  22. Ahmed, S., Sarah, S., Nabi, A. and Owais, S. (2010) Performing unbiased groundwater modelling: application of the theory of regionalized variables, Chapter 5, In H. Wheater, S. Mathias and Xin Li (eds.) **"Groundwater Modelling for Arid and Semi-arid areas"**, Cambridge University Press, pages:63-74.

23. Sreedevi, P.D. and Ahmed, S. (2009) Public participation in measuring the rainfall provides adequate variability assessment for estimation, *In* Paliwal B.S. (Ed.) "Global groundwater resources and management", Selected papers from the **33<sup>rd</sup> International Geological Congress, Oslo, Norway**, Chapter 15, pages 251-258.
24. Ahmed, S., (2008) Groundwater Monitoring Network Design in Granitic Aquifers in Semi-Arid Region: Applications of Geostatistics with a few case studies, *In* Das S. (ed.) "Drinking Water and Food Security in Hard Rock Areas of India", **Golden Jubilee Volume, Geological Society of India**, Chapter 2, pages 11-28.
25. Ahmed, S., J.C. Maréchal, E. Ledoux and G. de Marsily (2008) Groundwater Flow Modelling in Hard-Rock Terrain in Semi-Arid Areas: Experience from India, *In* H. Wheater, S. Sooroshian and KD Sharma (eds.), **Hydrological Modelling in Arid and Semi-Arid Areas**, Chapter XI, Cambridge University Press, Pages 157-190.
26. Ahmed, S., Aadil Nabi, Shazrah Owais and D. Kumar (2007) Optimization of Groundwater Monitoring Networks: Application of Geostatistics with Case Studies from a Granitic Aquifer in a Semi-Arid Region, *In* L. Chery and G. de Marsily (Eds.) **Aquifer systems Management: Darcy's legacy in a world of impending water shortage**, Taylor and Francis, London, Chapter XV, pages 527-540.
27. Maréchal, J.C., B. Dewandel, S. Ahmed and P. Lachassagne (2007) Hard rock aquifers characterization prior to modelling at catchment scale: an application in India, *J. Krasny and M. Sharp (Eds.), Special Issue of IAH Publication SP-04, Springer.*
28. Murthy, P.S.N., Arora, T. and Ahmed, S. (2007) Applying Geostatistics: Basic knowledge and Variographic analysis, *In* Ahmed, S., Jayakumar, R. and Salih, A. (Eds.) **Groundwater Dynamics in Hard Rock Aquifers**, Capital Pub. Co., New Delhi & Springer, p.150-171.
29. Ahmed, S. and Devi, K. (2007) Kriging for Estimating Hydrogeological Parameters, *In* Ahmed, S., Jayakumar, R. and Salih, A. (Eds.) **Groundwater Dynamics in Hard Rock Aquifers**, Capital Pub. Co., New Delhi, p.172-178.
30. Ahmed, S., Kumar, D. and Bhat A.N. (2007) Application of Geostatistics in Optimal Groundwater Monitoring Network Design, *In* Ahmed, S., Jayakumar, R. and Salih, A. (Eds.) **Groundwater Dynamics in Hard Rock Aquifers**, Capital Pub. Co., New Delhi, & Springer p.179-190.
31. Kumar, D. and Ahmed, S. (2007) Reconstruction of Water Level Time Series in an Aquifer Using Geostatistical Techniques, *In* Ahmed, S., Jayakumar, R. and Salih, A. (Eds.) **Groundwater Dynamics in Hard Rock Aquifers**, Capital Pub. Co., New Delhi, & Springer p.191-200.
32. Ahmed, S., and Sreedevi, P.D. (2007) Simulation of Flow in Weathered-Fractured Aquifer in a Semi Arid and Over-Exploited Region, *In* Ahmed, S., Jayakumar, R. and Salih, A. (Eds.) **Groundwater Dynamics in Hard Rock Aquifers**, Capital Pub. Co., New Delhi, & Springer p.219-233.
33. Zaidi, F.K., B. Dewandel, J.M. Gandolfi and S. Ahmed (2007) Water budgeting and construction of Future Scenarios for Prediction and management of groundwater under Stressed Condition, *In* Ahmed, S. Jayakumar, B and Salih, A. (Eds.) **Groundwater Dynamics in Hard Rock Aquifers**, Capital Pub. Co., New Delhi, & Springer p. 142-149.
34. Ahmed, S., B. Dewandel, JM Gandolfi and K. Subrahmanyam (2006) A scientific decision tool for groundwater management: Could artificial recharge alone be a sustainable solution? *In* Salamat, A.R. and Salih A. (eds.) "**Management of Artificial Recharge and Rainwater harvesting**", Proc. of a workshop in Lahore, Pakistan, April 25 to May 2, 2005, **UNESCO** publications, p. 87-119.
35. Ahmed, S., K. Subrahmanyam, P.D. Sreedevi and JM Gandolfi (2006) Artificial Recharge to an over-exploited granitic aquifer through defunct dug-wells, a chapter in Neupane, B, Jayakumar, R., Salamat, A. and Salih, A. (Eds.) "**Management of Aquifer Recharge and Water harvesting in Arid and Semi-arid Regions of Asia**", Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi, p. 189-206 (ISBN 81-204-1678-3).
36. Ahmed, S. (2006) Application of Geostatistics in Hydrosociences, Thangarajan M. (Ed.) '**Groundwater Resource Evaluation, Augmentation, Contamination, Restoration, Modeling and Management**', Capital Pub. Co., & Springer p. 78-111.
37. Ahmed, S. (2004) Application of Geostatistics: Parameter Estimation to Predictive Aquifer Modeling, Rai S.N. (Ed.) '**Role of Mathematical Modeling in Groundwater Resource Management**', NGRI Publication, p. 357-381.

38. Sreedevi, P.D. and S. Ahmed (2003) Assessment of groundwater quality and climatic water balance studies in Pageru river basin, Andhra Pradesh, India. In 'Water Resources Systems-Global changes, Risk assessment and Water Management', **IAHS, publications** 280, p: 205-212.
39. Ahmed, S. and PD Sreedevi (2003) Cyclic variation of fluoride contents with time in a granitic aquifer in semi-arid region, Sherif MM, Singh VP and Al-Rashed M (eds.) **Hydrology and Water Resources** Vol. 5 p:199-210, **Balkema** publishers.
40. Ahmed, S. (2002) Groundwater Monitoring Network Design: Applications of Geostatistics With A Few Case Studies from A Granitic Aquifer from semi-arid region, In A Semi-Arid Region, In Sherif M.M. et al (eds.) "**Groundwater Hydrology**", Volume 2, p. 37-57, A.A. **Balkema** Publishers, 2002.
41. Ahmed, S. (2001) Regionalization of aquifer parameters for groundwater modeling including monitoring network design, In Elango, L. & Jayakumar, R. (eds.), "**Modeling in hydrogeology**", Allied Publishers Limited, India, p. 39-57.
42. Ahmed, S. and V. Agnihotri (2000) Geostatistical techniques applied to Groundwater Hydrology, A chapter in Pandalai, H.S. and Saraswati, P.K. (eds.) **Geological Data Analysis: Statistical Methods**, Hindustan Publishing Company, New Delhi, p. 194-209.
43. Ahmed, S. (1998) Geostatistical Solution of Inverse Problem in Groundwater Hydrology using prior information, In Indira N.K. and Gupta P.K. (eds.) **Inverse Methods**, **Narosa Publishing House**, New Delhi, p. 169-180.
44. Ahmed S., de Marsily G. (1989) Co-Kriged Estimates of Transmissivities Using Jointly Water Level Data. In: Armstrong M. (eds) Geostatistics. Quantitative Geology and Geostatistics, vol 4:615-628. Springer, Dordrecht. [https://doi.org/10.1007/978-94-015-6844-9\\_48](https://doi.org/10.1007/978-94-015-6844-9_48)

## Publications in SCI and high impact International Journals

(>150 Published & several at various stages):

### 2024

1. Paswan, A.K., Tiwari, V.M. and Ahmed, S. (2024) Unveiling hydrological shifts under projected climate change in highly irrigated semi-arid state of Telangana, India, under review, *Earth Systems and Environment*.
2. Paswan, A.K., Tiwari, V.M., Agarwal, A., Asoka, A., Rangarajan, R. and Ahmed S. (2024) Long-term spatiotemporal variation in groundwater recharge in the highly irrigated semi-arid region of India: The intertwined relationship between climate variability and anthropogenic activities, Accepted, **Groundwater for Sustainable Development** (IF:5.9) *Vol. 25, art. no. 101148*

### 2023

3. Beja, S.K., Raza, W., Ahmed, S., Banarjee, B. and Ahmad, S.M (2023) High resolution oxygen and carbon isotopic records of a modern and a fossil coral from the Lakshadweep Archipelago, accepted, **Jr of Geol. Soc. India** (IF:1.459)
4. Talukdar, S., Shahfahad, Ahmed, S., Naikoo, M.W., Rahman, A., Malik, S., Ningthoujam, S., Bera, S. and Ramana, G.V. (2023) Predicting Lake water quality index with sensitivity-uncertainty analysis using deep learning algorithms, **Journal of Cleaner Production** (IF=11.2), Vol. 406, June 2023, 136885, <https://doi.org/10.1016/j.jclepro.2023.136885>.
5. Alam, Hina, Fatima, M. and Ahmed, S. (2023) Effect of Lake Water Contamination on Hematological Parameters of Fish, Nile Tilapia (*Oreochromis Niloticus*) from five Different Lakes of Hyderabad City, **BioGecko**, Vol. 12(3):4110-4121.
6. Alam, Hina and Ahmed, S. (2023) Assessment of Water Quality in Shamirpet Lake, Hyderabad, **Corrosion and Protection**, Vol. 51(1):383-401.
7. Biswas, G., Arshad, M., Saba, Naseemus, Arora, T., and Ahmed, S. (2023) Hydrogeochemical Investigation and Groundwater Quality Assessment towards 'smart city' Planning in Coastal Aquifer, India, **Water Practice & Technology** Vol 18 No 1, 168 doi: 10.2166/wpt.2022.168

8. Ishita Afreen Ahmed, M.A; Swapan Talukdar, Mohd Waseem Naikoo, M.A; Shahfahad ., Ayesha Parvez, Swades Pal, S. Ahmed, Abu Reza Md Towfiqul Islam, Amir Mosavi and Atiqur Rahman (2023) A new framework to identify most suitable priority areas for soil-water conservation using coupling mechanism in Guwahati urban watershed, India, with future insight, **Journal of Cleaner Production (IF=11.2)**, [Volume 382](#), January 2023, 135363.
9. Arora, Tanvi; Satish Kumar; Rehmat Khan; D. Jalander and S. Ahmed (2022) Contribution of Electrical imaging to decode the potential aquifer locations for water security in semiarid Niger, Africa, **Geosystems and Geoenvironment**, Volume 2(2), May 2023, 100072 <https://doi.org/10.1016/j.geogeo.2022.100072>.

## 2022

10. Roy, S.S., Rahman, A., Ahmed, S., Shahfahad and Ahmad, I.(2022) Long-term Trends of Groundwater at the Local Level in Mumbai, India, **Groundwater for Sustainable Development**, Volume 18, August 2022, 100797, <https://doi.org/10.1016/j.gsd.2022.100797>
11. Debas, J, Sarah, S., Mondal, N.C. and Ahmed, S. (2022) Geostatistical spatial projection of geophysical parameters for practical aquifer mapping. **Nature Sci Rep 12**, 4641 (2022). <https://doi.org/10.1038/s41598-022-08494-5>, (IF4.379).
12. Arshad, M., Sarah S., Chatterjee, A., Kumar, A.V. and Ahmed, S. (2022) Integrated approach to delineate sites for implementation of Managed Aquifer Recharge (MAR) structures in fluoridated crystalline aquifer of South India, *J Earth Syst Sci* **131**, 67 (2022). <https://doi.org/10.1007/s12040-022-01824-1>, (IF=1.423)

## 2021

13. Chandra, S., Tiwari, V. M., Vidyasagar, M., Raju, K. B., Choudhury, J., Lohithkumar, K., et al. (2021). Airborne electromagnetic signatures of an ancient river in the water-stressed Ganga Plain, Prayagraj, India: A potential groundwater Repository. *Geophysical Research Letters*, 48, e2021GL096100. <https://doi.org/10.1029/2021GL096100> (IF=5.576)
14. Sarah, S. Waseem Shah and Ahmed, S. (2021) Modeling and comparing streamflow simulations in two different montane watersheds of Western Himalayas, **Groundwater for Sustainable Development**, Vol 15, No. 100689, (IF=1.075), <https://doi.org/10.1016/j.gsd.2021.100689>.
15. Baig, M.R.I., Shahfahad, Naikoo, M.W., Ansari, A.H., Ahmed, S. and Rahman A. (2022) Spatio-temporal analysis of precipitation pattern and trend using standardized precipitation index and Mann–Kendall test in coastal Andhra Pradesh. **Model. Earth Syst. Environ. Vol.8(1) (IS/IF=4.27)**. <https://doi.org/10.1007/s40808-021-01262-w>.
16. Dar, F.A.; Jeelani, Gh.; Perrin, J. and Ahmed, S. (2021) Groundwater recharge in semi-arid karst context using chloride and stable water Isotopes, **Groundwater for Sustainable Development (IF=1.075)**, Volume 14, August 2021, 100634, <https://doi.org/10.1016/j.gsd.2021.100634>.
17. Ahmed, I.A.; Shahfahad, M.A.; Baig, M.R.I.; Tayyab, M.; Asghar, S.; Ahmed, S.; and Rahman, A. (2021) Lake Water Volume Calculation using Time Series LANDSAT Satellite Data: A Geospatial Analysis of Deepor Beel Lake, Guwahati, **Frontiers in Engineering and Built Environment (IF=1.897)**, Vol. 1 No. 1, 2021, pp. 107-130, DOI [10.1108/FEBE-02-2021-0009](https://doi.org/10.1108/FEBE-02-2021-0009)
18. Sarah, S.; Ahmed, S.; Viollete, S. and Marsily G. de (2021) Groundwater sustainability challenges revealed by quantification of contaminated groundwater volume and aquifer depletion in hardrock aquifer systems, **Jour. of Hydrology (IF=5.722)**, Volume 597, June 2021, 126286, <https://doi.org/10.1016/j.jhydrol.2021.126286>.
19. Fauzia, Surinaidu, L., Rahman, A. *et al.* Distributed groundwater recharge potentials assessment based on GIS model and its dynamics in the crystalline rocks of South India. **Nature Sci Rep 11**, 11772 (2021). <https://doi.org/10.1038/s41598-021-90898-w>.
20. Arora, T., Warsi, T., Dar, F.A., Ahmed, S. (2021) Electrical imaging of karst terrene for managed aquifer recharge: A case study from Raipur, central India. *J Earth Syst Sci* 130, 14. <https://doi.org/10.1007/s12040-020-01514-w> (IF=1.423)



21. Arora, T. and Ahmed, S. (2021) Contribution of geoelectric parameters to investigate the hydraulic characteristics of an aquifer in hard rock terrain, *Serie Correlación Geológica* - 36 (1-2): 53 – 64, <http://www.insugeo.org.ar/scq/ver-articulo.php?id=523> (IF/IS=0.5)

## 2020

22. Roy, S.S., Rahman, A., Ahmed, S., Shahfahad and Ahmad, I. (2020) Alarming groundwater depletion in the Delhi Metropolitan Region: a long-term assessment, *Jour. of Environmental Monitoring and Assessment* (IF=1.959), Vol. 192:620, <https://doi.org/10.1007/s10661-020-08585-8>
23. Everard, M. Ahmed, S., Gagnon, A., Kumar, P., Thomas, T., Sinha, S., Dixon, H. and Sarkar, S. (2020) Can nature based solution contribute to Water security in Bhopal?, *Science of the Total Environment*, Vol. 723:138061 (IF=7.963), <https://doi.org/10.1016/j.scitotenv.2020.138061>.
24. Warsi, T., Kumar, V. Satish, Kumar, D., Nandan, M.J., Biswas, G., Kumar, D., Manikyamba, C., Vinodarao, T., Rangarajan, R., Ahmed, S. and Chandrasekhar, V. (2020) Integration of geophysics and petrography for identifying the aquifer and the rock type: a case study from Giddalur, Andhra Pradesh, India, *Jour. Earth System. Sci.* (IF=1.104), 129(44), <https://doi.org/10.1007/s12040-019-1321-4>.
25. Kumar, A., Mondal, N.C. and Ahmed, S. (2020) Identification of Groundwater Potential Zones Using RS, GIS and AHP Techniques: A Case Study in a Part of Deccan Volcanic Province (DVP), Maharashtra, India, *Jour. Indian Society of Remote Sensing* (IF=0.869), Vol. 48(3): 497-511, <https://doi.org/10.1007/s12524-019-01086-3>.
26. Chandra, S., Jacobsen, B.H., Christensen, N.B. Ahmed, S. and Verma, S.K. (2019) Multiparametric coupling and constrained interpolation to improve natural recharge estimation. *J Earth Syst Sci* 129, 8. <https://doi.org/10.1007/s12040-019-1253-z>.

## 2019

27. Sonekamble, S., R. Rangarajan, R. Rajkumar, Taufique Warsi, T. Sambasivarao, S. Ahmed (2019) Appraising hydro-dynamics of alluvial aquifers from Indo-Gangetic Plains, *Jour. Geol. Soc. of India* (IF=0.994), Vol. 94(5): 464-470.
28. Chandra, S., Choudhury, J., Maurya, P.K., Ahmed, S., Auken, S. and Verma, S.K. (2019) Geological significance of delineating paleochannels with AEM, *Journal of Exploration Geophysics* (IF=1.116), Volume 51, Pages 74-83, <https://doi.org/10.1080/08123985.2019.1646098>
29. Mizan, S.A., Dewandel, B., Selles, A., Ahmed, S. and Caballero, Y. (2019) Development of simple groundwater balance tool to evaluate the specific yield and the 2-D recharge: Application to a deeply weathered crystalline aquifer in southern India, *Hydrogeology Journal* (IF=2.401), <https://doi.org/10.1007/s10040-019-02026-8>.
30. Mizan, S.A., Ahmed, S. and Selles, A. (2019) Spatial estimation of groundwater storage from 2-D specific yield in the crystalline aquifer of Maheshwaram watershed, South India, *Jour. Earth System Science* (IF=1.104), Vol. 128-185, doi: 10.1007/s12040-019-1218-2
31. Nicolas, M., Bour, O., Selles, A., Dewandel, B., Bailly-Comte, V., Chandra, S., Ahmed, S. and Marechal, J.C. (2019) Managed Aquifer Recharge in fractured crystalline rock aquifers: impact of horizontal preferential flow on recharge dynamics, *Journal of Hydrology* (IF=4.405), Volume 573, June 2019, Pages 717-732, <https://doi.org/10.1016/j.jhydrol.2019.04.003>
32. Sonkamble, S., S. Ashalata, M. Jampani, S. Ahmed and P. Amarasinghe (2019) Hydrogeophysical characterization and performance evaluation of natural wetlands in semi-arid waste water irrigated landscape, *Water Research* (IF=9.130), 148 (2019):176-187.
33. Chandra, S., Esben, A., Maurya, P.K., Ahmed, S. and Verma, S.K. (2019) Large scale mapping of fractures and groundwater pathways in crystalline hardrock by AEM, *Scientific Report, Nature.com*, 9:398, (IF=4.011), Doi: 10.1038/s41598-018-36153-1.

## 2018

34. Sreedevi, P.D., Sreekanth, P.D., Ahmed, S. and Reddy, D.V. (2018) Evaluation of groundwater quality for irrigation in a semi-arid region of South India, **Sustainable Water Resources Management**, Vol 5(3):1043-1056. <https://doi.org/10.1007/s40899-018-0279-8>,
35. Marechal, J.C., Selles, A., Dewandel, B., Boisson, A., Perrin, J. and Ahmed, S. (2018) An observatory of Groundwater in Crystalline rock aquifers exposed to a changing environment, Hyderabad, India. **Vadose Zone Journal**, Special Section: Hydrological Observations, <https://doi.org/10.2136/vzj2018.04.0076>, (IF=0.78).
36. Rashid, M. and S. Ahmed (2018) Appraisal of the groundwater balance components from multi-remote sensing datasets in a semi-arid region, **Environ. Monitoring and Assessment**, Vol 190(11):681, DOI: 10.1007/s10661-018-7067-7
37. Mondal N.C., Adike, S. and Ahmed, S. (2018) Development of Entropy-based model for pollution risk assessment of hydrogeological system, **Arabian Jour. of Geosciences**, Springer Berlin Heidelberg, Vol 11:375 p:1-15, <https://doi.org/10.1007/s12517-018-3721-1>
38. Sreedevi, P.D., Sreekanth, P.D., Ahmed, S. and Reddy, D.V. (2018) Appraisal of Groundwater Quality in a crystalline Aquifer: A chemometric approach, **Arabian Journal of Geoscience**, Vol. 11:211, doi.org/10.1007/s12517-018-3480-z.
39. Jampani, M. Huelsmann, S., Roudolft, L., Sonkamble, S., Ahmed, S. and Amarasinghe, P. (2018) Spatio-temporal Distribution and Chemical Characterization of Groundwater Quality of a Wastewater Irrigated System: A Case Study, **Science of the Total Environment**, Vol. 636, 15 September 2018, Pages 1089-1098.
40. Sonkamble, S., Wajihuddin, Md., Jampani, M., Sarah, S., Somvanshi, V.K., Ahmed, S., Amarashinghe, P., and Boisson, A. (2018) Natural treatment system (NTS) models for wastewater management: A study from Hyderabad, India. **Water Science and Technology**, Jan 2018, 77 (2) 479-492; DOI: 10.2166/wst.2017.565, (IF 1.197).
41. Chatterjee, R., Jain, A.K., Chandra, S., Tomar, V. Parchure, P.K. and Ahmed, S. (2018) Mapping and management of aquifers suffering from over-exploitation of groundwater resources in Baswa-Bandikui watershed, Rajasthan, India, **Jr. Envi. Earth Sciences**, 77, 157, <https://doi.org/10.1007/s12665-018-7257-1>

## 2017

42. Chatterjee, A., Sarah, S., Sreedevi, P. D., Selles, A., & Ahmed, S. (2017). Demarcation of fluoride vulnerability zones in granitic aquifer, semi-arid region, Telangana, India. **Arabian Journal of Geosciences**, Vol. 10:558, <https://doi.org/10.1007/s12517-017-3334-0>
43. Ferrant, S., Selles, A., Le Page, M., Herrault, P.A., Pelletier, C., Al-Bitar, A., Mermoz, S., Gascoin, S., Bouvet, A., Saqalli, M., Dewandel, B., Caballero, B., Ahmed, S., Maréchal, J.C. and Kerr, Y. (2017) Detection of irrigated crops from Sentinel-1 and Sentinel-2 data to estimate seasonal groundwater use in South India, **Remote Sensing**, (IF 3.54), Vol9(11):1119, <https://doi.org/10.3390/rs9111119>
44. Rashid, M., Lo, M.-H., Ahmed, S. (2017) Integrated multi-parameter approach for delineating groundwater potential zones in a crystalline aquifer of southern India, **Arabian Jour. of Geosciences**, Vol 10(22): 489, doi.org/10.1007/s12517-017-3288-2.
45. Guiheneuf, N., O. Bour, A. Boisson, T. Leborgne, M. W. Becker, B. Nigon, M. Wajiduddin, S. Ahmed and J.C. Marechal (2017) Insights about transport mechanisms and fracture flow channeling from multi-scale observations of tracer dispersion in shallow fractured crystalline rock, **Journal of Contaminant Hydrology**, Vol 206:18-33, <https://doi.org/10.1016/j.jconhyd.2017.09.003>.
46. Dar, F.A., Ganai, J.A., Ahmed, S. and Satyanarayanan, M. (2017) Groundwater Trace Element Chemistry of the Karstified limestone of Andhra Pradesh, India, **Environmental Earth Sciences**, Vol. 76(20):673, <https://doi.org/10.1007/s12665-017-6972-3>
47. Nagaiah, E., Sonkamble, S., Mondal, N.C. and Ahmed, S. (2017) Natural zeolites enhance groundwater quality: evidences from Deccan basalts in India, **Environmental Earth Sciences**, 76:536, <https://doi.org/10.1007/s12665-017-6873-5>

48. Choudhury, J., Lohit Kumar, L., Nagaiah, E., Sonkamble, S, Ahmed, S. and Kumar V. (2017) Vertical Electrical sounding to delineate the potential aquifer zones for drinking water in Niamey city, Niger, Africa, **J. Earth Syst. Sci.**, Vol. 126:91, doi:10.1007/s12040-017-0860-9.
49. Mondal, N.C., Adike, S., Singh, V.S., Ahmed, S. and Jayakumar, K.V. (2017). Determining shallow aquifer vulnerability by the DRASTIC method and hydrochemistry in granitic terrain, Southern India. **J. of Earth Syst. Sci.** (Online, **IF= 0.858**).
50. Sreedevi P.D., Ahmed, S. and D.V. Reddy (2017). Mechanism of Fluoride and Nitrate Enrichment in Hard-rock Aquifers in Gooty Mandal, South India. **Environmental Processes**. 4:625-644.
51. Mizan, S.A., Chatterjee, A., Ahmed, S. (2017) Arsenic enrichment in groundwater in southern flood plain of Ganga-Son interfluves, **Arabian Journal of Geosciences**, 10:100. <https://doi.org/10.1007/s12517-017-2880-9>

## 2016

52. Arora, T., Boisson, A. and Ahmed, S. (2016) Non-intrusive hydro-geophysical characterization of the unsaturated zone of South India-A case study, **Journal of African Earth Sciences**, Vol. 122: 88-97, <https://doi.org/10.1016/j.jafrearsci.2016.04.021>
53. Chandra S, Ahmed S., Auken E., Pedersen J.B., Singh A., Verma S.K., (2016) 3D aquifer mapping employing airborne geophysics to meet India's water future. **The Leading Edge** 35 (9), 770-774, <http://dx.doi.org/10.1190/tle35090770.1>
54. Saba, Naseem-us, Umar, R. and Ahmed, S. (2016) Assessment of Groundwater quality of major industrial city of central Ganga Plain, Western Uttar Pradesh, India through mass transport modeling using chloride as contaminant, **Groundwater for Sustainable Development**, Vol. 2-3(2016):154-168.
55. Chandra, S., Nagaiah, E., Veerababu, N., Mondal, N.C., Somvanshi, V.K. and Ahmed, S. (2016). Advanced geophysical investigation including Heliborne TEM in high-resolution aquifer mapping with special emphasis to crystalline hard rocks. **Journal of The Geological Society of India**, August 29, 2016, Springer Publisher, Special Volume on Integrated and Sustainable Water Management: Science & Technology (Editors: Subhajyoti Das & R.H. Sawkar), Vol.5, pp. 87-96, DOI: [10.17491/cgsi/2016/95954](https://doi.org/10.17491/cgsi/2016/95954) (**IF=0.60**).
56. Mondal, N.C., Tiwari, K.K., Sharma, K.C. and Ahmed, S. (2016). A diagnosis of groundwater quality from a semiarid region in Rajasthan, India. **Arabian Journal of Geosciences**, Vol. 9:602, DOI: 10.1007/s12517-016-2619-z (**IF=1.224**).
57. Mondal, N.C., Bhuvaneshwari Devi, A., Anand Raj, P., Ahmed, S. and Jayakumar, K.V. (2016). Estimation of aquifer parameters from surficial resistivity measurement in granitic area in Tamil Nadu. **Current Science**, August 10, 2016, vol. 111, no.3, 524-534, doi: 10.18520/cs/v111/i3/524-534, (**IF=0.926**).
58. Sonkamble, S., Chandra, S., Somvanshi, V.K. and Ahmed, S. (2016). Hydro-geophysical techniques for safe exploitation of the freshwater resources in coastal area. **Environmental Earth Sciences**, 75(4); 279:1-11, (IF: 1.765).
59. Dar, F.A., Arora, T. Warsi, T. Devi, A.R. Wajihuddin, M. Grutzamer, G. Bodhankar, N. Ahmed, S. (2016) 3-D Hydrogeological Model of Limestone Aquifer for Managed Aquifer Recharge in Raipur of Central India. **Carbonates and Evaporites**, DOI 10.1007/s13146-016-0304-7.
60. Alazard, M., Boisson, A., Marechal, J.C., Perrin, J., Dewandel, B., Schwarz, T., Pettenati, M., Picot-Colbeaux, G., Kloppman, W. and Ahmed, S. (2016) Investigation of recharge dynamics and flow paths in a fractured crystalline aquifer in semi-arid India using borehole logs: implication for managed aquifer recharge, **Hydrogeology Journal**, Vol. 24(1):35-57. DOI 10.1007/s10040-015-1323-5.

## 2015

61. Dar, F.A., Rangarajan, R., Muralidharan, D. and Ahmed, S. (2015) Recharge rate in carbonate rock covered watershed in Kurnool Dist., Andhra Pradesh, India using tritium injection and soil water balance methods, **Jour. Indian Geophysical Union**, Vol. 19(4):401-413.

62. Mondal, NC and Ahmed, S. (2015) Landscape entropy approach to demarcate pathways for oozing of water in a desert area in India, **Current Science**, Vol. 109 (1):148-157, July 10, 2015.
63. Bhaskar Rao, Y.J., Ahmed, S., Gahalaut, V., Kumar A. and Ravi Kumar, M. (2015) CSIR-National Geophysical Research Institute during the year 2014, **Current Science**, Vol. 108(11):2010-2013, June10, 2015.
64. Ghosh, N.C., Kumar, S., Grützmacher, G., Ahmed, S., Singh, S., Sprenger, C., Singh, R.P., Das, B., and Arora, T. (2015) Semi-analytical model for estimation of unsteady seepage from a large water body influenced by variable flows, **Water Resour. Management**, Vol. 29(9):3111-3129. DOI 10.1007/s11269-015-0985-z
65. Boisson, A.,D. Villesseche, M. Baisset, J. Perrin, M. Viossanges,S. Chandra, B. Dewandel,G. Picot-Colbeaux, R. Rangarajan, J. C. Maréchal, S. Ahmed (2015). Questioning the impact and sustainability of percolation tanks as aquifer recharge structures in semi-arid crystalline context, **Environmental Earth Sciences**, Volume 73(12):7711–7721(IF=1.765).
66. Pauwels H., Négrel P., Dewandel B., Perrin J., Mascré C., Roy S. and Ahmed S. (2015) Hydrochemical Borehole Loggings for Characterizing Fluoride Contamination in A Heterogenous Aquifer (Maheshwaram, India), **Jour. of Hydrol**, 525:302-312.
67. Hallett, B.M., H.A. Dharmagunawardhane, S. Atal, E. Valsami-Jones, S. Ahmed and W.G. Burgess (2015) Mineralogical sources of groundwater fluoride in Archean bedrock/regolith aquifers: Mass balances from southern India and north-central Sri Lanka, **Journal of Hydrology: Regional Studies**, Vol. 4 (Part A): 111-130, [doi:10.1016/j.ejrh.2014.10.003](https://doi.org/10.1016/j.ejrh.2014.10.003)
68. Boisson, A., N. Guiheneuf, J. Perrin, O. Bour, B. Dewandel, A. Dausse, M. Viossanges, S. Ahmed and J.C. Marechal (2015), Determining the vertical evolution of hydrodynamic parameters in weathered and fractured South Indian crystalline-rock aquifers: insights from a study on an instrumented site, **Hydrogeology Journal**, Vol. 23(4):757-773, DOI 10.1007/s10040-014-1226-x.
69. Chandra, S. Boission, A., Ahmed, S. (2015). Quantitative characterization to construct hard rock lithological model using dual resistivity borehole logging. **Arabian Journal of Geosciences**, June 2015, Volume 8(6):3685–3696(IF=1.224)
70. Starkl M, Brunner N, Amarasinghe P, Mahesh J, Kumar D, Asolekar SR, Sonkamble S, Ahmed S, Wajihuddin M, Pratyusha A, Sarah S (2015) Stakeholder Views, Financing and Policy Implications for Reuse of Wastewater for Irrigation: A Case from Hyderabad, India. **Water**; 7(1):300-328, doi:[10.3390/w7010300](https://doi.org/10.3390/w7010300)
71. Dar, Farooq A., Jerome Perrin, S. Ahmed, A.C. Narayana and J. Riotte (2015) Hydrogeochemical characteristics of Karst Aquifer from a semi-arid region of Southern India and impact of rainfall recharge on groundwater chemistry, **Arab. Jour. of Geosciences**, Volume 8(5):2739-2750, DOI 10.1007/s12517-014-1440-9.
72. Mondal, N.C. and Ahmed, S. (2015). Dar-Zarrouk parameters for deducing shallow fresh groundwater zones in a tannery belt, Tamilnadu, India. **Journal of Geophysics**, October 2015, Vol. XXXVI, No. 4, pp. 175-185.

## 2014

73. Khan, Haris H., Arina Khan, P.D. Sreedevi, S. Ahmed (2014) Mapping potential infiltration patterns using digital elevation models, **Journal of Geographic Information System (JGIS)**, Vol.6(4):345-357, DOI: [10.4236/jgis.2014.64031](https://doi.org/10.4236/jgis.2014.64031).
74. Wakode, H., Baier, K., Jha, R., Ahmed, S., Azzam, R. (2014): Assessment of Impact of Urbanization on Groundwater Resources using GIS Techniques – Case Study of Hyderabad, India. **Intern. J. Environ. Res.**, 8(4):1145-1158, doi [10.22059/IJER.2014.808](https://doi.org/10.22059/IJER.2014.808).
75. Ahmed, S. A new chapter in groundwater geophysics in India: 3D Aquifer Mapping through heliborne transient Electromagnetic Investigations (2014), **Geol. Soc. of India**, News and Notes: Vol. 84(4):501-503.
76. Boisson, A., Baisset, M., Alazard, M., Perrin, J., Villesseche, D., Dewandel, B., Kloppmann, W., Chandra, S., Picot-Colbeaux, G., Sarah, S., Ahmed, S., Maréchal, JC (2014) Comparison of surface and groundwater balance approaches in the evaluation of managed aquifer

- recharge structures: Case of a percolation tank in a crystalline aquifer in India, **Journal of Hydrology**, Vol 519:1620-1633.
77. Sarah, S., Ahmed, S., Boisson, A., Violette, S. and Marsily, G. de (2014) Projected groundwater balance as a state indicator for addressing sustainability and management challenges of overexploited crystalline aquifers, **Journal of Hydrology**, Vol 519:1409-1422, <https://doi.org/10.1016/j.jhydrol.2014.09.016>
  78. Rangarajan, R., D. Muralidharan, S. Chandra, D.V. Reddy, R. Andrade and S. Ahmed (2014) Time lapse tracer and SP measurements to characterize the hydrodynamics of fractured granite aquifer: A case study, **Jour. Geol. Soc. of India**, Vol 83(6):681-687.
  79. Pettenati, M., Picot-Colbeaux, G., Thiéry, D., Boisson, A., Alazard, M., Jerome, P., Dewandel, B., Marechal, J.C., Ahmed, S. and Wolfram, K (2014) Water quality evaluation during managed aquifer recharge (MAR) in Indian crystalline basement aquifers: reactive transport modeling in the critical zone, **Procedia Earth and Planetary Science** (GES-10), 10, Pages 82-87.
  80. Dar, Farooq A., Perrin, J., Ahmed, S. and Narayana, A.C. (2014) Review: Carbonate aquifers and future perspectives of karst hydrogeology in India, *Hydrogeol J*, 22: 1493. <https://doi.org/10.1007/s10040-014-1151-z>
  81. Massuel, S., J Perrin, C Mascré, W Mohamed, A Boisson, S Ahmed (2014) Managed aquifer recharge in South India: What to expect from small percolation tanks in hard rock?, **Journal of Hydrology**, 512:157-167.
  82. Boisson, A., D. Villesseche, M. Baisset, J. Perrin, M. Viossanges, W. Kloppmann, S. Chandra, B. Dewandel, G. Picot-Colbeaux, R. Rangarajan, J. C. Marechal, S. Ahmed (2014), Questioning the impact and sustainability of percolation tanks as aquifer recharge structures in semi-arid crystalline context, **Environmental Earth Sciences**, DOI 10.1007/s12665-014-3229-2.
  83. Sonkamble, S., Chandra S., Nagaiah, E., Dar, F.A., Somvanshi, V.K. & Ahmed, S. (2014) Geophysical signatures resolving hydrogeological complexities over hard rock terrain-a study from Southern India, **Arabian Journal of Geosciences**, Vol. 7(6):2249-2256, DOI 10.1007/s12517-013-0931-4
  84. Guihéneuf, N., A Boisson, O Bour, B Dewandel, J Perrin, A Dausse, Viossanges M., Chandra, S., Ahmed, S. and Maréchal J.C., (2014) Groundwater flows in weathered crystalline rocks: Impact of piezometric variations and depth-dependent fracture connectivity, **Journal of Hydrology**, 511, 320-334, doi:10.1016/j.jhydrol.2014.01.061
  85. Ferrant, S., Y Caballero, J Perrin, S Gascoïn, B Dewandel, S Aulong, F. Dazin, S. Ahmed, JC Marechal (2014) Projected impacts of climate change on farmers' extraction of groundwater from crystalline aquifers in South India, **Scientific reports**, 4: 3697, [www.nature.com](http://www.nature.com) 10.1038/srep03697
  86. Sonkamble, S. H Agre, P Madhnure, S Chandra, S Ahmed (2014) Hydrochemistry deducing basaltic trap thickness for groundwater resource mapping along the Deccan Volcanic Province (DVP) margin in India, **Environmental Earth Science**, 71(5):2319-2332, DOI 10.1007/s12665-013-2633-3.
  87. Sonkamble, S., S Chandra, S Ahmed, R Rangarajan (2014) Source speciation resolving hydrochemical complexity of coastal aquifers, **Marine pollution bulletin**, 78 (1), 118-129.

## 2013

88. Pauwels, H., L Aquilina, P Negrel, O Bour, J Perrin, S Ahmed (2013) Groundwater Salinization in Hard-Rock Aquifers: Impact of Pumping and Vertical Transfers, **Procedia Earth and Planetary Science**, 7, 660-664.
89. Pettenati, M., J. Perrin, H. Pauwels and S. Ahmed (2013) Simulating fluoride evolution in ground water using a reactive multicomponent transient transport model: Application to a crystalline aquifer of Southern India, **Applied Geochemistry**, Vol. 29:102-116.
90. Purshotham D., Rashid, M., Lone, M.A., Narasing Rao, A., Ahmed, S. Nagaiah, E. and Dar, F.A. (2013) Environmental impact assessment of air and heavy metal concentration in groundwater of Maheshwaram watershed, RR Dist., A.P., India, **Jour of Geol. Soc. of India**, 81(3):385-396.

91. Mondal, NC, V. P. Singh and S. Ahmed (2013) Delineating Shallow saline groundwater zones from Southern India using geophysical indicator, **Jour. of Environ. Monitoring Assessment**, 185(6):4869-4886, DOI10.1007/s10661-012-2909-1.
92. Sreedevi, P.D., P.D. Sreekanth, H.H. Khan and S. Ahmed (2013) Drainage morphometry and its influence on hydrology in a semi-arid region: using SRTM data and GIS, **Environ. Earth Sciences**, 70(2):839-848 , DOI 10.1007/ s12665-012-2172-3

## 2012

93. Sreedevi, P.D., Sreekanth, P.D. and Ahmed, S. (2012) Predicting Groundwater Level Using the soft computing tool: An approach for Precision Enhancement, **Environmental Engineering Research**, Vol 17(S1): S69-S74, <http://dx.doi.org/10.4491/eer.2012.17.S1.S6>. [IF=3.932]
94. Croke, B., N. Herron, P. Pavelic, S. Ahmed, V. R. Reddy, R. Ranjan, G. Syme, M. Samad and K. V. Rao (2012) Impacts of meso-scale Watershed Development in Andhra Pradesh (India) and their implications for designing and implementing improved WSD policies and programs, **Water Practice and Technology**, doi:10.2166/wpt.2012.025.
95. Perrin, J. S. Ferrant, S. Massuel, B. Dewandel, J.C. Maréchal, S. Aulong and S. Ahmed (2012) Assessing water availability in a semi-arid watershed of southern India using a semi-distributed model, **Journal of Hydrology**, Vol. 460–461, p. 143-155.
96. Atal., S., Négrel, P., Pauwels, H., Chandra, S. and Ahmed, S. (2012) Zonation of Geogenic and Anthropogenic Fluoride Contamination in Granitic Aquifer: A Case Study from Maheshwaram Watershed, Hyderabad. **Journal of Geological Society of India**. pp.127-143,
97. Dewandel, B., J.C. Maréchal, O. Bour, B. Ladouche, S. Ahmed, S. Chandra, and H. Pauwels (2012) Upscaling and regionalizing hydraulic conductivity and effective porosity at watershed scale in deeply weathered crystalline aquifers, **Jr. of Hydrology**, 416–417: 83–97
98. Alam, F. Rashid Umar, S. Ahmed and F.A. Dar (2012) A new model (DRASTIC-LU) for evaluating groundwater vulnerability in parts of central Ganga Plain, India, **Arabian Jour. of Geosciences**, DOI 10.1007/ s12517-012-0796-y
99. Khan H H, Khan A, Ahmed S. Gennero MC, Minh KD and Cazenave A, (2012) Terrestrial water dynamics in the lower Ganges - estimates from ENVISAT and GRACE, **Arabian Journal of Geosciences**, published online, DOI 10.1007/s12517-012-0629-z.
100. Jeelani, Gh., S. Ahmed and A. Absar (2012) Essential and toxic elements in karst springs of Kashmir, **Current Science**, 103(8):992-994.
101. Purushotham, D., M.A. Lone, M. Rashid, A N. Rao and S. Ahmed (2012) Deciphering heavy metal contamination zones in soils of a granitic terrain of southern India using factor analysis and GIS, **J. Earth Sys. Sci.** 121(4):1059-1070.
102. Chandra, S., E Nagaiah, D V Reddy, V Ananda Rao and S. Ahmed (2012) Exploring deep potential aquifer in water scarce crystalline rocks, **J. Earth Sys. Sci.** 121(6):1455-1468.
103. Chandra, S., Atal, S., Ahmeduddin, M. and Ahmed, S. (2012) Societal application of Geophysic as an aide to rescue operation, **Jour. Geol. Soc. of India**, 79(2):155-160.
104. Mondal, N. C., Singh, V.P. and Ahmed, S. (2012) Entropy-based approach for assessing natural recharge in unconfined aquifers from Southern India. **Water Resources Management**, 26(9): 2715-2732, July 2012, DOI: 10.1007/s11269-012-0042-0 (IF= 2.201).

## 2011

105. Rashid, M., Lone, M.A. and Ahmed, S. (2011) Integrating geospatial and ground geophysical information as guidelines for groundwater potential zones in hard rock terrains of South India, **Environmental Monitoring Assessment**, 184(8):4829-39. doi: 10.1007/s10661-011-2305-2.
106. Dar, Farooq A., Jerome P., Riotte, J., Gebauer, H.D., Narayana, A.C. and Ahmed, S. (2011) Karstification in the Cuddapah Sedimentary Basin, Southern India: Implications for Groundwater Resources, **Acta Carsologica**, 40/3:457-472.
107. Perrin J., Ahmed S., Hunkeler D. (2011) The effects of geological heterogeneities and piezometric fluctuations on groundwater flow and chemistry in a hard-rock aquifer, southern

- India, **Hydrogeology Journal**, 19(6):1189-1201. **The Article has been selected as the Editor's Choice Article of the year 2011.**
108. Sarah, S., Jeelani, Gh. and Ahmed, S. (2011) Assessing variability of water quality in a groundwater fed perennial lake of Kashmir Himalayas using linear Geostatistics, **Journal of Earth System Science**, Vol 120(3):399-411.
  109. Nabi, Aadil, Gallardo, A.H. and Ahmed, S. (2011) Optimization of a groundwater monitoring network for a sustainable development of the Maheshwaram catchment, India, **Sustainability**, 3:396-409 doi:10.3390/su3020396
  110. Chandra, S., Ahmed, S., Nagaiah, E., Singh, S.K. and Chandra, P.C. (2011) Geophysical exploration for lithologic control of arsenic contamination in groundwater in Middle Ganga Plains, India, **International Journal of Physics and Chemistry of Earth**, 36(16):1353 – 1362.
  111. Purshotham, D., A. Narasing Rao, M. Ravi Prakash, S. Ahmed and G. Ashok Babu (2011) Environmental Impact on groundwater of Maheshwaram Watershed, RR dist., Andhra Pradesh, **Jour. of Geol. Soc. of India**, Vol. 77(6):539-548.
  112. Chandra, S., Ahmed, S. and Rangarajan, R. (2011) Lithologically Constrained Rainfall (LCR) method for estimating spatio-temporal recharge distribution in crystalline rocks, **Jr. of Hydrology**, 402 (2011):250–260.
  113. Perrin, J., Mascre C. and Ahmed, S. (2011), Solute recycling: An emerging threat to groundwater resource to southern India? **Jr. of Hydrology**, Vol. 398(1-2):144-154.
  114. Negrel, Ph., Pauwels, H., Dewandel, B., Gandolfi, JM, C. Mascre and Ahmed S. (2011) Understanding Groundwater systems and their functioning through the study of stable water isotopes in hard rock aquifer (Maheshwaram watershed, India), **Jour. of Hydrology**, 397:55-70.
  115. Sreekanth, P.D., Sreedevi, P.D., Ahmed, S. and Geethanjali, N. (2011) Comparison of FFNN and ANFIS models for estimating groundwater levels, **Environmental Earth Sciences**, 62:1301-1310. DOI 10.1007/s 12665-010-0617-0.
  116. Arora, T. and Ahmed, S. (2011) Characterization of Recharge through complex vadose zone of a granitic aquifer by Time-Lapse Electrical Resistivity Tomography, **Jr. Applied Geophysics**, 73: 35-44.
  117. Khan, H.H., A. Khan, S. Ahmed, J. Perrin (2011) GIS based Impact Assessment of Land Use changes on Groundwater Quality: study from a rapidly urbanizing region of South India, **Jr. Environmental Earth Sciences**, 63:1289-1302.
  118. Atal, S., Ph. Négrel, H. Pauwels, C. Mascre & S. Ahmed (2011) Double Correction Technique for Characterizing Ground water Quality Zones: A Case study from Granitic Setting, India, **Water Qual, Expo & Health**, 2:133-146, [IF=1.692]. <https://doi.org/10.1007/s12403-010-0031-6>

## 2010

119. Chandra, S., B. Dewandel, S. Dutta and S. Ahmed (2010) Geophysical model of geological discontinuities in a granitic aquifer; analyzing small scale variability of electrical resistivity for groundwater occurrences, **Jr. of Applied Geophysics**, 71:137-148.
120. Arora, T. and Ahmed, S. (2010) Electrical Structure of an Unsaturated Zone-A Case Study of a granitic aquifer, **Current Science**, 99(2):216-220.
121. Dewandel, B., J. Perrin, S. Ahmed, S. Aulong, Z. Hrkal, P. Lachassagne, M. Samad, S. Massuel (2010) Development of a tool for managing the groundwater resources in semi-arid hard rock regions: Application to a rural watershed in South India. **Hydrological Processes**, 24(19): 2784–2797 DOI: 10.1002/hyp.7696.
122. Kumar, D., Anand Rao, A., Nagaiah, E., Krishnamraju, P., Mallesh, D., Ahmeduddin, M. and Ahmed, S. (2010) Integrated geophysical study to decipher potential groundwater zones and zeolite-bearing zones in deccan traps, **Current Science**, 98(6):803-814.

## 2009

123. Atal, S., Pauwel, H., Gandolfi, J.M. and Ahmed, S., (2009) Fluoride Hydro-geochemistry Studies: A Case Study from Granitic Aquifer System of Maheshwaram, Hyderabad, India, **Earth Science Frontiers**, S1.
124. Krishnamurthy, N.S., Ananda Rao, V., Kumar D., Singh, K.K.K. and Ahmed, S. (2009) Electrical Resistivity Imaging Technique to delineate coal seam barrier thickness and demarcate water filled voids, **Jr. of Geol. Soc. of India**, 73:639-650 [**Awarded HS Pareek Award for best paper published in JGSI in 2009**]
125. Sreekanth, P.D., Geethanjali, N., Sreedevi, P.D. Ahmed, S., Ravi Kumar, N. and Kamala Jayanthi, P.D. (2009). Forecasting groundwater level using artificial neural networks, **Current Science**, 96 (7): 933-939.
126. Sreedevi .P.D, Owais .S, Khan. H.H and Ahmed. S., (2009) Morphometric analysis of a watershed of South India using SRTM data and GIS, **Jr. of Geol. Soc. of India**, 73:543-552.

#### 2008

127. Chandra, S., Ahmed, S., Avadh Ram and B. Dewandel (2008) Estimation of Hard Rock Aquifers Hydraulic Conductivity from Geoelectrical Measurements: A theoretical development with field application, **Journal of Hydrology**, 357:218-227.
128. Dewandel B., JM Gandolfi, D. de Condappa and S. Ahmed (2008) An Efficient Methodology for Estimating Irrigation Return Flow Coefficients of Irrigated Crops at Watershed and Seasonal Scales, **Hydrological Processes**, 22(11):1700-1712.
129. Umar, R., Khan, M.M.A., Ahmed, I., and Ahmed, S. (2008) Implications of Kali-Hindon inter-stream aquifer water balance for groundwater management in western Uttar Pradesh, **J. Earth Syst. Sci.** 117 (1):1-10.

#### 2007

130. Faisal K. Zaidi, S. Ahmed, J.C. Maréchal and B. Dewandel (2007) Optimizing piezometric network in chronic estimation of groundwater budget: A case study from a granitic watershed in South India, **Hydrogeology Journal**, 15(6):1131-1146, DOI 10.1007/s10040-007-0167-z
131. Pauwels, H. and S. Ahmed (2007), Fluoride in groundwater: Origin and health impacts, **Geosciences**, No. 5, March 2007, p. 68-73.
132. Dewandel, B., Gandolfi, J.M., Zaidi, F.K., Ahmed, S. and Subrahmanyam, K. (2007) A decision support tool with variable agroclimatic scenarios for sustainable groundwater management in semi-arid hard-rock areas, **Current Science** Vol. 92(8):1093-1102, doi. 10.1007/s10040-015-1323-5.
133. Kumar, D., S. Ahmed, N.S. Krishnamurthy and Benoit Dewandel (2007) Reducing ambiguities in vertical electrical sounding interpretations: A geostatistical application, **Applied Geophysics**, 62:16-32.

#### 2006

134. Kumar, D. N.S. Krishnamurthy, G. K. Nayak and S. Ahmed (2006) Utility of magnetic data in delineation of groundwater potential zones in hard rock terrain – A case study, **Current Science**, 91(11):1456-1458.
135. Kumar S., D. Kumar and S. Ahmed (2006) Delineation of Groundwater Prospects zones in Hard Rocks using Remote Sensing and GIS- A Case Study from Rajasthan. **Jr. of Geol. Soc. of India**, 68(2):259-268.
136. Maréchal, J.C., Dewandel, B., Ahmed, S., L. Galeazzi and Faisal K. Zaidi (2006), Combined estimation of specific yield and natural recharge in a semi-arid groundwater basin with irrigated agriculture, **Jour. of Hydrology**, 329: 281-293.
137. Chandra, S.; Rao, V.A; Krishnamurthy, N.S.K; Dutta, N and S. Ahmed (2006) Integrated studies for characterization of lineaments to locate the groundwater potential zones in hard rock region of Karnataka, India, **Hydrogeology Journal**, 14(5):767-776.
138. Dutta S., Krishnamurthy, N.S., Arora T., Rao, V.A., S. Ahmed and Baltassat, J.M. (2006) Localization of water bearing fractured zones in a hard rock area using integrated geophysical techniques in Andhra Pradesh, India, **Hydrogeology Journal**, 14(5):760-766.



139. Chandra, S., S. Atal, D.V. Reddy, P. Nagabhushnam, N.S.K. Murthy, K. Subrahmanyam, R. Rangarajan, JVS Murthy, S. Ahmed and V. P. Dimri (2006) Water Sprouting Phenomenon Observed in Parts of Andhra Pradesh – An Explanation, **Jr. of Geol. Soc. of India**, 68(1):157-159.
140. Lachassagne, P., S. Ahmed, B. Dewandel, JM Gandolfi, JC Marechal and R. Wyns (2006) Les Aquifères Fissurés, **Géochronique**, No. 97, March 2006, Pages: 38-41.
141. Ahmed, S. (2006) Comments on “A Geostatistical Approach to resource evaluation of Kalta Iron ore deposit, Sundergarh dist., Orissa” by Sarkar, BC and Indranil Roy published in Jr. Geol Soc. of India 65: 553-561, **Jr. of Geol Soc. of India**, 67 (4): 542-545.
142. Ahmed S. (2006) Comments on “Geostatistical studies of a gold prospects in Sidhi Dist., M.P.” by Saikia K and Sarkar, BC published in Jr. Geol Soc. of India Vol. 66: 229-241, **Jour. Geol Soc. of India**, 67 (4): 549-550.
143. Chandra, S., S. Atal, N.S.K. Murthy, K. Subrahmanyam, R. Rangarajan, D.V. Reddy, P. Nagabhushnam, J.V.S. Murthy, S. Ahmed and V. P. Dimri, (2006) Oozing of water in Parts of Andhra Pradesh, India, **Current Science**, 90(11):1555-1560.
144. Sreedevi, P.D., S. Ahmed, B. Made, E. Ledoux and JM Gandolfi (2006) Association of Hydrogeological factors in temporal variations of fluoride concentration in a crystalline aquifer in India, **Environmental Geology**, 50(1):1-11.
145. Maréchal, J.C., S Ahmed, C Engerrand, L Galeazzi, F Touchard (2006) Threatened groundwater resources in rural India: an example of monitoring, *Asian Journal of Water, Environment and Pollution* 3 (2), 15-21, <https://hal.archives-ouvertes.fr/hal-00462030>

#### 2005

146. Sreedevi, P.D., Subrahmanyam, K. and S. Ahmed (2005) Integrated approach for delineating groundwater potential zones in Pageru river basin, Cudappah District, A.P., India, **Hydrogeology Journal**, 13(3):534-543.
147. Sreedevi, P.D., Subrahmanyam, K. and S. Ahmed (2005) The significance of morphometric analysis for obtaining groundwater potential zones in a structurally controlled terrain, **Environmental Geology**, 47(3):412-420.
148. Lachassagne P, JC Marechal, S. Ahmed, B. Dewandel, JM Gandolfi, NS Krishnamurthy, K. Subrahmanyam and R. Wyns (2005) New tools and methods for managing and protecting hard rock water resources (Nouveaux outils et methods pour gérer et protéger la ressource en eau souterraine des regions de socle), **Hydrosciences**, 25:54-57.

#### 2004

149. Ahmed, S. (2004) Geostatistical Estimation Variance approach to optimizing an air temperature monitoring network, **Water, Air and Soil Pollution**, 158 (1): 387-399.

#### 2003

150. Krishnamurthy, NS, D. Kumar, V. Ananda Rao, S.C. Jain and S. Ahmed, (2003) Comparison of surface and subsurface geophysical investigations in delineating fracture zones, **Current Science**, 84(9):1242-1246.
151. Kumar, D. and S. Ahmed (2003) Seasonal behavior of spatial variability of groundwater levels in a granite aquifer in monsoon climate, **Current Science**, 84(2):188-196.
152. Saxena, VK and S. Ahmed (2003) Inferring the chemical parameters for the dissolution of Fluoride in groundwater, **Environmental Geology**, 43(6):731-736.
153. Kumar, D., N.S. Krishnamurthy, S. Ahmed, S.C. Jain and R.L. Dhar, (2003) Mise-à-la-Masse (Charged Body) technique in establishing the lateral extension of fractures in hard rocks, **Jr. of Geological society of India**, 61(2):185-194.

#### 2002

154. Maréchal, JC, M.P. Sarma, S. Ahmed and P. Lachassagne, (2002) Establishment of earth tide effect on water level fluctuations in an unsaturated hard rock aquifer using spectral analyses, **Current Science**, 83(1):61-64.

## 2001

155. Saxena, V.K. and S. Ahmed (2001) Dissolution of Fluoride in groundwater: A water-rock interaction study, **Environ. Geology**, 40(9):1084-1087, 2001.

## 1993

156. Murthy, P.S.N. and S. Ahmed (1993) Cokriging under constrained condition as applied to mineral deposits, **Science de la Terre**, Serie Informatique, 32:63-79. In Fabbri et Royer (eds.), "Geomathematics and Geostatistics".
157. Ahmed, S. and G. de Marsily (1993) Cokriged Estimation of Aquifer Transmissivity as an Indirect Solution of Inverse Problem: A Practical Approach, **Water Resources Research**, 29(2):521-530.

## 1988

158. Ahmed, S. and G. de Marsily (1988) Some Applications of Multivariate Kriging in Groundwater Hydrology, "**Science de la Terre**, Serie Informatique, 28:1-25.
159. Ahmed, S., G. de Marsily and Alain Talbot (1988) Combined use of hydraulic and electrical properties of an aquifer in a geostatistical estimation of transmissivity, **Ground Water**, 26(1):78-86.

## 1987

160. Ahmed, S. and G. de Marsily (1987) Comparison of Geostatistical methods for Estimating Transmissivity using data on Transmissivity and Specific Capacity, **Water Resources Research**, 23(9):1717-1737, <https://doi.org/10.1029/WR023i009p01717>
161. Marsily G. de, and S. Ahmed (1987) Application of Kriging Techniques in Groundwater Hydrology, invited paper published in a special volume of **Jr. of Geological Society of India**, 29(1):47-69.

## 1985

162. Gupta, C.P., S. Ahmed and V.V.S. Gurunadha Rao (1985) Conjunctive utilization of surface and ground water to arrest the water-level decline in an alluvial aquifer, **Jour. of Hydrology**, 76(3/4):351-361, [https://doi.org/10.1016/0022-1694\(85\)90142-8](https://doi.org/10.1016/0022-1694(85)90142-8)

## **Papers published in Non-SCI journals (21):**

1. Maréchal, J.C. Adrien Selles, Benoît Dewandel, Shakeel Ahmed. Hyderabad, un observatoire des eaux souterraines face au changement global. *Géologues*, 2017. ([hal-02176157](#))
2. Mondal, N.C., Kumar, L., Bhimaraju, K., Tiwari, P. Saba, N., Chandra, S and Ahmed, S. (2017) High Resolution 2-D Aquifer Mapping along Tapi River Bed adjoining Surat Smart City using Electrical Resistivity Tomography (ERT) survey, *Jour. of Geophysics*, Vol. XXXIX (1):15-19.
3. Ahmed, S. (2015) A 3D Aquifer Mapping is significant prior to river-linking: Geophysical and hydrogeological prospectives, *Journal of Applied Hydrology*, Vol. XXVIII(1):28-30.
4. Mondal, N.C. and S. Ahmed (2015) Dar-Zarrouk parameters for deducing shallow fresh groundwater zones in a tannery belt, Tamil Nadu, India, *Journal of Geophysics*, October 2015, Vol. XXXVI, No. 4, pp. 175-185.
5. Sreedevi, P. D.; Ahmed, S. (2013) Using Ion-Selective Electrode for Estimation of Fluoride Contaminated Seasons for Groundwater, **Advanced Electrochemistry**, Vol. 1(1):75-81, <https://doi.org/10.1166/adel.2013.1012>.
6. PD Sreedevi and S. Ahmed (2013) Assessment of Fluoride concentration of groundwater in semi-arid regions, India, **Jour of Applicable Chemistry**, 2(3):526-531.
7. P.D. Sreedevi and S. Ahmed (2012) Assessment of groundwater resources using climatic and hydrologic budget methods, **Int. J. Hydrol. Sci. and Technology**, 2(2):169-184.
8. Uerschels, D., Baier, K., Azzam, R., Sebesvari, Z., Renaud, F.G., Ahmed, S. and Jha, R. (2011) Wasserversorgung von Squatter-Siedlungen in Hyderabad, Indien, **Geographische Rundschau**, Vol. 12 pages 48-51.

9. Shreedevi, P.D., Aadil Nabi and Ahmed, S. (2011) Delineation of groundwater contamination zones using factor Analyses in semi-arid regions, **Int. Journal of Hydrology Science and Technology**, published online.
10. Sreedevi, P.D., Kumar, D. and Ahmed, S., (2011) Vertical disparity of electrical conductivity of groundwater: inferring water-bearing fractures in granitic aquifer, **Int. Jour of Hydrology Science and Technology**, 1 (1/2): 105-124
11. Sreekanth, P.D., Geetanjali, N., Sreedevi, P.D., Ahmed, S. and Ravi Kumar, N. (2008) Fusion between Artificial Neural Networks and Fuzzy Logic for predicting Groundwater level, **International Journal of Computing and Applications**, Vol. 3(2):99-111.
12. Sreekanth, P.D., Geetanjali, N., Sreedevi P.D., Ahmed, S., and Balakrishna, R. (2008) Efficacy of Support Vector Regression prediction model, **Jour. of Advanced Research in Computing Engineering**, Vol. 2(2):179-184.
13. Marechal, J.C., S. Ahmed, L. Galeazzi, and F Touchard (2006) Threatened groundwater resources: a case study from rural India, **Asian Jr. of Water, Env. and Pollution**, Vol. 3(2):15-21.
14. Kumar, D., N.S. Krishnamurthy and S. Ahmed (2006) A Geostatistical analysis for reducing ambiguities in vertical electrical sounding interpretations of a Granitic aquifer, **Bhu Jal News** Volume No.18 , Number 1-4, p. 23-35.
15. Lachassagne, P., Marechal, J.C., Ahmed, S., Dewandel, B., Gandolfi, J.M., Krishnamurthy, N.S., Subrahmanyam, K. and Wyns, R (2005) Nouveaux outils et méthodes pour gérer et protéger la ressource en eau souterraine des régions de socle, Hydro+ (Paris), 2005, Num 150, pp 53-57.
16. Ahmed, S. and N.S. Krishnamurthy (2002) Joint Analysis of Geoelectrical And Geohydrological Parameters Using Multi-Variate Geostatistical Technique, **Bhujal News**, 17 (1-2): 23-28, Special Volume on Groundwater Geophysics-1.
17. Ahmed, S., F. Bertrand, V.K; Saxena, K. Subrahmanyam and F. Touchard, (2002) A geostatistical method of determining priority of measurement wells in a Fluoride monitoring network in an aquifer, **Jr. of Applied Geochemistry**, 4(2B):576-585.
18. Venkatanarayana, B., S. Ahmed and V. Agnihotri (1999) Hydrogeological conditions of aquifer in Kuteshwar Limestone deposits, **Environ. Hydrology**, Vol. 7, paper 5.
19. Agnihotri V., and S. Ahmed (1997) Analyzing ambiguities in data collection network design using geostatistical estimation variance reduction technique, **Environmental Hydrology**, Vol. 5, paper 5.
20. Ahmed, S., S. Sankaran and C.P. Gupta (1995) Variographic Analysis of some hydrogeological parameters: Use of Geological soft data, **Environmental Hydrology**, 3(2), p.28-35, (<http://www.hydrweb.com>).
21. Ahmed, S. and G. Murali (1992) Regionalization of Fluoride Content in an Aquifer, **Environmental Hydrology**, Vol 1(1):35-39.

### Popular Articles:

1. **Shakeel Ahmed**, 3D imaging and National Aquifer Mapping Program, **Geography and You**, Vol. July-August 2015, Pages 10-13, <https://www.geographyandyou.com/3d-imaging-and-national-aquifer-mapping-programme/>
2. J.C. Marechal and **Shakeel Ahmed**, Dark zones are human made, **Down to Earth**, August 2003, p. 54, July 15, 2003, <https://www.downtoearth.org.in/coverage/dark-zones-are-humanmade-13164>
3. **Shakeel Ahmed**, Our method is affordable, Interview in **HYDROPLUS: International Water Review**, No. 120, January-February, 2002, p. 44-45,

## Research Papers (In Proceedings):

### A: Reviewed and published by internationally reputed publishers (30)

1. S. Chandra, K. Vidyasagar, K.B. Raju, L. Kumar, J. Choudhury, S. Chandrapuri, S. Ahmed and S.K. Verma (2019) URAT SMART CITY-Heliborne TEM surveys for ensuring efficient mitigation of water supply to Surat city, Conference Proceedings, 1st Indian Near Surface Geophysics Conference & Exhibition, **European Association of Geoscientists & Engineers**, Nov 2019, Volume 2019, p.1 – 2, <https://doi.org/10.3997/2214-4609.201979012>
2. Chatterjee, A., Arshad, M., Selles, A., & Ahmed, S. (2019). Relation Between Water Level Fluctuation and Variation in Fluoride Concentration in Groundwater—A Case Study from Hard Rock Aquifer of Telangana, India. In **Chaminé, H.I., Barbieri, M., Kisi, O., Chen, M., Merkel, B.J.** (Eds.), *Advances in Sustainable and Environmental Hydrology, Hydrogeology, Hydrochemistry and Water Resources*, proceedings of 1st Springer Conference of the Arabian Journal of Geosciences (CAJG-1), Tunisia 2018, pp. 215- 218.
3. Guiheneuf, N., Bour, O., Boisson, A., Le Borgne, T., Becker, M.R., Nigon, B., Wajiduddin, W., Ahmed, S. and Marechal, J.C. (2015) Identification of transport processes in Southern Indian fractured crystalline rock using forced-gradient tracer experiments, *Geophysical Research Abstracts* Vol. 17, EGU2015-11974.
4. Alazard, M., Boisson, A., Marechal, J.C., Dewandel, B., Perrin, J., Pettenati, M., Picot-Colbeaux, G., Ahmed, S., Thiery, D. and Kloppmann, W. (2015) Managed Aquifer recharge in weathered crystalline basement aquifers in India: Monitoring of the effect of tank infiltration on water quality over several monsoon events, *Geophysical Research Abstracts* Vol. 17, EGU2015-6807.
5. Tiwari, R.K., Mondal, N.C., Chandra, S. and Ahmed, S. (2014) Geophysical loom for deducing 3-D structure of palaeo-channels in middle Ganga plain (MGP), Bihar, India, *Hydrology Current Research*, OMICS Group, Vol. 5(4), page: 88.
6. Picot-Colbeaux Géraldine, Thiéry Dominique, Pettenati Marie, Boisson Alexandre, Perrin Jérôme, Sarah Sarah, Dewandel Benoît, Maréchal Jean-Christophe, Ahmed Shakeel, Kloppmann Wolfram (2013) Modeling managed aquifer recharge capacity of crystalline aquifers in semi-arid context (South India): Implementing natural percolation tank dynamics into MARTHE code, presented at ISMAR8, China.
7. Merritt, W.S., V.R. Reddy, K.V. Rao, P. Pavelic, S. Ahmed, R. Ranjan, B.F.W. Croke, and G. J. Syme (2011) Integrated modelling for understanding watershed development impacts on social and biophysical systems, In Proc. Of 19th International Congress on Modelling and Simulation, Perth, Australia, 12–16 December 2011, <http://mssanz.org.au/modsim2011>, pages 2887-2893.
8. Aulong, S.; Borne, F.; Caballero, Y.; Chaudhuri, B.; Dazin, F.; Dewandel, B.; Dinis, L.; Galab, S.; Guerrin, J.; Himanshu; Ladouche, B.; Maire, E.; Maréchal, J.C.; Muthusankar, G.; Perrin, J.; Prudhvikar Reddy, P.; Ramesh, B.R.; Sannier, C.; Sekhar, M.; Ahmed, S.; Vigaud, N. (2010) Socio-Economic Assessment of Farmers' Vulnerability as Water Users Subject to Global Change Stressors in the Hard Rock Area of Southern India. The SHIVA ANR Project, LANDMOD2010 – Montpellier – February 3-5, 2010
9. Atal, S., Negrel, P., Pauwels, H., & Ahmed, S. (2010, June). Role of major ion geochemistry in delineating polluted parts in Southern granitic aquifer system, Andhra Pradesh, India. In *Geochimica Et Cosmochimica Acta* (Vol. 74, No. 12, Pp. A36-A36). The Boulevard, Langford Lane, Kidlington, Oxford Ox5 1gb, England: Pergamon-Elsevier Science Ltd.
10. Lachassagne, P., Ahmed, S., Dewandel, B., Coutoise, N. JC Marechal, Perrin, J. and Wyns, R., (2009) Recent improvements in the conceptual model of hard rock aquifers and its application to the survey, management, modeling and protection of groundwater, In **“Groundwater and Climate in Africa”**, Proc. of Kampala Conference, June 2008, IAHS Publ. 334, p: 250-256.
11. Perrin, J., C. Mascré, S. Massuel and S. Ahmed (2009) Tank management in India: Percolation versus Irrigation, In **“Improving Integrated Surface and Groundwater Resources Management in a Vulnerable and Changing World”**, Proc. of JS.3 at the Joint IAHS & IAH Convention, Hyderabad, India, September 2009, IAHS Publ. 330, pages 28-33.
12. Perrin, J., Dewandel, B., Marechal, J.C., Khan, H.H. and Ahmed S. (2009) A Decision Support

Tool (DST-GW) for Sustainable Groundwater Management in Semi-Arid Hard-Rock Regions, Water, Environment, Energy and Society (WEES-2009).

13. Ahmed, S. (2008) Groundwater Monitoring Network Design in Granitic Aquifers in Semi-Arid Region: Applications of Geostatistics with a few Case Studies, In Das, S. (ed.) **"Drinking Water and Food Security in hard rock areas of India"**, Golden Jubilee Volume, Geol. Soc. of India, pages 11-28.
14. Ahmed, S., JC Marechal, K Subrahmanyam, B. Dewandel and P. Lachassagne (2003) Managing Weathered-Fractured aquifers in a semi-arid region under monsoon climatic conditions in India, Krasny J., Hrkal Z. and Bruthans, J. (eds.) **Groundwater in fractured rocks**, IHP-VI Series on Groundwater No. 7, IAH Publications, p:123-124.
15. Ahmed, S., D. Kumar and K. Subrahmanyam (2003) Evolution of common variograms of water levels for monsoon and non-monsoon periods in an aquifer in semi-arid regions, In Servat, E.; Nazem, W; Leduc, C. and Ahmed, S. (Eds.) **"Hydrogeologie des regions mediterrannees et semi-arides"**, *IAHS Publication No. 278*, p:55-61, Montpellier, France, April 2003.
16. Subrahmanyam, K., B.A. Prakash and S. Ahmed (2003) The impact of anthropogenic factors on groundwater regime in crystalline hard rock aquifers, In Servat, E.; Nazem, W; Leduc, C. and Ahmed, S. (Eds.) **"Hydrogeologie des regions mediterrannees et semi-arides"**, *IAHS Publication No. 278*, p:396-402, Montpellier, France, April 2003.
17. Maréchal, JC, L. Galeazzi, B. Dewandel and S. Ahmed (2003) Importance of irrigation return flow on the groundwater budget of a rural basin in India, In Servat, E.; Nazem, W; Leduc, C. and Ahmed, S. (Eds.) **"Hydrogeologie des regions mediterrannees et semi-arides"**, *IAHS Publication No. 278*, p:62-67, Montpellier, France, April 2003.
18. Ahmed, S., Dewashish Kumar and J.C. Maréchal, Geostatistical analysis of water level of fractured aquifer and optimization of monitoring network, In Findikasis, A.N. (Ed.) **"Bridging the gap between Measurement and Modeling in Heterogeneous Media"**, published by IAHR, Paseo Bajo Virgen del Puerto, Spain, pp. 379-381, Proc. of the International Groundwater Symposium at Berkeley, USA, during march 25-28, 2002,
19. Ahmed, S. (2002) Groundwater monitoring network design: Application of Geostatistics with a few Case studies from a granitic aquifer in a semiarid region, In Sherif M.M. et al. (Eds.) *Groundwater Hydrology 2: 37-57*, A.A. Balkema Publisher, Japan.
20. J. C. Maréchal, M.P. Sarma, S. Ahmed and P. Lachassagne, Do Earth tides effect groundwater levels in unconfined aquifers? A case study from a hard rock aquifer, In Thangarajan et al (eds.), *Proceedings of IGC2002*, p. 169-174, Oxford and IBH Pub. Co. Pvt. Ltd., 2002.
21. Ahmed, S., V.K. Saxena, K. Subrahmanyam and Dewashish Kumar, Spatial variability and correlation of hydrochemical parameters in a weathered fractured granitic aquifer, In Thangarajan et al (eds.), *Proceedings of IGC2002*, p. 269-278, Oxford and IBH Pub. Co. Pvt. Ltd., 2002.
22. Dewashish Kumar, S. Ahmed, B.A. Prakash and N.S. Krishnamurthy, Combined used of geological logs and vertical electrical soundings for spatial prediction of layer thickness and depth to bed rock in an aquifer, In Thangarajan et al (eds.), *Proceedings of IGC2002*, p. 383-390, Oxford and IBH Pub. Co. Pvt. Ltd., 2002.
23. Lachassagne, P., C. Golaz, D. Thiery, S. Ahmed, JC Maréchal, F. Touchard and R. Wyns, A methodology for the mathematical modelling of hard-rock aquifers at catchment scale, based on the geological structure and the hydrogeological functioning of the aquifer, In proc. of **31<sup>st</sup> IAH congress** in Munich, Germany, Sept. 2001, Seiler K.P. and Wohnlich S. (eds.) "New approaches characterizing groundwater flow" Vol. 1. p. 367-370, A.A. Balkema Publishers.
24. Ahmed, S., G. de Marsily and C.P. Gupta, Coherent Structural Models in Cokriging Aquifer parameters: Transmissivity and Water-levels, In Proc. of International Conf. on **"Water Resources in Mountaneous Regions"**, Switzerland, Aug-Sept.,1990, **Vol. XXII** Part 1, p.173-183, **I.A.H. Pub.**
25. Ahmed, S., Geostatistical Estimation of Aquifer Parameters: Some Case Studies, Invited Paper published in Proc. of the Australian Workshop on **"Geostatistics in Water Resources"**, Vol. 2, pages E1-20, Glen Osmond, Australia, Nov. , 1989,
26. Ahmed, S. and C.P. Gupta, Stochastic Spatial Prediction of Hydrogeologic Parameters: Use of cross-validation in Krigings, In Proc. of **Internat. Groundwater Workshop: IGW89**, Hyderabad,

- India, Feb. - March, 1989, (Gupta et al. eds.), Oxford and IBH Pub. Co., Vol III, p. 77-90.
27. Thangarajan M., and S. Ahmed, Kriged Estimates of Water-levels from the Sparse Measurements in a Hard Rock Aquifer, In Proc. of **Internat. Groundwater Workshop: IGW-89**, Hyderabad, India, Feb.- March, 1989, (Gupta et al eds.), Oxford and IBH Pub. Co., Vol I, p. 287-302.
  28. Ahmed, S. and P.S.N. Murthy (1997) Could Radial Basis Function estimator replace ordinary Kriging?, In Baafi, E.Y. and Schofield, N.A. (eds.) **Geostatistics Wollongong**, Kluwer Academic Publishers, Volume 1, p.314-323.
  29. Dong, A., S. Ahmed and G. de Marsily (1990) Development of Geostatistical Methods dealing with the Boundary Condition Problem Encountered in Fluide Mechanics of Porous Media, In GUERILLOT Dominique, GUILLON Olivier, Eds, "**Mathematics of Oil Recovery**", Technip, Paris, p.21-30, 1990, ISBN 2-7108-0589-8, <https://doi.org/10.3997/2214-4609.201411096>
  30. Ahmed, S. and G. de Marsily (1989) Cokriged Estimates of Transmissivity using jointly Water-level data, In Armstrong (ed.), **Geostatistics**, Kluwer Academic Publishers, Vol. 2, p. 615-628.

**B: Other proceedings (22):**

1. Singh, K.P., V. Preethi and S. Ahmed (2011) Preliminary biogeochemical study of Musi river and groundwater for designing strategies for bioremediation of contaminants, presented during the World Congress on Biotechnology-2011, Hyderabad, March 21-23, 2011.
2. Sarah and Ahmed, S. (2009) Eliminating biasness at various stages of groundwater modeling using Geostatistics, In Rana S. (ed.) "Proceedings of 3<sup>rd</sup> World Aqua Congress: **Enhancing Water Use Efficiency**", Vol.-I, Pages 24-33.
3. Ahmed, S. (2006) Artificial Recharge alone cannot ensure sustainability in groundwater management as the dark zones are human made!, In proc. of the national symposium on "**Water Resources Management for Sustainable Development**" organized by the Institute of Advanced Technology and Environmental Studies, Bhubaneswar, July 26-28, 2006, page 61-74.
4. Sreedevi PD and S. Ahmed, Hydrogeological evaluation of Pageru river basin, India: An Integrated approach using remote sensing, geophysical data. In Asia Pacific Association of Hydrology and Water Resources, Proceedings of the **2<sup>nd</sup> APHW Conference**, Singapore, Vol.2, 317-325, 2004
5. Ahmed S., Subrahmanyam K, Sreedevi PD and Gandolfi JM, Artificial recharge to an over-exploited granitic aquifer through defunct dug wells, In proceedings of Regional workshop on **Management of aquifer recharge and water harvesting in arid and semi-arid regions of Asia**, Yazd, Iran, Vol-1, 151-165, 2004
6. Krishnamurthy, N.S., Kumar, D., Nayak, G.K., and S. Ahmed, 2-D inversion of magnetic data for delineating bedrock depth and potential groundwater zones in hard rock terrain, published in proceedings of the "International Conference on Hydrological Perspective for Sustainable Development" – (**HYPESD-2005**), 23-25 February 2005 held at IIT, Roorkee, Allied Publishers Pvt. Ltd., Vol.II, 837-845.
7. Arora, T., Krishnamurthy, N.S., and S. Ahmed, TLERT to decipher the unsaturated zone, published in proceedings of the "International Conference on Hydrological Perspective for Sustainable Development" – (**HYPESD-2005**), 23-25 February 2005 held at IIT, Roorkee, Allied Publishers Pvt. Ltd., Vol.II, 846-852.
8. Tanvi Arora, Sreedevi P.D., Zaidi F.K., Ahmed S. and Subramanyam K., Hydrogeological effects on the fluoride contents of groundwater in a granitic aquifer. In Singh VP and Yadava RN (eds), proceedings of '**Water and Environment**', vol.1, pp: 278-283, Allied Pub. Co. Pvt. Ltd., 2003.
9. Sreedevi, P.D. and S. Ahmed, Groundwater Quality in the Vicinity of a Limestone Mining Area in Andhra Pradesh, In proceedings of a National Seminar on **Status of Environmental Management in Mining Industry**, Banaras Hindu University, January 18-19, 2003.
10. Murthy, P.S.N., S. Ahmed and V. Kameshwar Rao, Some methods and algorithms for ore reserve estimation, In Rai, KL, Sahu, GR and Diwan, P (eds.), **Computer application in mineral**

**development and water resources management**, SAAEG publications, Raipur, 2002, pp.26-45.

11. Subrahmanyam, K., S. Ahmed and J.C. Maréchal, Groundwater Overexploitation and its repercussions in the hard rocks, In proc. of International Conference “**4<sup>th</sup> Water Asia 2002**” held in New Delhi, January 30 to Feb. 1, 2002. 11p.
12. Agnihotri V., and S. Ahmed, Regionalization of aquifer parameters in simulating flow in a limestone aquifer, In proc. of the National seminar on “**Groundwater Resource Assessment and Management: Perspective for 21<sup>st</sup> Century**”, Banaras Hindu University, Varanasi, p. 187-192, 2000.
13. Ahmed, S. and V. Agnihotri, Qualitative and Quantitative role of supporting variables in spatial prediction of aquifer parameter, In proc. of the National seminar on “**Groundwater Resource Assessment and Management: Perspective for 21<sup>st</sup> Century**”, Banaras Hindu University, Varanasi, p. 73-78, 2000.
14. Ahmed, S. and V. Agnihotri, Fluoride pollution: a geostatistical method of designing an optimal monitoring network, In Proc. of workshop on “**Water pollution- Assessment and Management**”, published by the INGA, Hyderabad, p. 49-53, 1998.
15. Ahmed, S., and C.P. Gupta, Nested Squares: An appropriate approach in Aquifer modeling with river interaction, In Proc. of “**Artificial Groundwater Recharge**” Quetta, Pakistan, June, 1996, 1-11p
16. Murthy, PSN and S. Ahmed, Multi-variate Geostatistical Estimation for an improved and cost-effective exploration of gold resources, In proc. of the National Seminar on “**Exploration and Exploitation of Gold Resources**”, Dec. 2-4, 1996, Hyderabad, India.
17. Ahmed, S. Application of Geostatistical techniques in joint analysis of geoelectrical and geohydrological parameters, In Proc. of GSI Golden Jubilee seminar on “**Exploration geophysics in India**”, Calcutta, India, Nov., 1995. 15p.
18. Ahmed, S., An interactive software for computation and Modeling a Variograms, In Proc. of a conference on “**Water Resources Management**”, Mousavi and Karamooz (Eds.) p. 797-808, Isfahan, Iran, Aug., 1995, Isfahan University of Technology, Iran.
19. Ravi Prakash, M., M. Thangarajan, S. Ahmed, C.P. Gupta and K.A.S. Mani, Estimation of groundwater flow parameter through kriging in Bukaleru basin (A.P.), In Proc. of the **IX Indian Geological Congress**, Thanjavur, Oct., 1993.
20. Ravi Prakash, M., S. Ahmed and V.V.S. Gurunadha Rao, Stochastic Analysis of Transmissivity and Specific Yield obtained from Dug Well Pumping Tests, In Proc. of “**Groundwater Investigation, Management and Geophysical Technique**”, Lucknow, India, Dec, 1990.
21. Ahmed, S., A new Direction in Universal Kriging Estimation Technique using Steady Groundwater Flow Models, In proc. of International Conf. on “**Groundwater and the Environment**”, Kota Bharu, Malaysia, June, 1990, Univertsiti Kabansaang Malaysia.
22. Ahmed, S., and G. de Marsily, Multivariate geostatistical approach in estimating aquifer parameters, In proc. of the Internat. Groundwater Conference, “**Groundwater and the Environment**”, Malayasia, June 22-26, 1987, Awadalla and Noor (eds.), p. C1-10. Universiti Kabansaang Malaysia.

**Presentation and Abstract in Proceedings:** ~250

**Unpublished Technical Reports:** ~49

1. Ahmed S., et al., 2016. SYNOPTIC REPORT: PILOT AQUIFER MAPPING (AQUIM) PROJECT- Findings, Efficacy & Protocol, pp. Tech. Rep. No. NGRI-2016-GW-900, pp. 79.
2. Ahmed S., Chandra S., et al., 2015. AQUIM-Final Report, AQDRT, Jaisalmer district, Rajasthan. NGRI technical report No. NGRI-2015-GW-889, pp. 94.
3. Boisson, A., Dhanamadhavan, S., Elango, L., Dar, F., Sonkusare, M., Alazard, M., Wajihuddin, M., Ghosh, N.C., Sundaram, P.R., Singh, R.P., Rangarajan, R., Raicy, M.C., Sarah, S., Ahmed, S., Kumar, S., Singh, S., Arora, T., Warsi, T. and M. Thirunavukkarasu (2016) Report on field investigations on the performance of MAR techniques under the conditions in India, D2.3 [Project

report of the Enhancement of Natural Water Systems and Treatment Methods for Safe and Sustainable Water Supply in India (Saph Pani)].

4. Ahmed S., Chandra S., et al., 2015. AQUIM-Final Report, AQBHR, Patna district, Bihar. NGRI technical report No. NGRI-2015-GW-890, pp.62.
5. Ahmed S., Chandra S., et al., 2015. AQUIM-Final Report, AQMAH, Nagpur district, Maharashtra. NGRI technical No. NGRI-2015-GW-891, pp. 129.
6. Ahmed S., Chandra S., et al., 2015. AQUIM-Final Report, AQTND, Cuddalore district, Tamilnadu. NGRI technical report no. NGRI-2015-GW-892, pp. 150.
7. Ahmed S., Chandra S., et al., 2015. AQUIM-Final Report, AQKAR, Tumkur district, Karnataka. NGRI technical report No. NGRI-2015-GW-893, pp. 159.
8. Ahmed S., Chandra S., et al., 2015. AQUIM-Final Report, AQRAJ, Dausa district, Heliborne geophysical investigation in India: an innovative accomplishment in 3D aquifer mapping, NGRI-GW/AQUIM/2014/011.
9. Ahmed S., et al., 2014. Project Completion report-pilot project on aquifer mapping, NGRI-GW/AQUIM/2014/010
10. Dinesh Kumar, S.R. Asolekar, P. Amerasinghe, S. Ahmed, A. Boisson, M. Jampani, S. Sonkamble, M. Alazard (2014) Report on strategies for enhancement of constructed wetlands and other natural treatment systems. Work Package 3, D3.3 under Saph Pani Project. <http://www.saphpani.eu/downloads.html>
11. Ahmed S., S. Sonkamble, L. Elango , P. Amerasinghe, S. Asolekar, et al. (2014). Development of integrated management plans for natural treatment systems in urbanised areas (Case of Hyderabad and Chennai). Work Package 6, Deliverable 6.4 under Saph Pani Project. <http://www.saphpani.eu/downloads.html>
12. Ahmed S. et al., (2014) Conceptual model of flow and transport for a hard rock aquifer-Musi River microwatershed case study. Saph Pani Deliverable 3.2.[Project report of the Enhancement of Natural Water Systems and Treatment Methods for Safe and Sustainable Water Supply in India (Saph Pani)]. 56p. <https://cgspace.cgiar.org/handle/10568/71198>
13. Chandra S., Maurya, P.K., Somvanshi V.K., Kumar D., and Ahmed S. 2014. AQUIM Interim Report-basic data, AQDRT, Jaisalmer, Rajasthan, NGRI-GW/AQUIM-RAJ/2014/07
14. Chandra S., Deepak Kumar, Pradip K. Maurya, Rakesh K. Tiwari, E. Nagaiah, Mohd Ahmeduddin, R. Rajkumar and Ahmed S. 2014. DC electrical and electromagnetic investigation in AQRAJ, Dausa district, Rajasthan, NGRI TECH. NGRI-2014-GW-859
15. Chandra S., Maurya, P.K., Somvanshi V.K., Kumar D., and Ahmed S. 2012. AQUIM Interim Report-Technical, AQDRT, Jaisalmer, Rajasthan, NGRI-GW/AQUIM-RAJ/2014/06
16. Chandra S., Maurya, P.K., Somvanshi V.K., Mondal N.,C., Rajkumar R., Kumar, D., Nagaiah., E., Tiwari R.K., Kumar S., Ahmeduddin, Md., et al., 2014, AQUIM Interim Report-basic data, AQRAJ, Dausa (Rajasthan), NGRI-GW/AQUIM-RAJ/2014/05
17. Chandra S., Maurya, P.K., Somvanshi V.K., Mondal N.,C., Rajkumar R., Kumar, D., Nagaiah., E., Tiwari R.K., Kumar S., Ahmeduddin, Md., et al., 2013, AQUIM Interim Report-Technical, AQRAJ, Dausa (Rajasthan), NGRI-GW/AQUIM-RAJ/2013/04
18. Chandra,S., Rangarajan, R., Mondal, N.C., Pujari, P., S. Sonkamble, E. Nagaiah, D.V. Reddy, M.V Raiyudu, Ahmed S., 2013, AQUIM Project- Mid Term Progress & Technical Report, NGRI-GW/AQUIM/2013/03
19. Chandra S., and Ahmed S., 2012. Inception report- pilot project on aquifer mapping, NGRI-GW/AQUIM/2012/02
20. Chandra, S and., Ahmed S., 2012. Scientific Report on forward modeling of SkyTEM response over different lithological set up in INDIA, NGRI-GW/AQUIM/2014/01
21. Chandra, S., Atal S., Ahmeduddin, M. and Ahmed S. (2010) Electrical Resistivity Tomography test to characterize the brine subsurface at Shambhar Lake, Rajasthan. NGRI Technical Report. *NGRI-2010-GW-718, pp. 12*
22. Chandra, S., Atal, S., Ahmeduddin M., and Ahmed S. (2010). Geophysics to pinpoint the tunnel terminals deep seated in the subsurface: an aid to rescue a child fallen into a well in Rajasthan. Tech Rep. No. NGRI-2010-GW-706.
23. Chandra, S., Atal S., Nagaiah E., Mallesh D., Krishnam Raju P., Ahmeduddin M., Zaphu V., Sheshamma NV., Rao VA., Ahmed S., 2009. Electrical resistivity tomography surveys to test the



- performance of Multielectrode resistivity systems (Syscals). Tech. Rep No. NGRI-2009-GW-690, pp. 26.
24. Chandra S., Nagaiah E., Mallesh D., and Ahmed S., 2009. Electrical resistivity tomography for shallow subsurface resistivity measurement: an aid to UHV research laboratory at CPRI, Hyderabad. Tech Rep No. NGRI-2009-GW-682, pp. 20.
  25. Chandra S., Nagaiah E., Kumar D., Krishnamraju P., Ahmeduddin M., Mallesh D., Ali S., and Ahmed S., 2009. Delineation of aquifer geometry using ERT under Establishment of international hydrogeological park at Chautuppal, Nalgonda district Andhra Pradesh: Phase-I. Tech Rep No. NGRI-2009-GW-676
  26. Kumar, D., Nabi, A., Chandra, S., Sreedevi, P.D., Khan, H. H., Dutta, S., Zaidi, F. K., Ali, S., Krishnamurthy N.S. and Ahmed S., (2008). Groundwater Exploration in Basaltic formations at Ghatiya Watershed, Madhya Pradesh: An Integrated Study. Technical Report No. NGRI-2008-GW-632
  27. Perrin J., Chandra S., Descieux-Read E. Nagaiah, A. Nabi, H. Khan and S. Ahmed (2008) Assessment of Groundwater Potential and Sustainability at Bayer Farm, Shankarpalli, Andhra Pradesh Phase I: Preliminary Hydrogeological study, NGRI Tech Rep. NGRI-2008-GW-636
  28. Rao V. A., Kumar D., Chandra S., Nagaiah, E., Kumar A., Syed Ali and Ahmed S. (2008). High-resolution Electrical Resistivity Tomography (HERT) Survey for Groundwater Exploration at APSP Campus, Dichpally, Nizamabad district, Andhra Pradesh. Tech. Rep. No. NGRI-2008-GW-626
  29. Krishnamurthy NS., Baltassat J.M., Girard J.F., Dutta S., Dewandel B., Chandra S., Kumar D., Marc D., Legchenko A., Robin H., Rao V.A., and Ahmed S., (2006). Geophysical characterization of a weathered granite aquifer using MRS and ERT methods. NGRI Tech. Rep. no. NGRI-2006-GW-552.
  30. Verma S.K., Krishnamurthy N.S., Rao V A., Manglik A., Dutta S., Dewashish Kumar, Bhatt K.M., Durga V.S. U, Chandra S, Sarma V.S., Ahmed S., Reddy K. K., P. Khan H., Tripathi A., Verma M. K. (2006 ) High-resolution Electrical Resistivity Tomography and Drilling Results of the Anumpalle kimberlite pipe, Wajrakarur Kimberlite Field, Andhra Pradesh. Technical Report No. NGRI-2006-EXP-531
  31. Krishnamurthy N.S., Dutta S., Girard J.F., Anand Rao V., Chandra S., Kumar D., Marc D., Gouez J.M., Baltasat J. M., Dewandel B., Gandolfi J.M., Voullamoz J.M., Ahmed S., (2006) Electrical Resistivity Tomography and Magnetic Resonance Sounding Studies for Characterizing the Weathered-Fractured Aquifer in A.P., India. Tech Rep. no-2006-GW-529
  32. Verma S.K., Krishnamurthy N.S., Rao V.A., Manglik A., Dutta S., Kumar D., Bhutt KM., Durga VSU., Chandra S., Sarma V.S., Ahmed S., (2005) High-resolution Electrical Resistivity Tomography (HERT) Survey over the Annumpalle kimberlite pipe. Tech report no-2005-Exp-509.
  33. Groundwater Group (2005) Geohydrological investigations at water spurting sites in Rangareddy, Nalagonda and Mahaboobnagar districts of Andhra Pradesh.
  34. S. Ahmed, C. Engerrand, E. Ledoux, P.D. Sreedevi, Dewashish P.D. Sreedevi, Dewashish Kumar, K. Subrahmanyam and G. de Marsily Kumar, K. Subrahmanyam and G. de Marsily (2003) Geostatistics, Aquifer Modeling And Artificial Recharge Artificial Recharge, Scientific Report Volume 3 of the Indo-French project "Optimal Development and Management of Groundwater in Weathered-Fractured Aquifer " funded by the IFCPAR, 60 pages, NGRI Publications.
  35. K. Subrahmanyam, J.C. Maréchal, D. Bruel, E. Ledoux, S. Ahmed and G. de Marsily (2003) Geological Investigation and Hydraulic Tests for Aquifer Characterization, Scientific Report Volume 2 of the Indo-French project "Optimal Development and Management of Groundwater in Weathered-Fractured Aquifer " funded by the IFCPAR, 60 pages, NGRI Publications.
  36. N.S. Krishnamurthy, Dewashish Kumar, Henri Robain, J.M. Baltassat Itassat and S. Ahmed (2003) Integrated Geophysical Investigations, Scientific Report Volume 1 of the Indo-French project "Optimal Development and Management of Groundwater in Weathered-Fractured Aquifer " funded by the IFCPAR, 64 pages, NGRI Publications.
  37. Krishnamurthy, N.S., V. Ananda Rao, B.C. Negi, D. Kumar, S.C. Jain, S. Ahmed and R.L. Dhar (2001) Electrical Self Potential and Mise-à-la-Masse investigations in Maheshwaram watershed, A.P., India, Technical Report No. NGRI-2001-GW-314.

38. Subrahmanyam, K., S. Ahmed and R.L. Dhar (2000) Geological and Hydrogeological investigations in Maheshwaram Watershed, RR Dist., A.P. India, Technical Report No. NGRI-2000-GW-292.
39. Krishnamurthy, N.S., D. Kumar, B.C. Negi, S.C. Jain, R.L. Dhar and S. Ahmed (2000) Electrical Resistivity investigations in Maheshwaram watershed, A.P., India, Technical Report No. NGRI-2000-GW-287.
40. Ahmed, S. (2000) The Maheshwaram Watershed: A site for advanced research on Groundwater, note on the progress of Indo-French Collaborative project, Technical Report released on the inauguration of the Meteorological Station.
41. Ahmed, S., V.V.S. Gurunadharao, R.L. Dhar, S.C. Jain, G.R. Anjaneyulu and V. Krishnan (2000) Study on the impact of Banasagar Reservoir on the groundwater seepage to Kuteshwar Limestone mines, Jabalpur, M.P., Technical Report No. NGRI-2000-GW-264.
42. Sankaran, S., D. Kumar, C. Engerrand, N.S. Krishnamurthy, Ch. Rangarao and S. Ahmed (1999) Reinterpretation of Vertical Electrical Sounding (VES) carried out in Maheshwaram watershed, RR Dist., AP, India, Technical Report No. NGRI-1999-GW-255.
43. Gupta, C.P., V.S. Singh, V.V.S. Gurunadharao and S. Ahmed (1992) Drinking Water Supply in Kavaratti island, Lakshadweep: Some suggestions, Technical Report No. NGRI-1992-ENVIRON-133.
44. Gupta, C.P., M. Thangarajan, M.R.K. Sarma, V.S. Singh, S. Ahmed and VVS Gurunadharao (1992) Modeling of Neyveli Aquifer System (3 Volumes), Technical Report No. NGRI-1992-ENVIRON-117.
45. Gupta, C.P., V.V.S. Gurunadharao and S. Ahmed (1990) Water Resources in Kavaratti Island, Lakshadweep: An Appraisal, Technical Report No. NGRI-1990-ENVIRON-087.
46. Ledoux, E., S. Sauvagnac and S. Ahmed (1989) User's Guide for the computer Program NEWVAR, modeling of Saltwater – Fresh water interface in an aquifer using Nested square meshes, Tech Report No. NGRI/GW/SS/11.
47. Ledoux, E., S. Sauvagnac and S. Ahmed (1989) User's Guide for the computer Program NEWSAM, modeling of flow in multilayered aquifers using Nested square meshes, Tech Report No. NGRI/GW/SS/10.
48. Ahmed, S. (1987) A brief review of the study of the relation between Electrical and Hydraulic properties of Aquifers, Technical Report No. LHM/RD/87/72, CIG, ENSMP, Fontainebleau.
49. Gupta, C.P., M. Thangarajan, S. Ahmed, VVS Gurunadharao, V.N. Saxena, C.S. Agarwal, A. Kumar and S.K. Srivastava (1983) Digital Modeling of Aquifer in Daha Region, UP, India, Technical Report No. NGRI/GW/SS/5.