

Affiliation:	Visiting Professor/Consultant, Islamic University for Science and Technology, J&K, India	
Formerly	Professor , School of Sciences, Maulana Azad National Urdu University, Hyderabad Emeritus Scientist , CSIR- National Geophysical Research Institute, Hyderabad Professor (MK Gandhi Chair), Jamia Millia Islamia, New Delhi, India Chief Scientist , CSIR-National Geophysical Research Institute, Hyderabad Team Leader (India), Indo-French Centre for Groundwater Research, Hyderabad Professor , Academy of Scientific and Innovative Research (CSIR-AcSIR)	
Cell +91 9849919496 (Whatsapp)	e-mails:	shakeelifcgr@gmail.com, shakeelahmed@ngri.res.in, shakeelahmed@manuu.edu.in
Date of Birth : September 25, 1958, Place of Birth : Varanasi, U.P. Indian Passport No. U7514230 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, India	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, France	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 1st 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 22 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); 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 36th **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 12th 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..	Chief Scientist
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	Professor (Physical Sciences)
01.08.2012	31.07.2014	Kashmir University, Srinagar, India	Visiting Professor Department of Earth Sciences
03.10.2018	02.10.2020	Dept. of Geography, Faculty of Natural Sciences, Jamia Millia Islamia, New Delhi	Professor (MK Gandhi Chair) 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 & Emeritus Professor (AcSIR)
01.11.2021	25.09.2023	Maulana Azad National Urdu University, Hyderabad (MANUU)	Consultant & Professor School of Sciences
29.04.2024	---	Islamic University of Science and Technology, Awantipora, J&K (IUST)	Visiting Professor, Centre for Disaster Risk Reduction

Details of the Experience possessed as per eligibility criteria:

S. No.	Post held	Organization	Pay	Nature of Duties	Experience in Years & months
1	Professor	School of Sciences, Maulana Azad National Urdu Univ., Hyderabad	Level 14, Gr Pay Rs. 10000	Teaching & Research as well as Campus Development	1 year 5 months
2	Professor	MK Gandhi Chair, Jamia Millia Islamia, New Delhi	Level 14, Gr Pay Rs. 10000	Teaching & Research	2 years
3	Chief Scientist	CSIR National Geophysical Res. Instt., Hyderabad	Level 14, Gr Pay Rs. 10000	R&D, Project Execution	10 years 11 months
4	Professor & Emiretus Professor	CSIR Academy of Scientific and Innovative Research, New Delhi	N.A,	Teaching and Research	4 years 9 months
Total Experience for the post of Vice Chancellor: 14 years 4 months					

Administrative Experience/Post(s) & responsibilities held:

S. No.	Post	Organization/ University	Duration (Dates)		Experience (In Years & Months)
			From	To	
1.	Head of the Department	CSIR-NGRI, Hyderabad	01.04.2002	30.09.2018	16 years 5 months
2.	Chairman/Member, Board of Studies	Maulana Azas National Urdu University	29.04.2022	25.09.2023	1 year 4 months
3.	Dean of Faculty	Not Applicable			
4.	Pro-Vice Chancellor	Director (In-Charge) CSIR-NGRI, Hyderabad	01.02.2016	30.09.2018	Total around 2 months during the period
4.	Member of Academic Council	Maulana Azas National Urdu University	29.04.2022	25.09.2023	1 year 4 months
		Islamic University of Science and Technology	01.09.2021	30.08.2024	3 years
5.	Member of Executive Council	Indo-French Centre for Groundwater Research, Hyderabad	23.11.1999	30.09.2018	19 years 10 months
6.	Others (Specify)				
	Secretary	Asian-GWADI (A flagship Program of UNESCO)	01.01.2018	Till date	6 years
	Secretary	Indian National Committee of IAH	01.01.1990	31.03.2010	20 years
	Member of Governing Board	UNESCO Category II Centre for RWH, Sudan	25.09.2018	30.09.2021	3 years

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.

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

Scientific Output as Publications:

Research Papers:~273 (**SCI: 160**, Non-SCI:25, Book Chapters: 44, Proceedings: 52, others: 3),Tech. Rep: ~49, Software Package: **5**, Proceedings/Books Edited/reviewed: **9**

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

Citation Google Scholar (as on August 20, 2024)	Citations	h-index	I-10-index
All	8830	44	128
Since 2020 (Last 5 years)	4482	33	93

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

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

Vidwan-ID : 286834

Languages Known:

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

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)

Awards & Honours:

Young Scientist Award	Awarded by the Muslim Association for the Advancement of Science, India (MAAS) for 1996 in Physical Sciences
International Prize for Water Science	Awarded by the Cannes Water Symposium, France. For the year 2004
National Mineral Award	Awarded by the Ministry of Mines, Govt. of India for 2006 in Groundwater
HS Pareek Award	Shared (as Co-author) for the best paper published in Jr. Geol Soc. of India during 2009 on coal geophysics
Groundwater Excellence Award	Received 2016 Smt. Savitree Chadha award of Excellence in Groundwater Management awarded by the Indian National Committee of International Association of Hydrogeologists
NGRI-AHI National Hydrology Lecture Award	Received NGRI-AHI National Hydrology Lecture Award 2014 by the joint association of CSIR-NGRI and Association of Hydrologists of India
Anni Talwani Memorial Prize of IGU	Anni Talwani Memorial Prize for the year 2017 in recognition of outstanding contribution in the field of hard rock hydrogeology & setting up Indo-French Centre for Groundwater Research
National Geoscience Award (Groundwater)	Received NGA (Team Award) for 2017 for Groundwater Exploration including project development, hydrogeological studies and management of groundwater resources. Leader of the Team
4 th National Water Award (Min of Jalshakti, Gol)	Has been instrumental in developing the campus as chairman of the MANUU Jal Shakti Abhiyan Comm. for obtaining the 4 th National Water Award to MANUU in 2023 in the category of the best campus use.
FTWAS	Elected Fellow of The World Academy of Sciences (TWAS) , 2022
FNASc	Elected Fellow of National Academy of Sciences of India (NASI) , 2019
FGSI	Elected Fellow, Geological Society of India since 2005 (L:1362), 2005
FNESA	Elected Fellow of the National Environmental Sciences Academy, New Delhi, 2010 (No. 1513)
FAPAS/FTAS	Elected Fellow of the Andhra Pradesh Akademi of Sciences, Hyderabad since 2013 and continue as founder fellow of the Telangana Academy of Sciences
FISSA	Elected Fellow, Indian Social Science Academy, 2022 & Councilor in the Executive Council of ISSA for 2024-25

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 2nd 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 5th **Mustafa Prize** in Isfahan, Iran during October 2, 2023 and Delivered a talk during the 9th STEP (Sci. & Tech. Exchange Program) at the School of Basic Sciences, Tarbiat Modares University, Tehran on Oct 1st, 2023.

Teaching/Faculty Positions:

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

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

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

#	Title of the Project	Partners	Funding agency & Budget	Period	Role
IN-HOUSE or NETWORK					
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	IFCGR: 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)
EXTERNALLY FUNDED (INTERNATIONAL)					
4	Optimal Dev and Management of Groundwater in Weathered-Fractured coupled Aquifer	NGRI, ParisTech	CEFIPRA	50 Lakhs	Proj Leader
	P2R: Indo-French Network project on water science	NGRI, IISc, IRD, BRGM, CWES-KCT, INRA, IITD	DST-India & MAE, France 8 lakhs + €1 Lakh	2006-2010	Activity Leader
5	SUSTWATER: Decision Support Tool for sustainable groundwater management	NGRI, BRGM, APGWD	EU under FP-6 € 100,000	2009-2012	Project Leader
6	Groundwater monitoring network optimization and database on F and As	NGRI	UNESCO 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	IAEA € 15,000	2009-2011	Project Leader
8	MOHINI: 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	ANR: France In kind	2008-2011	Project Leader
9	SHIVA: 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	ANR, France € 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,	ACIAR, Australia Aus\$ 125,000	2009-2015	Proj. Leader at NGRI
11	RUAF: Urban waste water irrigation	NGRI, IWMI, BRGM	IWMI € 6,800	2009-2011	Proj. Leader: NGRI
12	GRACE: Hydrology and Water Resources from Space over the Indian Continent	NGRI, LEGOS	IFCPAR, 45 lakhs	2009-2014	Joint Collaborator
13	International Hydrogeological Park at Chhotuppal NGRI Campus, Nalgonda	NGRI, BRGM, Hydrosciences, Montpellier	IFR-ILEE Res. support scheme €10000-15000	2009-2014	Project Leader at NGRI
14	SAPH PANI: Natural water systems and treatment with water shortages in urbanized areas in India	NGRI plus 18 others	EC: € 341,750 (Total Budget: 3.5M€)	2011-2014	Project Leader at NGRI
15	Geophysical Investigation for Groundwater Exploration in South and West Niger (Consultancy Project)	NGRI and WAPCOS	Super Geo Drillers, India US\$ 250,000	2016-2017	Project Leader

EXTERNALLY FUNDED (NATIONAL)					
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
Projects in Pipeline					
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	Awarded 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	Awarded 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	Awarded 2005	NGO
4	Faisal Kamal Zaidi, India	Characterization of crystalline hard rock aquifers through geological and hydrogeological methods	Aligarh Muslim University, Aligarh, India	Awarded 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	Awarded 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	Awarded 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	Awarded 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	Awarded 2009	Geologist in GSI, India
10	Haris H. Khan, India	Assessment of groundwater pollution from distributed sources in hard rock formations	Osmania University	Awarded 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	Awarded 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	Awarded 2013	Faculty at Kashmir Uni
16	Farooq Ahmad Dar, India	Hydrogeology and Water resources assessment of Karst regions of India	University of Hyderabad	Awarded 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	Awarded 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	Awarded 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	Awarded Dec. 2019	Scientist at IWMI, New Delhi
29	Ms. Pratyusha Adepu, 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	Awarded 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	Awarded 2021	Lecturer in Univ. of Odisha

34	Ms. Madeleine Nicolas France	Connectivity and geochemical compartmentalization of a fractured crystalline aquifer in tropical semi-arid environment	Univ. of Rennes-1 France, 2016	Awarded 2020	BRGM
35	George Biswas, India	Mapping Variability in Structure and Functioning of Diverse Basaltic Aquifers	AcSIR (NGRI) 2016	Awarded 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	Awarded 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	Awarded 2024	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	Awarded 2024	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. **5th 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 24th 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. **7th 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 36th 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 21st 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 150th 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 47th 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
Year 1984				
1	Oct. 31, 1984 to 24, Dec. 1987	FRANCE	Carried out doctoral research at the Ecole Nationale Supérieure des Mines de Paris (Centre de Géostatistique 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 Géostatistique, June 16-17, 1987	Govt. of France
Year 1985				
2	July 14-23	USA	Participation to the NATO Advance Study Institute, "Fundamentals of Flow & Transport in Porous Media	Univ. of Delaware & ENSMP, France
Year 1987				
3	June 22-26	MALAYSIA	Participation to and presentation of paper in an International Conference on "Groundwater and Environment"	Organizers
4	August 9-22	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
Year 1988				
5	Sept. 4-14	FRANCE	Installation of a few geostatistical software at the Centre d'Informatique Géologique, ENSMP, Fontainebleau, developed during doctoral research and participation in the 3 rd International Geostatistical Congress at Avignon, Sept 4-9	Govt. of France
Year 1989				
6	July 6-8	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	USA	Participated and presented papers to "28th International Geological Congress	CSIR & Govt. of France
Year 1994				
8	Nov. 21-25	AUSTRALIA	Participated to and presented paper during "25 th congress of International Association of Hydrogeologists"	IAH
Year 1995				
9	Aug. 28 - Sep. 1	ISLAMIC REPUBLIC OF IRAN	Participated and presented paper during a conference on "Water Resources Management" WRM-95, Isfahan Univ. of Technology	UNESCO
Year 1996-98				
10	Nov. 10, 1996 to Feb. 8, 1997	FRANCE	Carried out Post Doctoral Research 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, 1997 to Jan 25, 1998	FRANCE	Development of a few additional software to the modeling software and discussion regarding research work to be carried out by students from ENSMP to NGRI and from NGRI to ENSMP/UPMC	Govt. of France

Year 2000				
12	April 20, to May 06	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	FRANCE	Discussion on future scientific work on the collaborative project on hard rock hydrogeology	Govt. of France
Year 2001				
14	Nov. 7-15	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
Year 2002				
15	March 22 – 28	KUWAIT	Participated in an International Conference on Water Resources Management and presented a paper, Organized by the KISR	Organizers
16	May 1-31	FRANCE	Aquifer modeling studies of the Maheshwaram watershed under the Indo-French collaborative project	IFCPAR's Project
17	Sept. 15-20	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	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
Year 2003				
19	April 1-5	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	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
Year 2004				
21	Oct. 30 - Nov. 4	FRANCE	Meeting at BRGM Orleans for progress of IFCGR and review of the MoU and visiting IPGP, Sisyphe, and CIG, Fontainebleau	Govt. of France
22	Nov. 26 – Dec. 8	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
Year 2005				
23	April 17 – 23	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 28- May 3,	PAKISTAN	Participation as resource person in the UNESCO workshop on Managing Artificial Recharge and Water Harvesting	UNESCO
25	June 29 – July 3	FRANCE	Receiving the trophy for the International Prize for Water Sciences presented during a ceremony at the 7 th Cannes Water Symposium, Cannes, France	Govt. of France
Year 2006				
26	May 29 – June 6	FRANCE	Participating in the 150 th 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	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	FRANCE	Participating in UNESCO workshop on Groundwater Indicator and meeting at several collaborating organizations in France	Govt. of France
Year 2007				
29	June 9-18	PEOPLE'S REPUBLIC OF CHINA	Participation as Resource Person in the G-WADI meeting and workshop on Aquifer Modeling	UNESCO
30	Sept. 02 – 10	FRANCE	Various meetings and discussions on the collaborative Research	Govt. of France & DST
31	Nov. 18-20	FRANCE	Discussion on the SUSTWATER project	Govt. of France
32	Nov. 20-25	MAROCCO	Various meetings interaction on the creation of a centre for Water Resources Management	Govt of France & DST
Year 2008				
33	Jan. 15-31	AUSTRALIA	Participation in the project work "Groundwater Governance in Asia" at the Centre for Comparative water policies and laws	IWMI
34	Feb-12-15	FRANCE	Discussion and planning meeting of collaborative projects under P2R	Govt. of France
35	March 20-24	NEPAL	For the concluding workshop of the IWMI Project on Groundwater Governance in Asia: Theory and Practice	IWMI
36	Sept. 24-Oct. 2	FRANCE	Discussion on various collaborations, finalizing the draft of the 4 th rider of the MoU between NGRI and BRGM and witness the signature at BRGM, HQ	Govt. of France
37	November 15 to 23	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
Year 2009				
38	August 16-24	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	SUDAN	Invited to deliver keynote lectures in an UNESCO workshop on Water Resources, at Khartoum	UNESCO
Year 2010				
40	January 10-12	FRANCE	Meeting at Min. des'Affaires Eterangers (MAE), at Paris	Govt. of France
41	February 22-26	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	BRAZIL	2 nd 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 08-14	FRANCE	Participation to the annual progress meeting of the project "SHIVA" funded by ANR, France	ANR Project
Year 2011				
44	January 4-15	FRANCE	Participation to the collaborative project GRACE and review of the progress	IFCPAR Project
45	June 19-21	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	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	AUSTRIA	Participation in a project meeting at the IAEA	IAEA
Year 2012				
48	May 8-12	SWITZERLAND	Participation in a progress meeting of EU funded project "Saph Pani"	FP7-EC Project
49	June 23-27	FRANCE	Interview meeting at UNESCO-HQ, Paris and meeting at BRGM Orleans	UNESCO
50	Nov. 18-21	FRANCE	Meeting and discussions at BRGM, Orleans for future programs of IFCGR and finalizing the 7th Rider of MoU	AQUIM Sponsored Proj.
51	Nov. 21-23,	DENMARK	Discussion and finalization of Heliborne TEM survey program at Aarhus University, GEUS and SKYTEM	..do..
Year 2013				
52	May 26 – June 1	GERMANY	Participation in the 3 rd Progress review meeting (M18) of EC funded project "Saphani"	FP7-EC Project
53	August 24-31	DENMARK	Participation in the 1st Indo-Danish Workshop on Heliborne Geophysics (INDANCE) as Indian Coordinator.	Govt. of Demark
54	Sept. 16-21	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	AUSTRALIA	Case study and fieldwork under ACIAR funded project in Perth and Adelaide	ACIAR
Year 2014				
56	May 11-17	FRANCE	Meeting of Saph Pani project as well as collaborative discussions at BRGM and UPMC, Paris	FP7-EC Project
57	July 8-9	FRANCE	To participate in the defence of a thesis as Jury member at Geosciences, Univ. of Rennes (Could not take up due to other assignment)	FP7-EC Project
58	December 13-21	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
Year 2015				
59	March 21 to April 4	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	USA	To deliver a key-note speech in the American Geophysical Union's fall meeting at San Francisco	Projects
Year 2016				
62	February 16-24	Sudan	<ul style="list-style-type: none"> • 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 ▪ To attend UNESCO-GWADI meeting as a member of Asian GWADI advisory Committee ▪ Hold discussions with eminent Hydrogeologists on the Aquifer Mapping Results and collaboration 	UNESCO & Univ. of Khartoum
63	July 31st - August 6	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	People Republic of China	G-WADI program (6 th Asian GWADI Meeting)	UNESCO
Year 2017				
65	March 19-23	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	Republic of South Korea	To participate and deliver an invited lecturue in 1 st Asia International Water Week at Gyeongju, South Korea	Asia Water Council
Year 2018				
67	Sept. 24-28	Sudan	To participate in Governing Body meeting of UNESCO-RCRWH and participating in International Seminar to deliver invited lecture	UNESCO
68	Dec. 09- 15	Islamic Republic of Iran	To participate in 8 th Asian GWADI meeting, International Conference on International Drought Initiative	UNESCO
Year 2019				
69	July 28 – Sept. 01	USA	To participate in the convocation function of Penn State University, Visit to Maryland University etc.	Personal
Year 2022				
70	Decemb er 06- 11, 2022	France	Indo-French Joint workshop at Montpellier and UN Summit on Groundwater at UNESCO	Sponsored by CEFIPRA
Year 2023				
71	Septemb er 28 – October 4	Iran	Participate as Guest of Honour during the 5 th Mustafa Prize award ceremony at Isfahan and 9 th STEP at Tehran.	Sponsored by MSTF, Iran