

**Dr. Syed Hilal Farooq**  
Assistant Professor  
School of Earth, Ocean and Climate Sciences

Indian Institute of Technology Bhubaneswar,  
Samantaputi, Bhubaneswar, Odisha, 751013  
Phone No. (Off.): 91-674-2576113

Email: [hilalfarooq@iitbbs.ac.in](mailto:hilalfarooq@iitbbs.ac.in)

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## Educational Qualifications

Degree	University
Doctorate	IIT Bombay
M.Sc. (App. Geol.)	AMU - Aligarh
Others: CSIR-JRF Dec. 2002 & June 2003	Council of Scientific & Industrial Research

**Ph.D. Topic:** Role of dissolved organic carbon in mobilization of arsenic from the sediments to groundwater, district Murshidabad, West Bengal (India).

**Institutes Involved:** IIT Bombay (India) and KIT – Karlsruhe (Germany), through DAAD fellowship under “Sandwich model Ph.D. programme”.

## Projects:

- i) **Young Scientist Project:** Lateral variability in the distribution of arsenic in agriculture fields and its mass balancing - a study from West Bengal (Sanctioned by D.S.T., Govt. of India).
- ii) **International Collaborative Project:** Climate Change Vulnerability and Adaptation in Groundwater-dependent Irrigation in Asia-Pacific Region (Submitted to Asia Pacific Network for Global Change Research, Passed 1st Stage of Evaluation).

## Publications

### In Journals

- Chandrasekharam, D., **Farooq, S.H.\***, Wang, Y., Chandrasekhar A.K., Xie, X., and Guo, Q., (2012): A comparative study of the hydrogeochemistry of arsenic contaminated basins: Datong basin of PR China and Bengal basin of India and Bangladesh. Environmental Geochemistry and Health. Under review.
- **Farooq, S.H.**, Chandrasekharam, D., Abbt-Braun, G., Berner, Z., Norra, S. and Stüben, D., (2012): Dissolved organic carbon from the traditional jute processing technique and its potential influence on arsenic enrichment in the Bengal Delta. Applied Geochemistry, 27, 292-303.

- **Farooq, S.H.**, Chandrasekharam, D., Norra, S., Berner, Z., Eiche, E., Thambiduri, P. and Stüben, D., (2011): Temporal variations in arsenic concentration in the groundwater of Murshidabad district, West Bengal, India. *Environmental Earth Sciences*, 62, 223-232.
- **Farooq, S.H.**, Chandrasekharam, D., Chandrasekhar Azad, K., Thambidurai, P. and Dhanachandra, W., (2012): Anomalous of arsenic concentration in sediments and its relation to irrigation practices and crop patterns: A case study from west Bengal, India. Accepted: *Journal of Geological Society of India* (Publisher: Springer).
- **Farooq, S.H.**, Saha, N., Pande, N., Iyer, K., and Bobby, P.M., (2011): Harvesting Condensate Water from Air Conditioners. *Xplore: Xavier's Research Journal*. 2, 55-62.
- **Farooq, S.H.**, Chandrasekharam, D., Berner, Z., Norra, S. and Stüben, D., (2010): Influence of traditional agricultural practices on mobilization of arsenic from sediments to groundwater in Bengal delta. *Water Research*, 44, 5575-5578.
- Ahmad, A.H.M., Bhat, G.M., Khan M.S., and **Farooq, S.H.**, (2006): Provenance of Glauconitic Sandstones of Kheinjua Formation of Semri Group, Son Valley, Central India: Evidence for uplift of a rifted Continental Margin Basin. *Journal of Geological Society of India*. 68 (2), 288-298.
- Ahmad, A.H.M., Shahab, A.M.S., **Farooq, S.H.**, (2003): Texture, Mineralogy and Diagenesis of Jabalpur Sediments of Jabalpur Basin, M.P., *Journal of Indian Association of Sedimentologist*, 22, 243-250.
- Ahmad, A.H.M., Singh, A., Khan M.H.A, and Farooq S.H., (2002): Tidal channel upper shore face–beach foreshore model, an example from Bhandar sandstone, Baretha area (Bayana), district Bharatpur Rajasthan. *Indian Minerals*, 56 (3-4), 281-288.
- Ahmad, A.H.M., Khan, M.H.A, Sayeed, A.S.M., Farooq S.H., and Faisal S.M.S., (2001): Petrography & Diagenesis of Fakirwari Sandstone (Chari Formation) Kutch, Gujarat. *Indian Journal of Petroleum Geology*, 10 (2) 37-50.

### **In International Conferences**

- **Farooq, S.H.**, Chandrasekharam, D., Chandrasekhar Azad, K., Stueben, D. (2012): Effect of agricultural practices in contaminating the aquifer system. International and interdisciplinary conference on Land Use and Water Quality, 10-13 June 2013. The Netherlands. (Abstract accepted).
- Chandrasekhar AK, Ghosh, A., Chandrasekharam, D., **Farooq, S.H.**, Thambidurai, P. (2012): Fluoride contamination in groundwater of district Bijapur, South Chhattisgarh, India. *Water-Rock Interaction 14 (WRI-14)*, 9-14 June 2013, Avignon, France (Extended abstract accepted)

- Thambidurai P., Chandrasekharam, D., Chandrashekhar, A. K., **Farooq, S. H.** (2012): Source of arsenic in the contaminated groundwater regime of Barak Valley - Assam and adjacent Mizoram: A novel approach: *Annual International Conference on Geological & Earth Sciences (GEOS 2012)*, 3 - 4 December 2012, Singapore. pp. 97-100.
- Vinay, G., Chandrasekharam, D., Nair, B., Trupti, G. and **Farooq S.H.\*** (2012): Role of phosphate in mobilizing arsenic from soil to groundwater in West Bengal – an experimental investigation: *4th International Congress on Arsenic in the Environment*, 22-27 July 2012, Cairns, Australia. pp. 280-281.
- Chandrashekhar, A. K., **Farooq, S. H.\***, Chandrasekharam, D., Thambidurai P. (2012): Extent of Arsenic Contamination in the Groundwater of Thuwal and Bishnupur Districts of Manipur (India): *7th European congress on Regional Geoscientific cartography and Information systems (EUREGEO)*, 12-15 June 2012, Bologna, Italy. pp. 440 - 441.
- Thambidurai, P., Chandrasekharam, D., Chandrashekhar, A.K., and **Farooq, S.H.**, (2012): Arsenic contamination in groundwater of Surma basin of Assam and Mizoram, North Eastern India: *4th International Congress on Arsenic in the Environment*, 22-27 July 2012, Cairns, Australia. pp. 47-49.
- **Farooq, S.H.**, Chandrasekharam, D., Thambidurai, P., Chandrashekhar A.K., Bobby, P. M., and Stüben D. (2011): Need of seasonal groundwater monitoring for sustainable water management: *Fifth International Groundwater Conference (IGWC-2012)*, 18-21 December 2012, Aurangabad, Maharashtra, India. Extended abstract accepted.
- Chandrashekhar, A. K., **Farooq, S. H.\***, Chandrasekharam, D., Thambidurai P. (2012): Seasonal variability in arsenic concentration in the groundwater of Manipur, North-eastern state of India: *Fifth International Groundwater Conference (IGWC-2012)*, 18-21 December 2012, Aurangabad, Maharashtra, India. Extended abstract accepted.
- **Farooq, S.H.**, Chandrasekharam, D., Dhanachandra, D., and Stüben, D., (2011): Fate of arsenic in agriculture soils in response to change in crop pattern and cultivation practices - A study from West Bengal (India): *AGU Chapman Conference on Arsenic in Groundwater of Southern Asia*, 14 -17 November 2011, Hanoi, Vietnam. pp. 20.
- **Farooq, S.H.**, Chandrasekharam, D., Berner, Z., Norra, S. and Stüben, D., (2010): Effect of traditional jute producing techniques in mobilization of arsenic in the Bengal Delta: *3<sup>rd</sup> International Congress on Arsenic in the Environment*, 17 -21 May 2010, National Cheng Kung University (NCKU), Tainan, Taiwan. pp. 99-101.

- **Farooq, S.H.** and Chandrasekharam, D., (2009): Role of agricultural practices and product processing in mobilization of arsenic: German Alumni Groundwater Network, *DAAD Expert Seminar on Water & Biodiversity*, 1 - 6 November 2009, Bangalore, India. pp. 17.
- **Farooq, S.H.**, Chandrasekharam, D., Norra, S., Berner, Z., and Stüben, D., (2009): Role of agricultural practices in mobilization of arsenic from sediments to groundwater: *AGU Chapman Conference on Arsenic in Groundwater of Southern Asia*, 24 - 27 March 2009, Siem Reap, Cambodia. pp.18.
- **Farooq, S.H.**, Chandrasekharam, D., Norra, S., Berner, Z. and Stüben, D., (2008): Difference of arsenic mobilization in submerged soils of a jute pond and a rice paddy in West Bengal, India: *Eurosoil Congress - 2008*, 25 - 29 August 2008, University of Technology, Vienna, Austria. pp. 344.
- **Farooq, S.H.**, Chandrasekharam, D., Norra, S., Berner, Z. and Stüben, D., (2008): Seasonal variation of arsenic concentration in groundwater of West Bengal, India. *2<sup>nd</sup> International Congress - "Arsenic from Nature to Humans"*, 21 - 23 May 2008, Valencia, Spain. pp. 77.
- **Farooq, S.H.**, and Chandrasekharam D., (2006): The possibility of removal of arsenic from food chain: *International Groundwater Conference - 2006 (IGC-2006)*, 01 - 04 February 2006, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India. pp. 228.

### Awards and Honours

- Selected for participation in *International Continental Drilling Program (ICDP)* and awarded a fellowship by *US National Science Foundation* (2011).
- Awarded fellowships by *American Geophysical Union* on competitive basis (2011 & 2009).
- Awarded **DAAD Fellowship** by the German government to carry out research work in Germany (2006-2008, for a period of  $\approx 2\frac{1}{2}$  year).
- Awarded Senior Research Fellowship (SRF) from the *Council of Scientific and Industrial Research (CSIR)*, Ministry of HRD, Govt. of India (2006).
- Awarded Junior Research Fellowship (JRF) from the *Council of Scientific and Industrial Research (CSIR)*, Ministry of HRD, Govt. of India (2003-2005).
- Qualified National Eligibility Test (NET) - JRF, conducted by *University Grants Commission (UGC)*, Govt. of India (2002 & 2003).
- Awarded *University Post Graduate Merit Scholarship* (1998-2000).

## **Workshops**

- “Indo-Australian workshop on Arsenic” at School of Environmental Sciences, Jawaharlal Nehru University (JNU), New Delhi, October 2012.
- Workshop on “Recovering uncompromised samples of aquifer sands with in-situ groundwater from up to 300-m depth in South and South Asia” organized by International Continental Scientific Drilling Program (ICDP), Hanoi, Vietnam. April 2011.
- Workshop on “Use of Synchrotron X-ray and IR methods in the Geosciences” at ANKA, Forschungszentrum (A Humboldt Research Center), Karlsruhe, Germany, Nov. 2007.
- “Triple B Workshop (Berlin, Beijing, Buenos Aires) on Urban Atmospheric Pollution in Mega Cities” at Institute of Mineralogy and Geochemistry, University of Karlsruhe, Karlsruhe, Germany, Oct. 2007.
- Workshop on “Planetary Atmosphere, Ionosphere and Magnetosphere” conducted by Indian Space Research Organization (ISRO), Tiruanantpuram, India, February 2003.

## **Work Experience**

- Working as Assistant Professor in the School of Earth, Ocean and Climate Sciences, IIT Bhubaneswar (May 2012 – till date).
- ≈ 2 year of teaching experience as Assistant Professor at St. Xavier’s College, Mumbai, India (July 2010 – April 2012)
- Two years of research experience at Institute of Mineralogy and Geochemistry, University of Karlsruhe (TH), Germany (2006 - 2008).

## **Professional Memberships**

- International Association of Hydrological Sciences (IAHS), Oxfordshire, UK.
- German Alumni Water Network (GAWN), Universität Siegen, Germany.
- American Association of Petroleum Geologist (AAPG), USA.
- Indian Meteorological Society, India.

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