Curriculum Vitae

Mohammad Saiful Islam
Professor
Department of Geology
Faculty of Earth and Environmental Sciences
University of Dhaka, Dhaka 1000
Bangladesh

Mailing Address

Department of Geology
Faculty of Earth and Environmental Sciences
University of Dhaka, Dhaka 1000
Bangladesh

Phone

Office: (880-2) 9661900-73 Extension 7301
Mobile: +880 1712294642
E-mail: msaiful@du.ac.bd

Academic profile

Degrees[✡]	Institution	Year	Result
PhD	College of Earth Science and Engineering Shandong University of Science and Technology, China	Going on	
M.Phil. (Hydrogeology)	Department of Geology, Dhaka University, Dhaka, Bangladesh	Awarded in November 2002	
M.Sc. (Thesis Group)	Department of Geology, Dhaka University, Dhaka, Bangladesh	1991 (Held in 1994)	First Class
B.Sc. (Hons)	Department of Geology, Dhaka University, Dhaka, Bangladesh	1990 (Held in 1992)	First Class
Higher Secondary Certificate (H.S.C) - Science Group	Dhaka College, Dhaka, Bangladesh	1987	First Division
Secondary School Certificate (S.S.C) - Science Group	Fakir Bazar High School Comilla, Bangladesh	1985	First Division

Degrees

i. M.Phil. in Hydrogeology, Department of Geology, Dhaka University, 2002
Thesis title: *Studies on Hydrogeo-environmental Changes in Southwestern Bangladesh after Commissioning the Farrakka Barrage*

ii. M.Sc. in Geology (Thesis Group), Department of Geology, Dhaka University, 1995 (First Class)

[✡] *Medium of instruction is English*

Thesis title: *Pre-Farakka and Post-Farakka Studies on Hydraulic Head and Water Quality of Kushtia District, Southwestern Bangladesh*

iii. B.Sc. Honours in Geology, Department of Geology, Dhaka University, 1993 (First Class)

Job Experience

i. Professor, Department of Geology, Faculty of Earth and Environmental Sciences, Dhaka University, 2024-till date

Teaching/Research areas and responsibilities: Structural Geology, Tectonics, Regional Geology, Environmental Impact Assessment, Climate Change, Disaster Risk Reduction, Delta Processes and Management, Petroleum Engineering. Teaching undergraduate and post-graduate students; supervising students engaged in different research projects; supervising/co-supervising post-graduate thesis students in Tectonics and Petroleum Prospects, hydrogeological environmental studies; preparing relevant project proposals; writing relevant project reports and research papers.

ii. Associate Professor, Department of Geology, Faculty of Earth and Environmental Sciences, Dhaka University, 2013-2024

Teaching/Research areas and responsibilities: Mineralogy, Petrology, Principle of Economic Geology, Structural Geology, Hydrology, Surface water and Groundwater interaction, Surface water pollution, Groundwater pollution, Saline water intrusion, Water quality management, Flood management, Impact of irrigation development on the environment, Environmental Impact Assessment, Climate Change, Disaster Risk Reduction, Delta Processes and Management, Petroleum Engineering. Teaching undergraduate and post-graduate students; supervising students engaged in different research projects; supervising/co-supervising post-graduate thesis students in hydrogeological environmental studies; preparing relevant project proposals; writing relevant project reports and research papers.

iii. Assistant Professor, Department of Geology, Faculty of Earth and Environmental Sciences, Dhaka University, 2009-2013.

Teaching/Research areas and responsibilities: Same as above.

iv. Lecturer, Department of Geology, Faculty of Earth and Environmental Sciences, Dhaka University, 2008-2009.

Teaching/Research areas and responsibilities: Same as before.

v. Deputy Manager (Geology), Strategic Planning Division, Directorate of Planning, Bangladesh Oil, Gas and Mineral Corporation (Petrobangla), 3 Kawran Bazar, Dhaka 1215, Bangladesh, 2006-2008.

Key responsibilities: Formulation of policies regarding groundwater management in mining and hydrocarbon exploration.

vi. Assistant Manager (Geology), Strategic Planning Division, Directorate of Planning, Bangladesh Oil, Gas and Mineral Corporation (Petrobangla), 3 Kawran Bazar, Dhaka 1215, Bangladesh, 2005-2006.

Key responsibilities: Planning and monitoring different projects related to water resource management in mining.

vii. Assistant Manager (Geology), Implementation Division, Directorate of Mines and Minerals, Bangladesh Oil, Gas and Mineral Corporation (Petrobangla), 3 Kawran Bazar, Dhaka 1215, Bangladesh, 1999-2005.

Key responsibilities: Monitoring the development work of minining activities (e.g. coal and hard rock mining).

Publications:

1. Zohur Ahmed, Mohammad Solaiman, Md. Anwar Hossain Bhuiyan, M. Saiful Islam, Sarmin Sultana, Janifar Hakim Lupin (2024). Petroleum Source Rock Evaluation in the Eastern Fold Belt, Bengal Basin, Bangladesh: An Integrated Study Using Seismic Methods, Well Log Data, Field Investigation, and Laboratory Analysis. Dhaka Univ. J. Earth and Env. Sci. 13(2):77-104. https://doi.org/10.3329/dujees.v13i2.79462
2. Khan Riaz Hossain, **M. Saiful Islam** and Farhana Zaman (2024). Assessing the Spatio-Temporal Variability in the Frequency and Magnitude of Flash Floods and their Driving Mechanisms: Evidence from Haor Region of Bangladesh. J. Asiat. Soc. Bangladesh, Sci. 50(1-2):33-50. http://doi.org/10:3329/jasbs.v50i1.78842
3. **Islam M.S.**, Luan, X., Akhter, S.H., Steckler, M.S., and Bhuiyan, M.A.H. (2024). An overview of the Tectonic Evolution of Bengal Basin and its relation to Petroleum Prospect. Submitted to *Marine and Petroleum Geology* which is under review.
4. Luan, X., **Islam M. S**., Wei X., Lu, Y., Fan G., Pau S. K. and Lwin, S. M. (2021). Hydrocarbon accumulation in an active accretionary prism, a case study in the deep-water Rakhine Basin, Myanmar offshore. Journal of Asian Earth Sciences. https://doi.org/10.1016/j.jseaes.2021.104941
5. Wei, X., Luan, X., Ran, W., Lu, Y., **Islam, M.S**., Wang, K., Zhang, H. and Zhang, D. (2020). Characteristics and Paleogeographic Indications of the Late Oligocene to Early Miocene Coral Reefs in the Madura Strait Basin, Indonesia. Earth Science. 45(4):1403-1415. https://doi.org/10.3799/dqkx.2019.118
6. Ran, W., Luan, X., Lu, Y., Wei, X., Zhang, H., Wang, K., Wang, J., Wang, X., Zhang, D and **Islam, M.S**. (2019). Seismic characteristics and strontium isotope ages of the Middle Miocene Ngrayong Formation in the Madura Strait Basin: Implications for the paleogeographic reconstruction of East Java. Journal of Asian Earth Sciences. https://doi.org/10.1016/j.jseaes.2019.104109
7. **Islam M. Saiful**, Romana Afroz and M. Bodruddoza Mia (2019). Investigation of surface water quality of the Buriganga river in Bangladesh: Laboratory and spatial analysis approaches. Dhaka Univ. J. Biol. Sci. **28**(2): 147-158. https://doi.org/10.3329/dujbs.v28i2.46501
8. M. Bodruddoza Mia, Romana Afroz and **Islam M. Saiful** (2019). Evaluation and Monitoring of Water Quantity and Quality of the Buriganga River in Bangladesh using Multi-temporal Landsat Images. Dhaka Univ. J. Earth and Env. Sci., Vol. 8, 61-69. https://doi.org/10.3329/dujees.v8i1.50760
9. Khan Riaz Hossain and **M. Saiful Islam** (2018). Comparative Studies on the Changes in Climatic Condition and Seasonal Drought in North Western Part of Bangladesh. J. Asiat. Soc. Bangladesh, Sci. 44(2): 195-210. https://doi.org/10.3329/jasbs.v44i2.46561
10. Lipsi Mehtaz Mozaffor, **M. Saiful Islam** and Muhammad Qumrul Hassan (2015). Water Quality Assessment of Mirpur Thana of Dhaka City, Bangladesh. Dhaka Univ. J. Earth and Env. Sci. Vol. 4. P. 61-69.

11. Iftakher A, **M. Saiful Islam** and Jahangir AM (2015). Probable Origin of Salinity in the Shallow Aquifers of Khulna District, Southwestern Bangladesh. Austin J Earth Sci. 2(2): id1015. ISSN : 2380-0771.
12. Barua Shovon and **M. Saiful Islam** (2014). Water Quality Assessment of Dug Well Water and Its Adjoining Buriganga River Reach in the Old Dhaka of Bangladesh. J. Asiat. Soc. Bangladesh, Sci. 40**(2)**: 207-218. https://doi.org/10.3329/jasbs.v40i2.46019
13. Khan Riaz Hossain, **M. Saiful Islam** and M. Qumrul Hassan (2013). Hydrogeological Condition and Surface Water-Groundwater Interaction in Shariatpur District, South-Central Bangladesh. J. Ban. Geol. Soc., Dhaka, Bangladesh. Vol. 31-32. P. 111-121.
14. Majumder R. K., M. A. Halim, J. Shimada, B. B. Saha, A. Zahid, M. Q. Hasan and **M. Saiful Islam** (2013). Hydrochemistry and isotopic studies to identify Ganges River and riverbank groundwater interaction, southern Bangladesh. Arab J Geosci. 6:4585–4591. https://doi.org/10.1007/s12517-012-0767-3
15. Zahid A., M. Qumrul Hassan, Kamrul Islam, **M. Saiful Islam** (2012). Strengthening of Monitoring Network to Assess the Impact of Climate Change on Groundwater Resource of Bangladesh, pp. 22-43. In Zahid A., M. Qumrul Hassan, Anisur Rahman, M. Salim Khan, M. Abul Hashem and Lutful Hassan (eds.) Impact of Climate Change on Water Resources and Food Security of Bangladesh. Alumni Association of German Universities in Bangladesh (AAGUB) and German Academic Exchange Service (DAAD), Dhaka, Bangladesh. 167p.
16. Ahmed Nur, Anwar Zahid, M. Alamgir Kabir, **M. Saiful Islam** and M. Aminul Haque (2012). Evolution of Irrigation System and Requirement of Water Saving Technology in Bangladesh to Mitigate Climate Change Impact, pp. 63-78. In Zahid A., M. Qumrul Hassan, Anisur Rahman, M. Salim Khan, M. Abul Hashem and Lutful Hassan (eds.) Impact of Climate Change on Water Resources and Food Security of Bangladesh. Alumni Association of German Universities in Bangladesh (AAGUB) and German Academic Exchange Service (DAAD), Dhaka, Bangladesh. 167p.
17. Haque M. A., **M. Saiful Islam** and Anwar Zahid (2012). Groundwater Irrigation and Crop Economy in the Lower Gangetic Plain at Matbarer Char, Madaripur, South-Central Bangladesh. J. Asiat. Soc. Bangladesh, Sci. **38(1)**: 29-39. https://doi.org/10.3329/jasbs.v38i1.15318
18. Khan Riaz Hossain, **M. Saiful Islam** and Muhammad Qumrul Hassan (2012). Shallow and deep aquifer hydrochemistry and chemical variability of water quality at Shariatpur district, Bangladesh. Environ Earth Sci. 69:2499–2512. https://doi.org/10.1007/s12665-012-2075-3.
19. Rahman Md. Zillur, S.K. Shaha, M. Qumrul Hassan, A.S.M. Woobaidullah and **M. Saiful Islam** (2011). Hydro-meteorological Study of Sunamganj Town and Surroundings for Forecasting Flash Flood Early Warning. J. Asiat. Soc. Bangladesh, Sci. **37(1)**: 35-44.
20. Afrin Saima, **M. Saiful Islam** and Muhammad Qumrul Hassan (2011). Assessment of Surface and Groundwater Quality of Dhaka City. Dhaka Univ. J. Earth and Env. Sci. **2(1):** 55-62.
21. Nahar M. Naima Kamrun, M. Qumrul Hassan, Anwar Zahid and **M. Saiful Islam** (2011). Hydrostratigraphy and Properties of Aquifer Materials in Dhaka University Campus. Dhaka Univ. J. Sci. **59(1):** 17-24.

22. Ahmed Kazi Matin, **M. Saiful Islam** and Sarmin Sultana (2010). Changes in the Groundwater Regime of Dhaka City: A Historical Perspective, pp. 383-400**.** In Islam, M. A. (eds.) Environment of Capital Dhaka - Plants Wildlife Gardens Parks Air Water Earthquake. Asiatic Society of Bangladesh. Dhaka, Bangladesh. 432p.
23. Afroz Munira, **M. Saiful Islam** and Muhammad Qumrul Hassan (2010). Assessment of Water Quality and Supply Management System of Dhaka University Campus Area. Dhaka Univ. J. Earth and Env. Sci. **1(1):** 33-39.
24. A. Zahid, M.A. Haque, **M. Saiful Islam**, and M.A.F.M.R. Hasan (2009). The impact of shallow tubewells on irrigation water availability, access, crop productivity and farmers' income in the lower gangetic plain of Bangladesh, pp. 141-162. In Mukherji, A., K. G. Villholth, B.R. Sharma and J. Wang (eds.) Groundwater Governance in the Indo-Gangetic and Yellow River Basins: Realities and Challenges. Selected Papers on Hydrogeology #15, CRC Press, Taylor & Francis Group, London. 328p. https://doi.org/10.1201/9780203874479.
25. Najila Tahsan Nizam, S.Z.K.M Shamsad, Muhammad Sher Mahmud and **M. Saiful Islam** (2009). Quality and Chemical Properties of Groundwater in the Manikganj District of Bangladesh. J. Asiat. Soc. Bangladesh, Sci. **35(1)**: 49-56.
26. A. Zahid, M. Aminul Haque, **M. Saiful Islam**, M.A.F.M. Rashidul Hasan and M. Qumrul Hassan (2008). Groundwater resources potential in the deltaic floodplain area of Madaripur District, southern Bangladesh. Journal of Applied Irrigation Science, Vol. **42, No. 1/2008**: 41-56. DLG-Verlags-GmbH, Germany.
27. **Islam M. Saiful**, Anwar Zahid, M. Aminul Haque and M.A.F.M. Rashidul Hasan (2007). Problems and prospects of groundwater irrigation market in Bangladesh: A case study from Lower Gangetic Floodplain of Southwest Bangladesh. Journal of Applied Irrigation Science, Vol. **42, No. 2/2007**: 157-171. DLG-Verlags-GmbH, Germany.
28. **Islam M. Saiful** and Muhammad Qumrul Hassan (2006). Pre- and post-Farakka study on some climatic variables of the Ganges Floodplain of Southwestern Bangladesh and its impact on environment. In Proc. of the Workshop on 'Flooding in Bangladesh and Germany: Causes, Control and Management'. Goethe Institut, Dhaka: 71-78.
29. **Islam M. Saiful** and Muhammad Qumrul Hassan (2006). Surface water dynamics of the Ganges-Gorai river system of Southwestern Bangladesh and its impact on hydrogeo-environment. In Proc. of the Workshop on 'Flooding in Bangladesh and Germany: Causes, Control and Management'. Goethe Institut, Dhaka: 171-181.
30. Shamsad S.Z.K.M. and **M. Saiful Islam** (2005). Hydrochemical Behaviour of the Water Resource of Satkhira Sadar of Southwestern Bangladesh and its Impact on Environment. Bangladesh Journal of Water Resource Research, Bangladesh University of Engineering and Technology (BUET), Dhaka. Vol. **20**: 42-52.
31. Ahmed Zubayer, Muhammad Qumrul Hassan, Md. Sazzad Hossain and **M. Saiful Islam** (2002). Groundwater quality and hydrochemistry of Rangamati municipal area, Bangladesh. Dhaka Univ. J. Sci. **50(2):** 197-208.
32. Rahman M. M., Muhammad Qumrul Hassan, **M. Saiful Islam** and S.Z.K.M. Shamsad 2000. Environmental impact assessment on water quality deterioration caused by the decreased

Ganges outflow and saline water intrusion in south-western Bangladesh. Environmental Geology: **40(1-2)**: 31-40. Springer, Germany. https://doi.org/10.1007/s002540000152

33. **Islam M. Saiful** and Muhammad Qumrul Hassan (2000). Pre- and post-Farakka studies on the hydraulic head fluctuation in Kushtia district of southwestern Bangladesh and its impact on environment. J. Asiat. Soc. Bangladesh, Sci. **26(2)**: 173-182.
34. Shamsad S.Z.K.M, Muhammad Qumrul Hassan, **M. Saiful Islam** and Md. Moklesur Rahman (2000). Lead distribution in road-dust in and around Dhaka city and its impact on environment. J. Asiat. Soc. Bangladesh, Sci. **26(1)**: 143-148.
35. Shamsad S.Z.K.M, M.B.R. Khan, **M. Saiful Islam** and M. Shariful Islam (1999). Quality of surface water of southeastern outskirt of Dhaka city for irrigation purposes. Bangladesh J. Agril. Res. **24(4):** 541-548.
36. Shamsad S.Z.K.M and **M. Saiful Islam** (1999). Heavy metal pollution in surface water in and around the industrial areas of Dhaka city. J. Asiat. Soc. Bangladesh, Sci. **25(2)**: 299-308.
37. **Islam M. Saiful**, Muhammad Qumrul Hassan and S.Z.K.M. Shamsad (1999). Groundwater quality and hydrochemistry of Kushtia district, Bangladesh. J. Asiat. Soc. Bangladesh, Sci. **25(1):** 123-134.
38. Hassan Muhammad Qumrul, Md. Moklesur Rahman, **M. Saiful Islam** and S.Z.K.M Shamsad (1998). Effects of salinity on the hydrogeo-environment of Khulna city and Mongla port area of Bangladesh. Dhaka Univ. J. Biol. Sci. **7(2):** 113-127.
39. **Islam M. Saiful**, Muhammad Qumrul Hassan and S.Z.K.M. Shamsad (1998). Quality of irrigation water in the Kushtia district of Bangladesh. Dhaka Univ. J. Biol. Sci. **7(2):** 129-138.
40. Hassan Muhammad Qumrul and **M. Saiful Islam** (1997). Hydrogeo-environmental Impact on Kushtia District, Bangladesh: A study on pre- and post-Farakka conditions. In Proc. of the Workshop on 'Groundwater and Environment'. BGS and Goethe Institut, Dhaka. p. 84-93.

Research papers presented in International Seminar, Conference and Workshop

1. **M. Saiful Islam** (2024). Identification and Characterization of Lower Bhuban Sandstone Reservoirs in the North-eastern Region of Bangladesh. In National Workshop of Hydrocarbon Unit Research Program 2023-24. Hydrocarbon Unit, Energy and Mineral Resources Division, Ministry of Power, Energy and Mineral Resources, Dhaka, Bangladesh. 16 May, 2024.
2. Jowaher Raza, Muhammad Qumrul Hassan and **M. Saiful Islam** (2020). An Overview of Groundwater Condition around Hard Rock Mining Area, Maddhyapara, Dinajpur, Bangladesh. In International Symposium on Asian Earth Science, China (Online). 29-30, December, 2020.
3. **M. Saiful Islam** (2019). An overview of the Tectonic Evolution of Bengal Basin and its relation to Petroleum Prospect. In China-ASEAN Marine Geoscience Conference, Qingdao National Laboratory for Marine Science and Technology, Qingdao, China. 18-23 September, 2019.
4. Barua Shovon, **M. Saiful Islam** and Saugata Datta (2013). Water quality assessment of dug well waters and its adjoining Buriganga river reach, Old Dhaka, Bangladesh. In oral

presentation at the 125th Geological Society of America Anniversary Annual Meeting & Exposition, Denver, Colorado, USA.

5. **M. Saiful Islam** and Muhammad Qumrul Hassan (2008). Climatic Control on the Water Resources of Southwestern Bangladesh. In Poster Presentation of the International Conference on 'Global Climate Change and Its Effects'. Dhaka, Bangladesh. 25-30 August, 2008. p. 39.
6. **M. Saiful Islam**, Anwar Zahid, M Aminul Haque and MAFM Rashidul Hasan (2007). Groundwater Market in Bangladesh: A Case Study from Lower Indo-Gangetic Floodplain, Southwest Bangladesh. In International Workshop on Groundwater Governance in South Asia. International Water Management Institute (IWMI), New Delhi, India. 18-30 March, 2007.
7. Anwar Zahid, M Aminul Haque, **M. Saiful Islam** and MAFM Rashidul Hasan (2007). Development of Groundwater Irrigation and its Impact on Agriculture, Environment and Socio-economic Condition of Lower Gangetic Plain, Bangladesh. In International Workshop on Groundwater Governance in South Asia. International Water Management Institute (IWMI), New Delhi, India. 18-30 March, 2007.
8. **M. Saiful Islam** and Muhammad Qumrul Hassan (2003). Climatic Control on the Water Resources of Southwestern Bangladesh. In Poster Presentation of the International Conference on the Role of Natural Resources and Environment in Sustainable Development in South and Southeast Asia (NESDA). 17-21 January, 2003. Dhaka, Bangladesh.
9. S.Z.K.M Shamsad, Muhammad Qumrul Hassan and **M. Saiful Islam** (1998). Lead distribution in road-dust in and around Dhaka city and its impact on environment. Abstract. In International seminar on Geoscience and Urban Development. BGS-AGID, February 24-26, 1998. Dhaka. p 25.
10. Hassan Muhammad Qumrul and **M. Saiful Islam** (1997). Hydrogeo-environmental Impact on Kushtia District, Bangladesh: A study on pre- and post-Farakka conditions. In the Workshop on 'Groundwater and Environment'. BGS and Goethe Institut, Dhaka.

Trainings, Technical Seminars and Workshops Participated

Title	Institution	Time Duration
1. Hands-on Research Training on Running Sediment Sample Repository	Lamont-Doherty Earth Observatory (LDEO), Columbia University, USA	15 April-30 April 2013
2. Automated Geotechnical Testing Training on *Cyclic Triaxial*	Department of Geology, University of Dhaka	January 2010
3. IFS Workshop on Research Dissemination and Development of Scientific Manuscripts for Publication	Nepal	07-10 October 2009
4. SAARC Training Programme on Climate Change and Disaster Risk Reduction in South Asia	University of Dhaka Dhaka, Bangladesh	09-15 July 2009
5. Training Programme on Active Fault Mapping and Time Predictable Modelling	CDMP, UNDP, Dhaka, Bangladesh	11-12 May 2009
6. Training Course on Introduction to Petrel Software	Department of Geology, University of Dhaka	15-19 March 2009
7. Training Course on Introduction to ArcGIS	Department of Geology, University of Dhaka	13-15 January 2009
8. Summary Workshop and Report Writing on Groundwater Governance in South Asia	New Delhi, India	18 -30 March 2007
9. Workshop on Groundwater Governance in South Asia	New Delhi, India	9 October-15 November 2006
10. Groundwater Modelling	Department of Geology University of Dhaka	September 2005
11. Workshop on: Water Resource Management and Development in Urban Areas with Special Reference to Dhaka City	Goethe-Institut, Dhaka	14-18 September, 2003
12. Training Course on Coal and Coal Mining	Bangladesh Petroleum Institute, Dhaka	15-29 March, 2003
13. Training Program on Geographic Information Systems	The Institution of Engineers, Dhaka	27 January-09 April, 2002
14. Swift 2000 Proficiency (48 hours computer Training Course)	NIIT, Dhaka	August 2001
15. Petroleum Technical Seminar	Bangladesh Petroleum Institute, Dhaka	03-14 September 2000

MS theses supervised (2008-2016)

1. Hydrology and Groundwater Quality of Bhola district, South-central Bangladesh
2. Hydrochemistry and Source of Dug Well Water in Old Dhaka City, Bangladesh
3. Impact of Urbanization on the Peripheral and Inland Water Bodies of Dhaka City, Bangladesh
4. Studies on Hydrogeology and Water Quality of Pabna Sadar and Ishwardi upazilla of Pabna District, North-western Bangladesh
5. Hydrological Condition and Water Quality of Savar Pourashava, Savar, Dhaka.
6. Hydrogeological Condition and Water Quality Evaluation of Bogra Sadar, North-western Bangladesh
7. Water Quality and Groundwater Head Condition of Mirpur Thana, Dhaka
8. Aquifer Characterization and Groundwater Quality of Barguna District, South-Central Bangladesh

MS theses co-supervised

1. Evaluation of the Petroleum Source Rocks in the Surma Basin of Bangladesh using laboratory analysis, well log analysis, and seismic inversion
2. Assessment and Evaluation of Hydrogeological Condition of Sylhet City Corporation Area
3. Hydrogeological Condition and Water Quality of Shariatpur District of South-Central Bangladesh
4. Hydrogeological Condition of Magura District, Southwestern Bangladesh
5. Mine Waste Disposal, Its Impact Assessment and Mitigation Plan of Barapukuria Coal Mine, Bangladesh
6. Evaluation of Hydrogeological Condition and Groundwater Quality of Pabna District, North-western Bangladesh
7. Climatic Condition and Possible Impact of Climate Change in Khulna-Shatkhira-Bagerhat Districts, Southwestern Bangladesh
8. Hydrogeological Condition of Mathbaria Upazila, South Central, Bangladesh
9. Evaluation and Monitoring of Water Quality and Quantity of Buriganga River in Bangladesh using Multi-Temporal Satellite Images

MS projects supervised/co-supervised

1. Assessment of Water Quality and Supply Mangement System of Dhaka University Campus Area
2. The Farakka Barrage and Instrumentation of Thirty Years' Ganges Water Treaty
3. Impact of Tannery Pollution on the Hydrogeoenvironment of Hazaribag Area and Its Adjoining Areas of Dhaka City
4. Studies on Some Hydrometeorological and Hydrogeological Variables of Satkhira District, Southwestern Bangladesh
5. Hydrological and Hydrogeological Condition of Manikganj District, North Central Bangladesh
6. Studies on Some Hydrometeorological and Hydrogeological Variables of Jhenaidah District, Southwestern Bangladesh
7. Hydrogeoenvironmental Changes In Khulna District, Southwestern Bangladesh
8. Possible causes of Water logging problem and its impact on Environment in Satkhira Sadar Upazila of Satkhira District, South-western Bangladesh
9. Water Quality Assessment of Khulna District, South-western Bangladesh
10. Water Quality Assessment of Nabinagar Upazila of of Brahmanbaria District, South-eastern Bangladesh
11. Aquifer Delineation and Groundwater Head Condition of Sylhet District, North-Eastern Bangladesh

12. Assessment of Groundwater Quality of Manda Thana, Naogaon District, North-western Bangladesh
13. Groundwater Potentiality of Ishwardi Upazilla, Pabna
14. Present Scenario of Waterlogging Problem in Monirampur Upazila of Jessore District, Southwestern Bangladesh

Overseas Research Project

1. 'BanglaPIRE' (Partnership for International Research and Education) funded by United States Agency for International Development (USAID) – a collaborative research project with Columbia University, USA.*
2. 'Hydrodynamic Behaviour of Saline and Fresh Water Interface in Southwestern Bangladesh and its Impact on Environment' – a project funded by International Foundation for Science (IFS), Sweden.
3. 'Development of Groundwater Irrigation and its Impact on Agriculture, Environment and Socio-economic Condition of Lower Gangetic Plain, Bangladesh' – a collaborative research project with International Water Management Institute (IWMI) funded by IWMI, India.

Current Research Projects

1. 'Reservoir Characterization Integrating Seismic, Petrophysical, and Core Data: A Case Study from Habiganj Gas Field of Surma Basin, Bangladesh' – Principal Investigator of the Research Project submitted to Hydrocarbon Unit, Ministry of Power, Energy and Mineral Resources, Government of Bangladesh. 2025-2026.
2. 'Evaluation of Unconventional Reservoir in the Lower Tertiary Sequence of Surma Basin, NE Bangladesh' – Principal Investigator of the Research Project funded by Hydrocarbon Unit, Ministry of Power, Energy and Mineral Resources, Government of Bangladesh. 2024-2025.
3. 'Identification and Characterization of Lower Bhuban Sandstone Reservoirs in the Northeastern Region of Bangladesh' – Principal Investigator of the Research Project funded by Hydrocarbon Unit, Ministry of Power, Energy and Mineral Resources, Government of Bangladesh. 2023-2024.
4. 'Diagenesis and Petrographic Characterization of Surma Group Sandstone in the South-Eastern Part of Bangladesh: Implications for Reservoir Quality Assessment' – Principal Investigator of the Dhaka University Centennial Research Project funded by University Grants Commission of Bangladesh. 2023-2024.
5. 'Assessment and Correlation of Basin Scale Depositional Sequences of Tertiary Deposits of the Bengal Basin Applying Sequence Stratigraphy'– Co-Investigator of the Research Project funded by Ministry of Science and Technology, Government of Bangladesh. 2022-2023.
6. 'An Integrated Geophysical and Geological Investigation of the Natural and Anthropogenic Impacts on Groundwater Condition of Cox's Bazar city, Bangladesh' Assessment' – Principal Investigator of the Research Project funded by University Grants Commission of Bangladesh. 2022-2023.

Computer skills

Conversant with MS Office, and working/training experience in Surfer, ArcGIS, Petrel, CorelDraw and other Hydrogeological Softwares

Areas of research interest

Tectonics, Petroleum Engineering, Hydrology, Hydrogeology, Environmental Geology, Climate Change, Delta Processes and Management

Editorial attachment

Associate Editor, The Bangladesh Journal of Geology, Dhaka, Bangladesh
Associate Editor, The Dhaka University Journal of Earth and Environmental Sciences, Dhaka, Bangladesh
Member, Editorial Board, Austin Journal of Earth Science, New Jersey, USA
Elsevier recognised Reviewer of the journal 'Geomorphology'

Social network

Life Member of Dhaka University Alumni Association
Life Member of Dhaka University Geology Alumni Association
Life Member of Bangladesh Geological Society
Life Member of Asiatic Society of Bangladesh
Member of International Exchange Alumni (Bureau of Educational and Cultural Affairs, USA)
Life Member of Master Mission, Jambari, Cumilla, Bangladesh

International affiliation

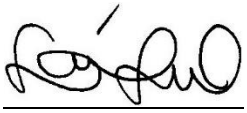
International Water Management Institute (IWMI) Fellow
International Foundation for Science (IFS) Grantee

International Award(s)

Received 'Best Research Group Award' from International Water Management Institute (IWMI), Delhi, India in 2007

Countries visited

China, India, Nepal, USA



Signature

*Under a USAID research grant program, Columbia University of USA and Dhaka University of Bangladesh implemented a collaborative project entitled "Toward geo-hazard assessment in Bangladesh: Academic infrastructure and knowledge transfer." As an integral part of the program, I was selected from the Department of Geology, University of Dhaka for two-week training from 15 April to 30 April 2013 at the Lamont-Doherty Earth Observatory (LDEO) of Columbia University, USA under the supervision of Professor Dr. Michael S. Steckler, Lamont Research Professor and Principal Investigator of the project. The training was basically to obtain hands-on experience for running a Sediment Sample Repository and working with the research equipment. Under the grant, Department of Geology, University of Dhaka, with the cooperation of Columbia University, established a Sediment Sample Repository for further geological research in home and abroad.