

## ***CURRICULUM VITAE***

Dr. Md. Sohel Rana

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### **Dr. Md. Sohel Rana**

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#### **Career Objective:**

- To develop a successful career as a nationally and internationally recognized geologist, contributing significantly to the advancement of geological sciences.

#### **Education:**

- **Doctor of Philosophy in Economic Minerals in Sand**, Jahangirnagar University, Savar, Dhaka, Bangladesh (2025). *Thesis: "Characterization, Distribution, and Economic Potential of the Jamuna River Sands in Bangladesh"*. Focused on the assessment, spatial distribution, and economic evaluation of both heavy and light mineral resources within the Jamuna River sands.
- **Master of Science in Geological Engineering**, Universiti Kebangsaan Malaysia (UKM), Malaysia (2015). *Thesis: "Heavy Mineral (Mineral Sands) Study in the Bukit Puteri Area, Bangi, Selangor, Malaysia"*. Specialized in mineralogical characterization and evaluation of economic mineral sands.
- **Specialized Research Training** in Heavy Mineral Separation Techniques, Caerphilly, Wales, United Kingdom (2019). Advanced training in laboratory methodologies for mineral sands processing and analysis.
- **Master of Science in Geology & Mining**, University of Rajshahi, Bangladesh (1999). Emphasized applied geological exploration, mineral resource evaluation, and field mapping techniques.
- **Bachelor of Science (Honor's) in Geology & Mining**, University of Rajshahi, Bangladesh (1998). Focused on foundational geoscience, mineralogy, petrology, and geological field methods.

#### **Computer Skill:**

- Proficient in various software including ArcMap, ERDAS Imagine, ENVI, MapInfo, Quantum GIS, Parabat, MS Word, Excel, PowerPoint, Adobe Illustrator, Rock Ware, and Adobe Photoshop for geospatial and geological analysis tasks.

## Language Proficiency:

- Fluent in Bengali, Malay, and English, with excellent written and verbal communication skills in all three languages.

## Personal Details:

- Father : Md. Siraj Uddin Khan
- Mother : Misses Sufia Khatun
- Date of Birth : 25<sup>th</sup> December, 1976
- Sex : Male
- Marital Status : Married
- Religion : Islam
- Nationality : Bangladeshi (by Birth)
- Permanent Address : Vill. Shamper, Post. Nutonmirpur, Upazila- Bera, District– Pabna.
- Present Address : 10/5, Baily Square Officers Quarter, Baily Road, Ramna, Dhaka.
- Department : Geological Survey of Bangladesh
- Designation : Deputy Director (Geology)
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## Training

### a) Local Training

No	Subject	Place	Duration	Comment
1.	Smart Project Management	Bangladesh Institute of Management (BIM)	29 June, 2025 To 3 July, 2025	Certificate Holder
2.	e-Governance for Sustainable Development	National Academy for Planning and Development, Dhaka	10 February, 2019 To 14 February, 2019	Certificate Holder
3.	Training Course on Management Skills for Project Executives	National Academy for Planning and Development, Dhaka	18 December, 2011 To 22 December, 2011	Certificate Holder

## b) Foreign Training

No.	Subject	Place	Duration	Comment
1.	Specialized research training in heavy mineral (mineral sands) separation methods.	Eriez Magnetics Europe Ltd. Caerphilly, Wales, United Kingdom	28 July 2019 To 04 August 2019	Certificate Holder
2.	Master of Science in Geological Engineering with a thesis titled 'Heavy Mineral (mineral sands) Study in the Bukit Puteri Area, Bangi, Selangor, Malaysia	University of Kebangsaan, Malaysia.	28 February 2014 To 27 February 2015	Certificate Holder

## Experience:

### (a) Professional Experience:

- Ten years of research and exploration experience in economic mineral resources of Bangladesh at the Economic Geology & Resources Assessment branch of the Geological Survey of Bangladesh (GSB).
- Three years of working experience in project implementation and heavy mineral research for the 'Identification and Economic Assessment of the Valuable Minerals in the River Sands of Bangladesh (IRSM\_BD)' geoscientific project at the Geological Survey of Bangladesh (GSB).
- Two years of working experience in administration as the Chief of the Transport & Workshop Sub-branch under the Operation & Cooperation Branch of the Geological Survey of Bangladesh (GSB).
- Two years of work and research experience in rocks and minerals at the Petrology & Mineralogy branch of the Geological Survey of Bangladesh (GSB).
- One year of working experience in administration and mineral leasing at the Bureau of Mineral Development (BMD).
- Participated in numerous geoscientific seminars and workshops, enhancing knowledge in geological research, methodologies, and emerging trends in the field.
- Presented numerous geological research papers at various conferences and seminars, contributing to the advancement of geoscientific knowledge and studies.

## **(b) Geological Research Reports:**

1. **Md. Sohel Rana**, Mohamamd Omer Faruk Khan, Zobayer Mahmud, Md. Al Razi (2024): Geological Research Report on “Identification and Economic Assessment of Valuable Minerals in the Sands of the Padma River, Bangladesh”. Records of the Geological Survey of Bangladesh, GSB/DATA/SUR-939.
2. **Md. Sohel Rana**, Anwar Saadat Mohammad Sayem, Zobayer Mahmud, Mohammad Al-amin, Md. Abdur Razzaque, Md. Al Razi (2024): Geological Research Report on “GDH-77/2022 of the Kutubpur Magnetic Body in Dinajpur District, Bangladesh”. Records of the Geological Survey of Bangladesh, GSB/DATA/SUR-938.
3. **Md. Sohel Rana**, Zobayer Mahmud, Md. Abdur Razzaque, Md. Al Razi (2024): Geological Research Report on “Extensive mineral and rock identification in the basement complex of the Kutubpur Magnetic Body, Parbatipur, Dinajpur, Bangladesh.”. Records of the Geological Survey of Bangladesh, GSB/DATA/RP-05.
4. **Md. Sohel Rana**, Zobayer Mahmud, Mohammad Al-amin, Md. Abdur Razzaque, Md. Al Razi (2024): Geological Research Report on “Extensive mineral and rock identification in the basement complex at the Masidpur Magnetic Body, Hakimpur, Dinajpur, Bangladesh”. Records of the Geological Survey of Bangladesh, GSB/DATA/RP-04.
5. **Md. Sohel Rana**, Mohammed Masum, Mohammad Nurul Hoque, Zobayer Mahmud, Mohammad Al-amin, Md. Abdur Razzaque (2021) Geological Research Report on “Iron Ore Discover in Bangladesh”. Records of the Geological Survey of Bangladesh, GSB/DATA/SUR-864.
6. Mohammed Masum, Mohammad Nurul Hoque, **Md. Sohel Rana**, Zobayer Mahmud, Mohammad Al-amin, Md. Abdur Razzaque (2020) Geological Report on “First Iron Ore Discover in Bangladesh”. Records of the Geological Survey of Bangladesh, GSB/DATA/SUR-980.
7. **Md. Sohel Rana**, Mohammad Al-amin, Md. Abdur Razzaque (2020): Gazette Amendment of Patgram Stone Quarry, Patgram, Lalmonirhat Bangladesh. Records of the Geological Survey of Bangladesh, GSB/DATA/SUR-893.
- 8., **Md. Sohel Rana**, Zobayer Mahmud, Mohammad Al-amin, (2020): Exploration of Silica Sand deposit at Patiya Upazila in Chattogram District of Bangladesh. Records of the Geological Survey of Bangladesh, GSB/DATA/SUR-895.
9. **Md. Sohel Rana**, Dr. Mohd. Basrillswadi Bin Basori., (2015): Heavy Mineral Study in the Bukit Puteri Area, Bangi, Selangor, Malaysia.

10. Md.Nuruzzaman Sabuj, Md Abu Sayem, **Md. Sohel Rana** (2014): Geological Drill Hole (GDH-68/13 Report, Chakupara-Masidpur, Hakimpur, Dinajpur, Bangladesh, *Unpublished Records of the Geological Survey of Bangladesh, GSB/DATA/UR-763.*

11. Md.NuruzzamanSabuj, **Md. Sohel Rana** (2014): Report on the Stone and Sand MixedStone Deposit of Lalmonirhat,Nilfamary,Panchagar District, Bangladesh, Unpublished Records of the Geological Survey of Bangladesh, GSB/DATA/SUR-764.

12. Md.Nuruzzaman Sabuj, **Md. Sohel Rana** (2013): Report on the White clay Deposits of Dhobaura, HaluaghatUpazila of Mymensingh District, Durgapur of Netrokona District and Nalitabari, Jhenigati, SreebordiUpazila of SherpurDistrict*Unpublished Records of the Geological Survey of Bangladesh, GSB/DATA/UR-743.*

13. Mohammad Masum, Md. NazwanulHaq, Md Abu Sayem, **Md. Sohel Rana**, (2012): Report on Exploration of Peat at 4000 Hectare Area of BijohnagarUpazila, BramanbariaDistrict, *Unpublished Records of the Geological Survey of Bangladesh.GSB/DATA/UR-789.*

14. Asma Hugue, **Md. Sohel Rana**, Md. Arifuzzaman & Kaniz Fatema (2009):. Qualitative Evaluation and Commercial Significance of Glass Sand of Habigonj and Commila Districts, Bangladesh *Unpublished Records of the Geological Survey of Bangladesh, GSB/DATA/UR-650*

### **(c) Geological Research Publications:**

1. **Md. Sohel Rana**, Md. Ali Akbar, Zobayer Mahmud, Anwar Sadat Mohammad Sayem, Md. Al Amin and Md. Al Razi “The mineralogy and geochemistry of the Kutubpur Magnetic body area in Parbatipur, Dinajpur, Bangladesh” 2<sup>nd</sup> National Seminar Geology for the Sustainable Development of Bangladesh. ISSN 2958-616X (26).

2. **Md. Sohel Rana**, Md. Ali Akbar, Mohammed Masum, Mohammed Nurul Hoque, Md. Nuruzzaman Sabuj, Md. Abu Sayem, Zobayer Mahmud, Md. Al Amin, Md. Abdur Razzaque (2024): “Mineralogical Characterization of the Masidpur Magnetic body of Dinajpur, Bangladesh”. 2<sup>nd</sup> National Seminar Geology for the Sustainable Development of Bangladesh. ISSN 2958-616X (16).

3. **Md. Sohel Rana**, Md. Ali Akbar, Farhan Ahmed Bhuiyan, Anwer Sadat Mohammad Sayem, Zobayer Mahmud, Md. Al Amin, Md. Al Razi. (2024): “Grain size analysis of the Plio-Pleistocene Dupitila Formation in the Kutubpur Magnetic Body Area, Dinajpur, Bangladesh: Implications for depositional setting”. 2<sup>nd</sup> National Seminar Geology for the Sustainable Development of Bangladesh. ISSN 2958-616X (04).

4. **Md. Sohel Rana**, Md. Ali Akbar, Anwer Sadat Mohammad Sayem, Zobayer Mahmud, Md. Al Amin, Md. Al Razi. (2024): “Prospect of Iron ore at Kutubpur magnetic body, Parbatipur, Dinajpur”. 2<sup>nd</sup> National Seminar Geology for the Sustainable Development of Bangladesh. ISSN 2958-616X(15).

5. **Md. Sohel Rana**, Md. Al Amin, Md. Abdur Razzaque (2024): “Environmental Degradation: A case study of the Patgram”. 2<sup>nd</sup> National Seminar Geology for the Sustainable Development of Bangladesh. ISSN 2958-616X(18).
6. **Md. Sohel Rana**, Mohd. Basril Iswadi Bin Basori (2024): “Heavy Minerals Exploration in the Bukit Puteri Area, Bangi, Selangor, Malaysia”. 2<sup>nd</sup> National Seminar Geology for the Sustainable Development of Bangladesh. ISSN 2958-616X(14).
7. **Md. Sohel Rana**, Zobayer Mahmud, Md. Al Amin (2024): “Discovery of Silica Sand deposit at Patiya Upazila in Chattogram District of Bangladesh”. 2<sup>nd</sup> National Seminar Geology for the Sustainable Development of Bangladesh. ISSN 2958-616X(17).
8. **Rana M. S**, Masum M, Hoque M. N, Akbar M.A, Sabuj M.N, Sayem M. A, Mahmud Z, Amin A. M, Razzaque M. A. (2021): Banded Iron Formation: A Prospect of Bangladesh. Geoscience for Sustainable Development of Bangladesh. Vol:1(43).
9. **Rana M. S**, Mahmud Z, Amin A. M,. (2021): Exploration of Silica Sand deposit at Patiya Upazila in Chattogram District of Bangladesh. Geoscience for Sustainable Development of Bangladesh. Vol:1(62).
10. Amin A. M, **Rana M. S**, Razzaque M. A. (2021): Environmental Impact of Sand and Gravel Extraction from Different Quarries at Patgram Upazila, Lalmanirhat, Bangladesh and Prospect of this Sand. Geoscience for Sustainable Development of Bangladesh. Vol:1(83).
11. Masum M, Hoque M. N, Akbar M.A, Mahmud Z, **Rana M. S**, Razzaque M. A. Amin A. M (2021): Geology and Precambrian Banded Iron Formation formed at Rangpur Platform in Bangladesh. International Journal Of Engineering Research And Development e- ISSN: 2278-067X, p-ISSN: 2278-800X, www.ijerd.com Volume 17, Issue 3 (May-June 2021), PP. 43-57.
12. Rahman M. J, Pownceby M.I, **Rana M.S**.(2020): Occurrence and distribution of valuable heavy minerals in sand deposits of the Jamuna River, Bangladesh. ELSIVEIR, Ore Geology Reviews 103273.
13. Rahman M. J, Pownceby M.I, **Rana M.S**.(2022): Distribution and characterization of heavy minerals in Meghna River sand deposits, Bangladesh. ELSIVEIR, Ore Geology Reviews 143 (2022) 104773.
14. Masum. M, Haque. M. N, Sayem M. A, **Rana M.S**, Hasan. M.F, Sheik.M.R and Paul.A.K.(2015): Peat Resources, its Quality and Condition of Deposition, Bijoynagar Upazila, B’Baria District, Bangladesh. BASR01(04),Page 124-128. ASD Publisher.
15. Haque. M. N, Masum. M, Uddin, M. N, Sheik. M. R, Sayem . M. A, **Rana M.S** And Sabuj, M. N. (2013): Peat Deposits at Bijoynagar Upazila, Brahmanbaria District, Bangladesh: A Potential local Source of Energy. Int. j. econ. environ. geol. Vol:4(2) 16-21.

16. Uddin.M.N. Sayem.M.A, Masum. M and **Rana M.S** (2009): Peat resources at Brahmanbaria Sadar, Brahmanbaria district, Bangladesh: Economic and Environmental Aspects. Proceedings- Geoscience for Global Development (GeoDev), volume-2.

17. Mohammad Omer Faruk khan, Md. Ali Akbar, Md. Ahasan Habib, **Md. Sohel Rana**, Riyadul Islam, Md. Rashedul Hasan (2025); “Geochemical Prospecting of for Lithium in the River Sands of Dharla, in Kurigram District, of Bangladesh” National Seminar on Geology for the Sustainable Development, Planning Climate Resilient Bangladesh.

18. Md. Shohanur Rahman Sohan, Rumana Yeasmin, M. Jullah Jalalur Rahman, Abu Sadat Md. Sayem, **Md. Sohel Rana**. “Textural and Petrographic Characterization, and Distribution of Heavy Minerals in Sand Deposits of the Teesta River, Bangladesh” National Seminar on Geology for the Sustainable Development, Planning Climate Resilient Bangladesh.

## Reference:

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