

Abdul Kader Fakir

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Office: Physical Instrumentation Division, BCSIR Laboratories, Dhaka
Bangladesh Council of Scientific and Industrial Research (BCSIR)
Dr. Quadrat-i-Khuda Road, Dhaka-1205, Bangladesh

Education

- 2023 M.Sc. in Computer Science (Position 3rd, 3.36 out of 4.0), Duration 1.5 years.
- 2014 Bachelor of Science in Computer Science & Engineering (CSE): (Position 2nd, 3.85 out of 4.0), Duration 4 years.
- 2010 Diploma in Computer Science & Engineering (CSE) (Position 1st, 3.64 out of 4.0), Duration 4 years.

Professional Experience

- 01.11.22 - Scientific Officer, Institute of Mining, Mineralogy, and Metallurgy (IMMM), Bangladesh
- 06.10.25 Council of Scientific and Industrial Research (BCSIR), Joypurhat, Bangladesh.
Scientific Officer, Physical Instrumentation Division, BCSIR Laboratories, Dhaka
- From 07 October 2025 to present Bangladesh Council of Scientific and Industrial Research (BCSIR), ীবৃত্ত-1205

Research Fields

- Primary : Computer Science & Engineering, Mineral Resources.
- In Depth Hardware & Network (LAN, MAN, WAN) configuration & Troubleshooting.
OS Installation, Server configurations, Maintenance & Troubleshooting.
knowledge on MYSQL, SQL, MS SQL-2005, MS SQL-2008R2,
Switches, Gateways and Firewalls, Cisco router, Routing, Bridging, VLAN, VPN,
, Remote sensing, Machine learning, Cloud computing. C++, C, Visual Basic,

Job Responsibilities

- Carry out routine work related to R and D project.
- Provide analytical services to various government, private, and autonomous organizations.
- Study and solve industrial problems.
- Ensure chemical safety and security in the laboratory.
- Continual improvement of the laboratory to obtain accreditation
- Develop analytical methods and validation of methods.

- Maintaining Scientific Equipment (AAS)

Training courses:

1. Training on “Practical Flotation Training” from 2-8 December 2022 by IMMM and CSIRO at Joypurhat 5900.
2. Conducted a training course on “Proximate Analysis of Coal” as a trainer from 9-13 April 2023, held by IMMM at Joypurhat, 5900.
3. Training on “Atomic Absorption Spectrophotometer” from 8-12 October 2023 by IMMM at Joypurhat 5900.
4. Training on “Simultaneous Thermal Analyzer (STA)” from 27 May 2024 by IMMM at Joypurhat 5900.
5. 28th Special Foundation Training Course for the officials of BCSIR from 22 December 2024 to 19 February 2025
6. Training on the X-ray diffractometer (XRD) was conducted from 1 July to 4 July 2024
7. Training on Wavelength Dispersive X-ray Fluorescence (WD-XRF) was conducted from 24 to 28 November 2024.

R&D Activities: Role of R&D Projects in BCSIR (2023-2024):

Sl. No	Title of the R&D Projects	Role
01.	Extraction of Ce, Nd, and La from Monazite Mineral of River sand, Bangladesh: A Study for occurrences, distribution, and potential processing option (July 2025- June 2028)	Project Associated
02.	Development of a computer antivirus software using programming languages C, C++, and Visual Basic (July 2024-june 2026)	Project Leader
03.	Exploration of valuable heavy minerals on the Meghan river estuary (July 2023- June 2025), Extended 01 year	Project Associated
04.	Assessment of critical Minerals Resources in Bangladesh (July 2023-June 2025)	Project Associated

Conference Proceedings:

2024	Abdul Kader Fakir, Md. Hasnain Mustak, Md. Ripaj Uddin, Md. Imam Shohel, Sha Alam. IoT-based smart monitoring system for measuring human heartbeat and body temperature, Conference BCSIRCongress-2023. At BCSIR Dhaka, Bangladesh, March 2024
2024	Md. Ripaj Uddin, Mohammad Nazim Zaman, Md. Aminur Rahman, Md. Hasnain Mustak, Abu Yousuf, Hayatullah, Golam Mostafa, Abdul Kader Fakir, A comprehensive guideline towards the restoration of the present Buriganga river by a holistic approach of the nature-based solution, Conference: BCSIR Congress2023, At BCSIR Dhaka, Bangladesh, March 2024

Research Paper:

01. Pownceby, H., Hossen, M. N., Hossain, M. M., Sha, M., Alam, M. S. R., Fakir, A. K., & Uddin, M. R. (2025). Extraction of Rare Earth Elements from Monazite: A Review of Current Practices and Emerging Opportunities for Bangladesh.