Nadia Mahjabin,

Chittagong University of Engineering & Technology,
Chattogram-4349, Bangladesh.

SUMMERY

I am a faculty member at the dept. of Petroleum and Mining Engineering, Chittagong University of Engineering and Technology (CUET), Bangladesh. Since 2017, I have worked here as a course instructor for undergraduate students, where I have taken courses on petroleum/mining-related subjects. I must do in-depth research to enrich my academic knowledge in the relevant field and to foster creativity and higher-order thinking abilities.

PERSONAL INFORMATION:

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ORCID ID: https://orcid.org/0000-0002-1874-8987

CUET ID: https://www.cuet.ac.bd/members/236

EDUCATION

- M.Sc. in Energy Technology (07/2018-03/2024).
  CGPA: **3.88** out of 4.0; Institute of Energy Technology,
  Chittagong University of Engineering and Technology (CUET), Chattogram-4349, Bangladesh.
- B.Sc. in Petroleum and Mining Engineering (2012-2017).
  CGPA: **3.95** (with honors) out of 4.0; Merit Status: **1st**
  Chittagong University of Engineering and Technology, Bangladesh
  List of Award:
  •Prime Minister Gold Medal, 2017 for obtaining highest CGPA form Mechanical Faculty

EXPERIENCE

- ✓ July, 2017-Till To Date.
  Faculty Member, Department of Petroleum and Mining Engineering, Chittagong University of Engineering and Technology, Bangladesh.
  During my term, I am teaching undergraduate students on various topics connected to mining and petroleum disciplines as a course instructor. Additionally, I am working as a student advisor, a member of the Program Self-Assessment Committee (PSAC), grad scrutinizer and thesis supervisor for Undergraduate students.

- ✓ December,2016, Super Refinery Pvt. Ltd.
  Worked as an intern in the Quality Control Lab.

RESEARCH INTERESTS

Mine Ventilation and Environmental Engineering, Mine Planning, Mining Systems, Machine Learning in Mining, Energy and Resources, Carbon capture & sequestration, Fluid flow in porous media, Environmental and Risk analysis, Fluid Mechanics.

Technical Skills

•Programming Languages: C++, Python

•Software: Rockworks, Surpac, Ventsim, Eclipse, DWSIM, Aspen Plus, PVTsim.

RESEARCH EXPERIENCE

- I have done my undergraduate research on Feed (Condensate) and Product Characterization of SUPER REFINERY PVT. LTD. and masters research on Phase Behavior Analysis of a Gas Condensate Reservoir.
- Supervising undergraduate students in the following project/ thesis:

I. Masum, M., Mahjabin, N.(2021) Assessment Of Risk Analysis Of Mine Fan By Studying Ventilation Network For Khalashpir Coal Mine, Unpublished manuscript, Chittagong University of Engineering & Technology, Bangladesh.

II. Amin, A., Mahjabin,N. (2023) A Study On The Use Of Dust Management Technology In Underground Mine Field, Unpublished Manuscript, Chittagong University of Engineering & Technology, Bangladesh.

III. Talukder, S., Mahjabin, N. (2023). Development of Ensemble Learning-Based Predictive Model for Seismic Hazard Assessment in an Underground Coal Mine, Manuscript submitted.

IV. Chakrabrtrty,A., Mahjabin, N. (2025),A Simulative Approach To Convert Refinery Flare Gas To Liquid Fuels Using Gas-To-Liquid (Gtl) Technology: A Way To Establish An Eco-Friendly Alternative Fuel Generation Source, Unpublished Manuscript

V. Rahman,A.M., Mahjabin, N.(2025), Valorization of Coal Tailings Through Reprocessing and Recycling, Running project.

PUBLICATIONS

I. Mahjabin, N., & Banik, S. C. (2025). An integrated study of phase behavior in natural gas reservoirs through experimental and simulation approach: A case study. Energy Reports, 13, 6631-6650.https://doi.org/10.1016/j.egyr.2025.05.077

II. Mahjabin, N, Banik,S.C., Abir A,N. (2025). A Simulation Approach of Characterization and Distillation Performance Assessment of Natural Gas Condensate, International Conference on Mechanical, Industrial and Energy Engineering (ICMIEE 2025), Paper ID: ICMIEE24-013.

III. Mallik, S., Mahjabin, N (2024). A Study on Reduction of CO2 Concentration in Underground Mine, International Conference on Mechanical, Industrial and Materials Engineering 2024, Rajshahi, Bangladesh.Paper ID:510

IV. Mahjabin*,N., Sultana,K., Islam, M., Karim, M. (2022). Condensate Characterization: An Approach to Evaluate the Performance of Condensate as a Feedstock in Oil Refinery, International Conference on Mechanical, Industrial and Energy Engineering (ICMIEE), Khulna, Bangladesh. ICMIEE22-003. scholar.google.com/scholar?cluster=14732527400228207356&hl=en&as_sdt=0,5

V. Rita,N., N., and Mahjabin,N. (2021). A Study of Alternative Solutions to Harness Flare Gas in Gas Field and Refinery, International Conference on Mechanical Engineering and Renewable Energy, (ICMERE), Chattogram, Bangladesh.ICMERE2021-P1-101

VI. Iqbal, A., and Mahjabin,N. (2019). Improved Oil Recovery by Low Salinity Waterflooding Using Numerical Simulation, International Conference for Petroleum Engineers (ICPE), Dhaka, Bangladesh. ICPE 2019-57