

Fehad Nabi Khan

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EDUCATION

- Aligarh Muslim University (AMU), Aligarh, India** 2018-2021(Jan)
- Master of Technology in Petroleum Processing & Petrochemical Engineering, CPI **9.33/10**
- Aligarh Muslim University (AMU), ZHCET, India** 2012-2016
- Bachelor of Technology in Chemical Engineering, CPI **6.94/10**

PROJECT AND INTERNSHIP

M.Tech Final year thesis: **Preparation, characterization and electrochemical analysis of material for supercapacitor applications**

- || In this thesis I have synthesized material for supercapacitor applications. The characterization of material is carried out through tests such as FT-IR, SEM, XRD and electrochemical characterization of the material is carried on auto lab potentiostat by test such as Cyclic Voltametry, Galvanic charge-discharge test, Electrochemical Impedance Spectroscopy (EIS) techniques.

M.Tech Final year project: **Energy and exergy analysis of BIGCC using M.S Excel spreadsheet**

- || In this project we developed a model on M.S Excel Spreadsheet to carryout energy and exergy analysis of biomass integrated gasification combined cycle for different types of biomass feed and different conditions of temperature and pressure and successfully designed the model and the study was presented in an international conference.

M.Tech seminar report: **Development of fuel additives**

- In this seminar report I completed a thorough research on the history, classification, chemistry, mechanism and recent development and future trends in fuel additives and additives technology.

B.Tech Final year dissertation: **Production of Acrolein from the dehydration of glycerol**

- The project aims to Techno-Economic Feasibility report on the production of Acrolein from dehydration of glycerol.

Summer Vocational Training at Harduaganj Thermal Power Plant, Aligarh, Uttar Pradesh

- || Reviewed the working of various Equipments used in DM plant of the thermal power plant like cation exchanger, Anion Exchanger, Degasser, etc.

ACADEMIC ACHIEVEMENT, WORKSHOP

- Stood **I Class First** in M.Tech (Petroleum Processing and Petrochemical Engineering) program with Hons.
- Qualified **GATE in 2020** with score of **597** and **All India Rank 597** out of **14790** appeared candidates in the exam.
- Qualified **GATE consecutively** in the **2017,2018,2019,2020**.
- Attended International Conference on Recent Advances in Engineering and Science (ICRAES 2020).
- Attended a workshop on 'Plant Design and Management Software (PDMS)

EXPERIENCE AND SCHOLARSHIP

- Currently working as **Junior Research Fellow** in **Bits-Pilani** since **15th Feb 2021** on an industrial project sponsored by **Aditya Birla Group**

As a junior research fellow listed are my contribution towards the project

- Designed and procured an experimental setup for determining the solubility of a multicomponent gas mixture in water with varying composition and temperature
- Established the experimental protocols for repeatable and reliable solubility data generation on individual and combined basis
- Extensive literature survey related to solubility of gases in water as individual and combined basis at low pressure
- Thermodynamic modelling for predicting the solubility of multicomponent gas mixture in water using Aspen Plus

- From 2018 to 2020 worked as teaching assistant in B.Tech courses in **Department of Petroleum Studies Aligarh Muslim University**
- Granted AICTE Gate Scholarship for a period of two years. (2018-2020)

SKILLS

Familiar with the operation of sophisticated material characterization instruments such as

- Fourier Transform Infrared Spectroscopy
- Gas Chromatography
- Thermo-Gravimetric Analyzer
- X-Ray Diffractor
- Potentiostat for electrochemical characterization of material using tests such as Cyclic Voltametry, Galvanic Charge Discharge, EIS.

Familiar with chemical process simulator such as

Aspen

MINITAB

Familiar with windows packages such as M.S Excel, M.S office, M.S power point, etc.

COCURRICULAR ACTIVITIES

- Represented school in Inter-School debate competitions.
- Actively participated in English and Hindi Skits.
- Participated in Essay writing competition organized by the Uttar Pradesh Fire Services, Aligarh
- Branch Coordinator for the session 2013-14 for the NGO Human's Pride.
- Participated in skit in 25th ENSEMBLE held at Aligarh Muslim University organized by University Drama Club.

LANGUAGE KNOWN

- English
- Hindi, Urdu

REFERENCE

Available upon request.