



UQ-IITD ACADEMY OF RESEARCH SEMINAR SERIES

Nurturing Minds Through Progressive Research: Unveiling the Future



Non-oxidative catalytic conversion of methane into aromatics over Mo/HZSM-5 catalyst

Abstract: The seminar discusses catalytic process to convert abundant hydrocarbon methane into higher hydrocarbons and fuels in oxygen-free conditions that recognized as alternate path to fulfill the growing energy demand. Bifunctional Mo/zeolite is the benchmark catalyst that afford higher benzene selectivity for process. The major challenge associated with using Mo/zeolite is the generation of extensive coke that leads to catalyst deactivation. The seminar core focusses on the development of suitable MDA catalysts by modifying the support acidity, porosity and metal impregnation with improved catalytic activity. Additionally, promoters effect was also studied to decrease coke generation in view of upgrading the process to a commercial level. catalyst constituents improved catalytic activity in view of upgrading the process to a commercial level.



Speaker : Ms. Deepti Mishra
UQ-IITD Joint PhD graduate student

Supervisors

IITD: Prof. Kamal K. Pant, Department of Chemical Engineering

UQ: Dr. Muxina Konarova, School of Chemical Engineering

Venue: LHC 212, IIT Delhi

Or you can join online (Microsoft Teams):

<https://shorturl.at/adlr9>

RSVP

Professor In-Charge of Academy (PICA)

UQ-IITD Academy of Research

pica@admin.iitd.ac.in

22nd September 2023

11:30 – 12:30 AM IST

4:00 – 5:00 PM AEST



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