



Rupak Kishor (P.hD)

Designation: Assistant Professor

Qualification: Ph.D. (Chemical Engineering)

Research Area: Advanced Separation Technology, Environmental Pollution Separations with chemical reaction, Molecular based membrane separation, N

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Education

Ph.D.: Indian Institute of Technology, Guwahati (2017)

M.Tech: S. V. National Institute of Technology, Surat (2009)

B.Tech: Sathyabama Institute of Science and Technology, Chennai (2006)

Research Interest

- Separations with chemical reaction
- CO₂ separation using adsorbent
- Hydrogen storage
- Nanomaterial
- Wastewater treatment

Publications

1. R. K. Gajula, **R. Kishor**, M. J. Prakash, Imine-Linked Covalent Organic Cage Porous Crystals for CO₂ Adsorption, *ChemistrySelect* 4, (2019) 12547– 12555. (SCI, I.F: 2.30)
2. **R. Kishor**, S. Singh, A. K. Ghoshal Role of Metal Type on Mesoporous KIT-6 for Hydrogen Storage. *Int. J. Hydrogen Energy*, 48 (2018) 10376-10385. (SCI, I.F: 7.1)
3. **R. Kishor**, A. K. Ghoshal, Amine modified mesoporous silica for CO₂ adsorption: The role of structural parameters, *Ind. Eng. Chem. Res.* 56,(2017) 6078–6087). (SCI, I.F: 4.32)
4. **R. Kishor**, A. K. Ghoshal, Aqueous aminosilane solution grafted three dimensional mesoporous silica for excellent adsorption performance and CO₂/N₂ selectivity, *Micropor. Mater.* 246 (2017) 137- 146. (SCI, I.F: 5.87)

5. **R. Kishor**, A. K. Ghoshal, Understanding the hydrothermal, thermal, mechanical and hydrolytic stability of mesoporous KIT-6: A comprehensive study, *Micropor. Mesopor. Mater.* 242 (2017) 127-135. (SCI, I.F: 5.87)
6. **R. Kishor**, A. K. Ghoshal, Polyethylenimine functionalized as-synthesized KIT-6 adsorbent for highly CO₂/N₂ selective separation, *Energy Fuels* 30 (2016) 9635–9644. (SCI, I.F: 4.65)
7. **R. Kishor**, A. K. Ghoshal, High molecular weight polyethyleneimine functionalized three dimensional mesoporous silica for regenerable CO₂ separation, *Chem. Eng. J.*, 300 (2016) 236–244. (SCI, I.F: 15.1)
8. **R. Kishor***, A. K. Ghoshal, *N*¹-(3-Trimethoxysilylpropyl)diethylenetriamine grafted KIT-6 for CO₂/N₂ selective separation, *RSC Adv.*, 6, 2016, 898–909. (SCI, I.F: 4.0)
9. **R. Kishor**, A. K. Ghoshal, APTES grafted ordered mesoporous silica KIT-6 for CO₂ adsorption, *Chem. Eng. J.*, 262 (2015) 882–890. (SCI, I.F: 15.1)
10. **R. Kishor**, S. Padmanabhan, K. R. Sarma, V. Patel, S. Sharma, P. A. Parikh, Correlation of Arrhenius parameters for uhmwpe synthesis with ethylene solubility characteristics in different polymerization media, *J. Appl. Polym. Sci.* 122 (2011) 2643 – 2652. (SCI, I.F: 3.0)
11. S. Padmanabhan, K. R. Sarma, **K. Rupak**, S. Sharma, Synthesis of ultra-high molecular weight polyethylene: A differentiate material for specialty applications, *Materials Science and Engineering B*, 168 (2010) 132–135. (SCI, I.F: 3.6)

Book Chapters

1. **S. Kumar, A. Singh, R. Kishor**, Algal Biomass Production Coupled to Wastewater Treatment (2023) *Phycoremediation Processes in Industrial Wastewater Treatment*, pp. 77-108.
2. **R. Kishor, S. Kumari, M. Muthuraj, N. Selvaraju** Recent Trends in Advanced Oxidation and Catalytic Processes for Removal of Heavy Metals, Dyes, and Xenobiotics (2022) *Recent Trends and Innovations in Sustainable Treatment Technologies for Heavy Metals, Dyes and Other Xenobiotics*, pp. 45
2. **S. Kumari, R. Kishor**, Chitin and chitosan: origin, properties, and applications (2020) *Handbook of Chitin and Chitosan: Volume 1: Preparation and Properties*, pp. 1-33.