

Vishal Agarwal

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Education

2006–2012 Ph. D. University of Massachusetts, Amherst, USA (Chemical Engineering)

2004–2006 M.Tech. Indian Institute of Technology Bombay, India (Chemical Engineering)

1999 – 2003 B.Tech. Panjab University, India (Chemical Engineering)

Professional Career

2022– Present Associate Professor, Chem. Eng., IIT Kanpur

2017 – 2022 Assistant Professor, Chem. Eng., IIT Kanpur

2012 – 2016 Post-doctoral researcher, University of California Santa Barbara, USA

Selected Publications

1. Kanishka Charakhwal, Vishal Agarwal, Role of H_2O_2 as Oxidant and H_2O as Co-catalyst over Anatase- TiO_2 (101) for Conversion of Methane to Methanol, ChemPhysChem 2024, e202400708.
2. Nikil Surya R, Sunny Kumar Bhagat, Horia Metiu, Vishal Agarwal, Activation of Methane in Vapor and Molten Sodium Catalyst, Journal of Physical Chemistry C 128(8), 2024, 3233-3241.
3. Abir Lal Bose, Sayali Ramteke, Goutam Deo, Vishal Agarwal, Structures and re-activity of monomeric MoO_x moieties supported on ZrO_2 (111) slab: A DFT study, Journal of Catalysis 429, 2024, 115267.
4. Sajal Kanti Dutta, Baljit Singh, Horia Metiu, Vishal Agarwal, Increase of the Catalytic Activity of Molten Salts by Doping: Methane Activation, Journal of Physical Chemistry C 128 (1), 2024, 123-128.
5. Aditya Goyal, Vishal Agarwal, Rate-Enhancing Role of Water in H-BEA and Sn-BEA for Keto-Enol Tautomerization of Acetone: A DFT Study, Journal of Physical Chemistry C 127 (46), 2023, 22618-22628.

Research Interests

1. Heterogeneous Catalysis.
2. Rare-Event Simulations.

Awards

1. Ramanujan Fellowship, 2017.
6. RG Madhuhane M. Tech. Best Masters Research Thesis Award, IITB, 2006.