Name of Faculty Dr. Raj Kumar Verma Designation Assistant Professor Nature of Job/Appointment Regular Date of Joining 16/05/2022 E-mail rajkumar_chem@cbit.ac.in **Education Qualifications** Name of the Degree Ph. D Doctor of Philosophy (Chemical Engineering) PG M. Tech (Chemical Engineering) UG B. Tech (Chemical Engineering) Work Experience 3.0 Years Teaching 2.7 Years Research 0.3 Years Industry Others Area of Specialization Energy Professional Memberships Responsibilities held at Institution Level



Class

Awarded

First

First

Process Intensification, Modeling and Simulation, Multiphase flow, Microfluidics, Biofuels, Computational Fluid Dynamics, Waste to

Worked as Volunteer in COMPFLU-2018, An international conference organized by Department of Chemical Engineering, IIT Roorkee

- 1. Class Teacher B. Tech 3rd Year
- 2. UG 4th Year Project coordinator
- 3. Discipline coordinator

1. UG students (04 Nos.) Research Guidance

- 1. Graphical abstract is selected for cover page in I&EC Research Journal of an issue 16, Volume-59.(ACS publication).
- 2. One of my research article in ChemBioEng Reviews Journal (Willey Online Library) is the most read and downloaded article in the year 2018-19.
- Awarded with MHRD fellowship to pursue M. Tech. and Ph.D. in Chemical Engineering at IIT Roorkee, India in the year 2012 and 2016, respectively

Courses Handled at Under Graduate / Post Graduate Level.

Responsibilities held at Department

Mass Transfer Operation, Chemical Reaction Engineering, Transport Phenomena, Computational Fluid Dynamics, Process Modeling and Simulation

National Journals - Nil International Journals - 06 National Conference - 01 International Conference - 01

Projects Carried out

No. of Papers Published

Awards Received

Patents 01 Published

Technology Transfer ---

Invited Speaker --

No. of Books/Chapter Published with

details

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.Other Trainings (Attended and/or Organized).

AICTE Recognized Faculty Development Programme **onSmart Materials Processing and Applications** Conducted by National Institute of Technical Teachers Training and Research (NITT) Chandigarh Punjab, India from 25/07/2022 to 29/07/2022

Details of Journal Publications/ Conferences (National and International)

International Journal from the year 2017

- Verma, R.K., Prakash, R., Mehta, A., Ghosh, S. Biodiesel production in a serpentine minireactor— Effect of flow distribution. International Journal of Energy Research, 2019, 43 (8), 3461-3474. IF: 5.164 doi:10.1002/er.4488. ISSN/ISBN-1099-114X.
- Verma, R.K., Ghosh, S. Two-Phase Flow in Miniature Geometries: Comparison of GasLiquid and Liquid-Liquid Flows. ChemBioEng Reviews, 2019, 6 (1), 5-16. IF:2.927. doi:10.1002/cben.201800016. ISSN-2196-9744
- 3. Prakash, R., Verma, R.K., Ghosh, S. Liquid-liquid mass transfer in a serpentine miniature geometry-effect on pressure drop. Chemical Engineering Journal, 2019, 369, 489-497. IF:13.27. doi:10.1016/j.cej.2019.03.064. ISSN-1385-8947.
- Verma, R.K., Ghosh, S. Comparison of slug breakup for confined liquid-liquid flows in serpentine mini geometry, Industrial & Engineering Chemistry Research, 2020, 59 (16), 7955-7964. IF:3.72. doi:10.1021/acs.iecr.0c00009. ISSN-1520-5045
- 5. Verma, R.K., Ghosh, S. Effect of phase properties on liquid-liquid two-phase flow patterns and pressure drop in serpentine mini geometry, Chemical Engineering Journal, 2020, 397, 125443. IF:13.27. doi:10.1016/j.cej.2020.125443. ISSN-1385-8947.
- Verma, R.K., Ghosh, S. Curvature Induced Intensification of Biodiesel Synthesis in Miniature geometry. Chemical Engineering and Processing: Process Intensification, 2021, 163, 108363. IF:4.237. doi.org/10.1016/j.cep.2021.108363. ISSN-0255-2701

International /National Conferences from the year 2017

- 1. Verma R.K., Ghosh, S. Reactive and non-reactive liquid-liquid dispersed flow in a serpentine mini reactor. International conference of Heat Transfer, Fluid Mechanics and Thermodynamics (HEFAT-2019), (22-24, July), 2019, Wicklow, Ireland.
- 2. Verma R.K., Ghosh, S. Effect of hydrodynamics on kinetics of transesterification reaction in a serpentine mini reactor. CHEMCON, 2018, NIT Jalandhar, Jalandhar, India.

Articles contributed in Encyclopedia: - Popular Articles in Magazine: -