

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	Class
Ph. D	Doctor of Philosophy (Chemical Engineering)	Awarded
PG	M. Tech (Chemical Engineering)	First
UG	B. Tech (Chemical Engineering)	First

Work Experience 3.0 Years

Teaching 2.7 Years

Research 0.3 Years

Industry --

Others --

Area of Specialization Process Intensification, Two-phase flow, Microfluidics, Biofuels, Computational Fluid Dynamics

Professional Memberships --

Responsibilities held at Institution Level Worked as Volunteer in COMPFLU-2018, An international conference organized by Department of Chemical Engineering, IIT Roorkee

Responsibilities held at Department Level

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

Research Guidance

1. UG students (04 Nos.)

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 (Wiley Online Library) is the most read and downloaded article in the year 2018-19.
3. 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

Awards Received

Courses Handled at Under Graduate / Post Graduate Level. Mass Transfer Operation, Chemical Reaction Engineering, Transport Phenomena, Computational Fluid Dynamics, Process Modeling and Simulation

No. of Papers Published

National Journals – Nil	International Journals – 06
National Conference – 01	International Conference – 01

Projects Carried out --

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).
 Details of Journal Publications/ Conferences (**National and International**)

International Journal from the year 2017

1. **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.
2. **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.
4. **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.
6. **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.