# Debdeep Bhattacharjee

## PERSONAL DETAILS

**Birth:** October 9, 1991
**Address:** 700, Jessore Road, Flat No. 204, Dum Dum, Kolkata 700028, India.
**Contact:** (+91) 9674634465
**E-mail:** debdeepbhattacharjee@ymail.com, debdeeptcs@gmail.com

## EDUCATION

**Ph.D in Chemical Engineering (CPI: 8.25)** 2018-2023
***Indian Institute of Technology Kharagpur***

**M.Tech in Chemical Engineering (CPI: 8.87)** 2016-2018
***Indian Institute of Technology Kharagpur***

**B.E. (Honours) in Chemical Engineering (CPI: 8.10)** 2010-2014
***Jadavpur University Kolkata***

## PEER REVIEWED JOURNAL PUBLICATIONS

**D. Bhattacharjee**, S. Chakraborty, A. Atta, "Passive droplet sorting engendered by emulsion flow in constricted and parallel microchannels" *Chemical Engineering and Processing - Process Intensification* **181**, 109126 (2022).
**DOI:** 10.1016/j.cep.2022.109126 (Impact Factor: 4.264)

**D. Bhattacharjee**, A. Atta, "Topology optimization of a packed bed microreactor involving pressure driven non-Newtonian fluids" *Reaction Chemistry & Engineering* **7 (3)**, 609-618 (2022).
**DOI:** 10.1039/D1RE00310K (Impact Factor: 5.2)

B. Saha, **D. Bhattacharjee**, P. Sandilya, S. Sengupta, "Cryochemical approach to develop catalysts for intensification of the hydrodesulfurization reaction," *Industrial & Engineering Chemistry Research* **58 (16)**, 6266-6277 (2019).
**DOI:** 10.1021/acs.iecr.8b06412 (Impact Factor: 4.326)

## CONFERENCE PRESENTATIONS

**D. Bhattacharjee**, A. Atta, and S. Chakraborty, Magnetohydrodynamic settling of a ferrofluid droplet in uniform magnetic field, CompFlu 2022, IIT Kharagpur, India, December 2022 (*Poster*).

**D. Bhattacharjee**, A. Atta, and S. Chakraborty, Evolution of ferrofluid droplet deformation under magnetic field in a uniaxial flow, FMFP 2022, IIT Roorkee, India, December 2022 (*Oral*).

**D. Bhattacharjee**, A. Atta, and S. Chakraborty, Magnetic field altered ferrofluid droplet deformation in the uniaxial extensional flow, APS DFD 2022, Indianapolis, USA, November 2022 (*Oral*).

**D. Bhattacharjee**, S. Chakraborty, and A. Atta, Emulsion flow induced passive droplet sorting in constricted and parallel microchannels, APS DFD Gallery of Fluid Motion 2022, Indianapolis, USA, November 2022 (*Poster*).

**D. Bhattacharjee**, S. Chakraborty, and A. Atta, Passive droplet sorting of an emulsion in a constricted branched microchannel, CHEMCON 2020, India (*online mode*), December 2020 (*Oral*).

## AWARDS

MHRD (Govt. of India) Doctoral Fellow for Ph.D at IIT Kharagpur.
MHRD (Govt. of India) GATE National Fellow for M.Tech at IIT Kharagpur.

## TECHNICAL SKILLS

MATLAB, COMSOL, ASPEN, LaTeX, C/C++