

LIST OF PUBLICATIONS

Peer-reviewed journals

- J12. S. Sengupta**, T. Dasgupta, D. Roy, M. Dejam, S. De, “Combined electroosmotic and pressure-driven transport of neutral solutes across a rough, porous-walled microtube”, **Electrophoresis**, 44 (2023) 711-724.
- J11. S. Sinha**, D. Roy, **S. Sengupta**, S. Neogi, S. De, “Froth flotation as primary treatment of flowback water: removal of total organic carbon and prediction of kinetics”, **The Canadian Journal of Chemical Engineering**, 101 (2023) 4160-4169.
- J10. S. Sengupta**, S. De, “Effect of the transition layer on the stability of a fluid-porous configuration: Impact on power-law rheology”, **Physical Review Fluids**, 6 (2021) 063902.
- J9. S. Sengupta**, S. De, “Long-time instability and transient behavior of pressure-driven flow of a power-law fluid in a plane channel overlying a porous layer”, **Physics of Fluids**, 33 (2021) 054109.
- J8. S. Sengupta**, S. De, “Effect of Couette component on the stability of Poiseuille flow of a Bingham fluid-porous system: modal and non-modal approaches”, **Physics of Fluids**, 32 (2020) 064103.
- J7. S. Sengupta**, S. De, “Stability of Poiseuille flow of a Bingham fluid overlying an anisotropic and inhomogeneous porous layer”, **Journal of Fluid Mechanics**, 874 (2019) 573-605.
- J6. S. Sengupta**, S. De, “Couette-Poiseuille flow of a Bingham fluid through a channel overlying a porous layer”, **Journal of Non-Newtonian Fluid Mechanics**, 265 (2019) 28-40.
- J5. S. Sengupta**, A. Jain, S. De, “Criteria for unique steady state for enzymatic depectinization of bael (*Aegle marmelos*) juice in a continuous stirred tank reactor”, **Reaction Chemistry & Engineering**, 3 (2018) 333-343.
- J4. A. Jain**, **S. Sengupta**, S. De, “Fundamental understanding of fouling mechanisms during microfiltration of bitter gourd (*Momordica charantia*) extract and their dependence on operating conditions”, **Food & Bioprocess Technology**, 11 (2018) 1012-1026.
- J3. K. A. Ninga**, **S. Sengupta**, A. Jain, Z. S. C. Desobgo, E. J. Nso, S. De, “Kinetics of enzymatic hydrolysis of pectinaceous matters in Guava juice”, **Journal of Food Engineering**, 221 (2018) 158-166.
- J2. A. Jain**, **S. Sengupta**, S. De, “Effect of process parameters on aqueous extraction of thymol and other phytonutrients from herbal seed Ajwain (*Trachyspermum ammi* L.)”, **Journal of Applied Research on Medicinal and Aromatic Plants**, 11 (2018) 27-36.
- J1. R. Mondal**, S. Mondal, K. V Kurada, S. Bhattacharjee, **S. Sengupta**, M. Mondal, S. Karmakar, S. De, I. Griffiths, “Modelling the transport and adsorption dynamics of arsenic in a soil bed filter”, **Chemical Engineering Science**, 210 (2019) 115205.

Conferences

- C4. S. Sengupta**, T. Dasgupta, D. Roy, S. De. “Analysis of mass transport for electroosmotic flow through a porous-walled, rough microtube”. **Chemical Engineering Congress (CHEMCON) 2023**, 27-30 December 2023, held at Heritage Institute of Technology, Kolkata, India.

C3. S. Sengupta, S. De. “*Modal and non-modal stability of plane Couette-Poiseuille flow of a viscoplastic fluid overlying a porous layer*”. **73rd Annual Meeting of the APS Division of Fluid Dynamics (APS-DFD)**, 22 - 24 November 2020, Chicago, IL, USA (Virtual Edition).

C2. S. Sengupta, S. De. “*Criteria for a Unique Steady State for Guava Juice Depectinization in a Continuous Stirred Tank Reactor*”. **AIChE Annual Meeting 2018**, 28 October - 2 November 2018, held at David L. Lawrence Convention Center, Pittsburgh, PA, USA.

C1. S. Sengupta, S. De. “*Thermodynamic Modelling of Membrane formation by Phase Inversion technique*”. **Chemical Engineering Congress (CHEMCON) 2015**, 27-30 December 2015, held at IIT Guwahati, Guwahati, India.