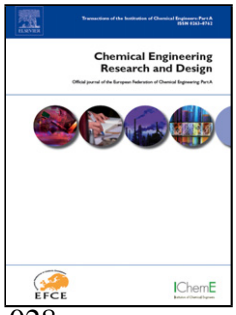

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Flow in vortex diodes

Aditya Pandare and Vivek V. Ranade

Highlights

- Vortex transition, toroidal recirculation, reversed flow and precessing vortex were simulated
- A methodology for simulating the unsteady turbulent flow in the diode is outlined
- Influence of flow rate on pressure drop across the diode was compared with experimental data
- This work will serve as a platform for future studies of flow and cavitation in the diode chamber