

## Accepted Manuscript

Title: Flow in Vortex Diodes

Author: Aditya Pandare Vivek V. Ranade

PII: S0263-8762(15)00189-6

DOI: <http://dx.doi.org/doi:10.1016/j.cherd.2015.05.028>

Reference: CHERD 1894



To appear in:

Received date: 24-10-2014

Revised date: 4-5-2015

Accepted date: 21-5-2015

Please cite this article as: Pandare, A., Ranade, V.V., Flow in Vortex Diodes, *Chemical Engineering Research and Design* (2015), <http://dx.doi.org/10.1016/j.cherd.2015.05.028>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## 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

Download English Version:

<https://daneshyari.com/en/article/7007275>

Download Persian Version:

<https://daneshyari.com/article/7007275>

[Daneshyari.com](https://daneshyari.com)