DESCRIPTION

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ChERD aims to be the principal international journal for publication of high quality, original papers in chemical engineering.

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Distillation and absorption

- Hydrodynamics, heat and mass transfer in separation equipment
- Physical properties and thermodynamic models/methods
- Process design, operation and intensification
- Process equipment characterisation
- Process modelling, simulation and optimisation

Fluid flow

- Fluid flow and mixing in process equipment
- Reactive flow
- Turbulent flow
- Microfluidics
- Multiphase flow
- Computational fluid dynamics
• Porous media flow
• Interfacial flows, coating & wetting phenomena
• Complex fluids
• Non-Newtonian fluids
• Flow visualization

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• Mechanisms of heat and mass transfer
• Multicomponent mass transfer
• Simulation of heat and mass transfer processes
• Simultaneous heat and mass transfer

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• Fundamental properties of interest to processing of materials
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• In-line measurement and control of material processes
• Morphological development processes
• Pre-processing, shaping, multi-layering and finishing of final product form
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• Structure-function relationships in products and relevant systems
• Tailoring chemical products and materials for end-use applications

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• Formation and synthesis of particulates
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• Measurement and characterisation of particulate systems
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• Product formulation and rheology

**Pharmaceutical engineering**

• Design, modelling, operation and control of pharmaceutical (bio)reactors, unit operators and process systems used in the production of (bio)pharmaceuticals
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• Pharmacokinetic and pharmacodynamic modelling
• Design, characterisation and modelling of drug delivery systems

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