Oscillatory Flow Reactors

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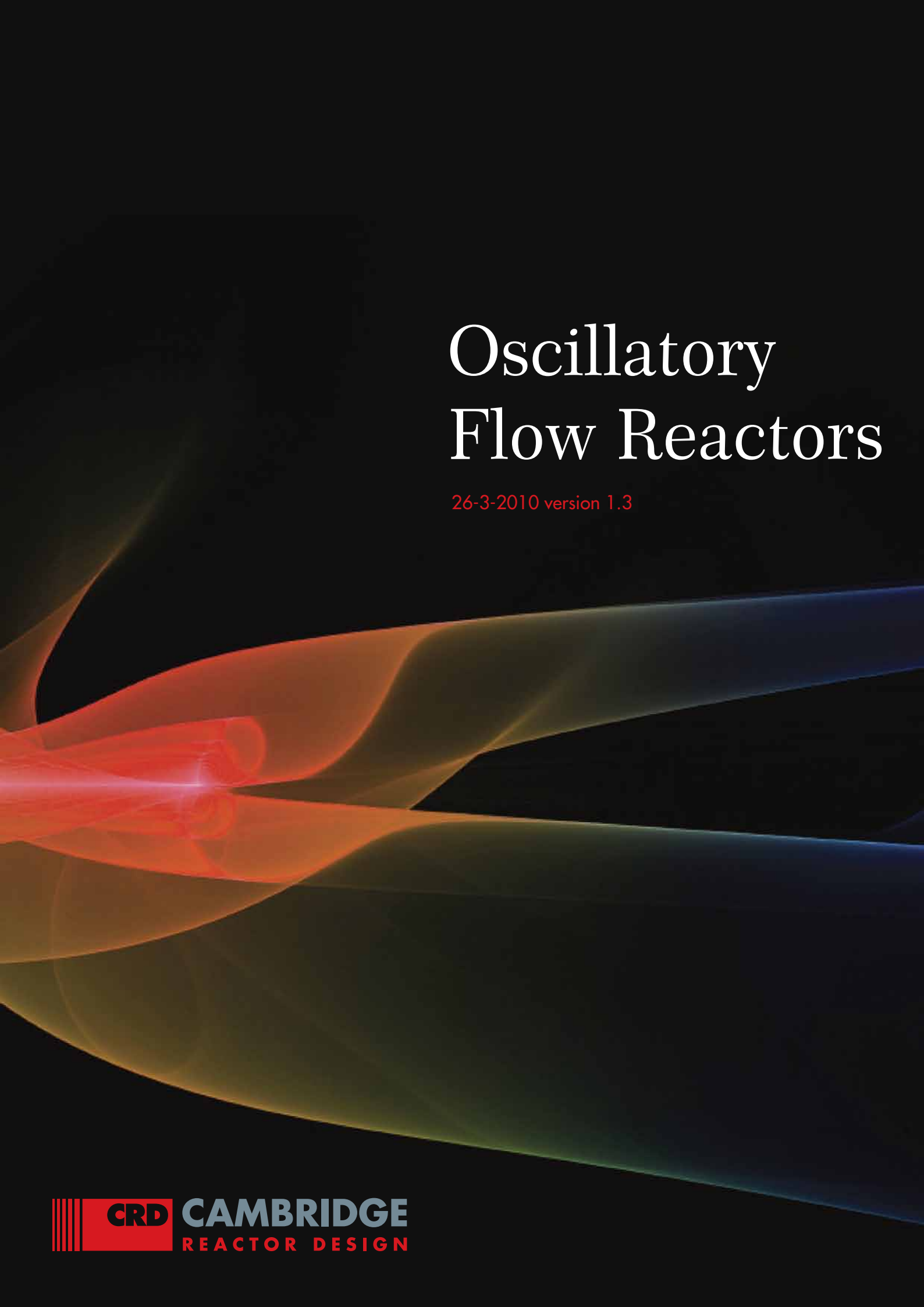

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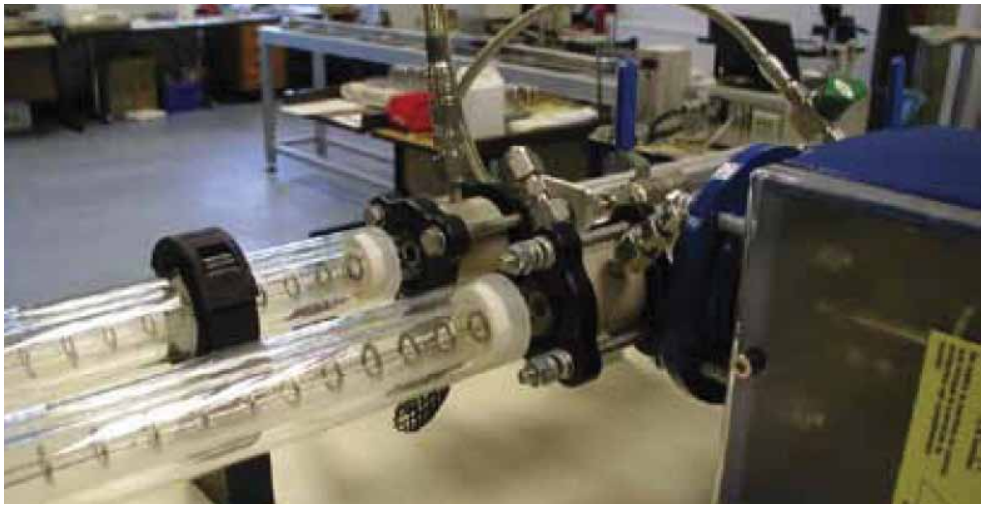


Oscillatory Flow Reactor

Cambridge Reactor Design have been involved with Oscillatory Flow since its inception at Cambridge University in the 1990s. We are pleased to offer customers a range of reactors based on the technology, all offering controlled, uniform mixing with excellent heat and mass transfer characteristics.

Our Oscillatory Flow Reactors use a combination of flow oscillation and baffled tube geometry to ensure efficient mixing and effective heat transfer. The mixing is sufficiently powerful to tackle anything from polymers to enzymes and soups!

Key features:

- wide range of applications in the chemical and process industries
- more efficient than either tubular or stirred tank mixers
- designed for batch or continuous operation
- user variable oscillation intensity (stroke and frequency)
- residence time of seconds to hours
- can be configured to act as a set of CSTRs in series.

Oscillatory Flow Reactors

Oscillatory flow is useful wherever immiscible phases need to be mixed or slurries need to be managed and as such has found application in fine chemicals, waste water treatment and biofuels production, amongst other areas.

There is no restriction to the the number of tubes that can be employed; our multi tube configuration reactors can be supplied to handle large throughputs.

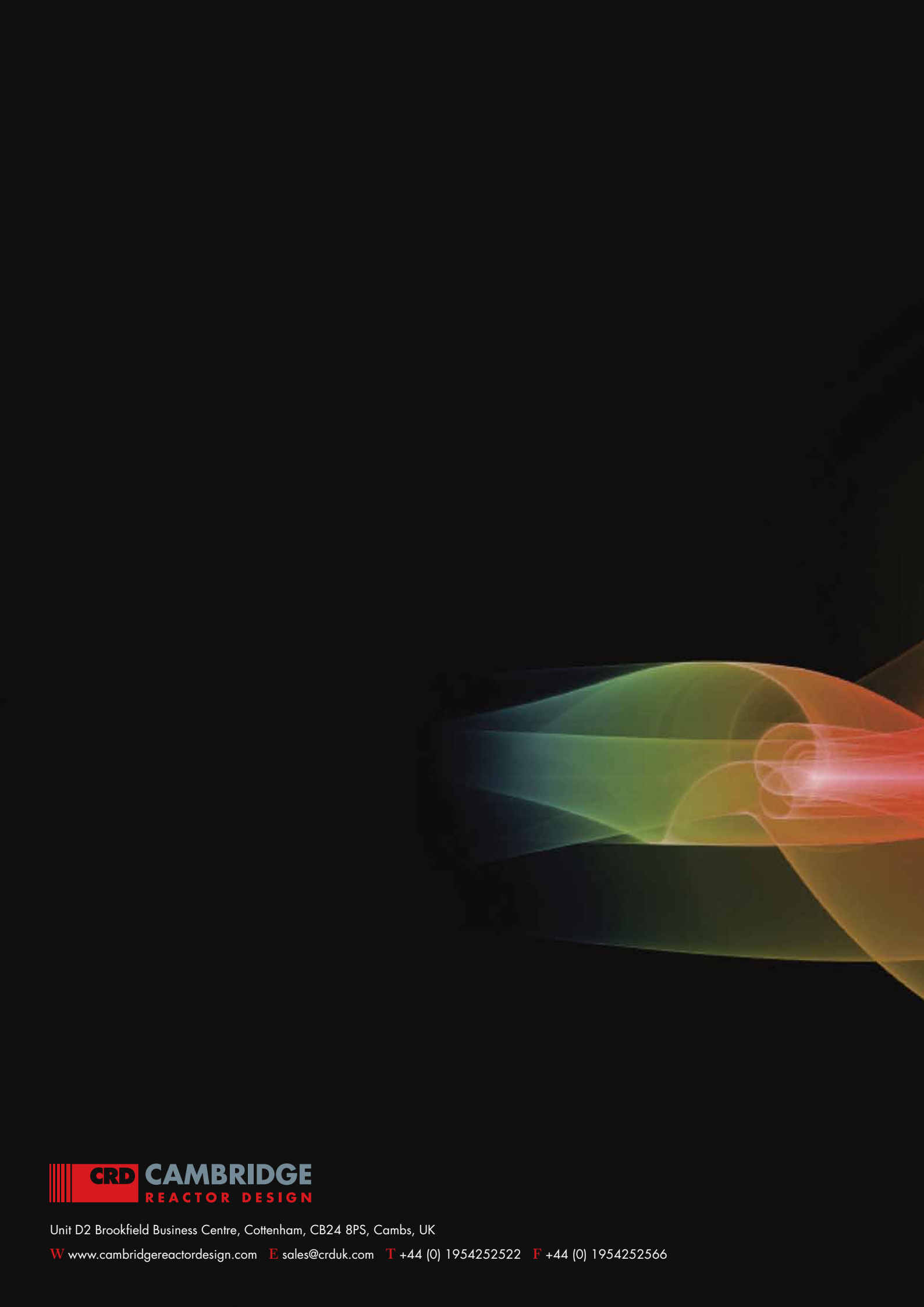
Current configurations available to order are:

- Mixer/Homogeniser
- Flocculator
- Multiphase Reactor
- Emulsifier
- Heat exchanger
- Bubble column (gas-liquid)
- Flow Visualisation

Process enhancements using OFR are being investigated. Technical reports in the following applications are available on request:

Fluid Mechanics and Mixing	(Howes 1990)
Single Phase Heat Transfer	(Mackley, Stonestreet 1995)
Liquid Gas Mass Transfer	(Hegwill1992)
Solids Suspension	(Mackley 1993)
Liquid Phase RTDs	(Dickens 1989)
Power Dissipation	(Stonestreet (1995)

If you would like to speak to a technical representative please call us on 01954 252522, e-mail sales@crduk.com, or alternatively you can visit www.cambridgereactordesign.com for further information.



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