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CHEMICAL ENGINEERING RESEARCH AND DEVELOPMENT

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Evolution of Chemical Looping Technologies

Particle Synthesis



TGA

1993



Fixed Bed Tests

1998



Bench Scale

2001



Sub-Pilot Scale
Process Tests

2007



SCL



CCR



Pilot Scale
Demonstration

2010 to date

Perspective
Chemical Looping Technology Platform
2013 AIChE R. H. Wilhelm Award in Chemical Reaction Engineering

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