

# Contents

<b>1</b>	<b>Process Intensification Technologies</b> . . . . .	1
	References . . . . .	6
<b>2</b>	<b>Biodiesel and Fatty Esters.</b> . . . . .	9
	2.1 Biodiesel Production Routes . . . . .	11
	2.2 Catalysts for Fatty Esters Synthesis . . . . .	13
	2.3 Industrial Biodiesel Processes . . . . .	18
	References . . . . .	20
<b>3</b>	<b>Reactive Separation Processes.</b> . . . . .	25
	References . . . . .	29
<b>4</b>	<b>Property Models and Process Simulation.</b> . . . . .	35
	References . . . . .	40
<b>5</b>	<b>Reactive Distillation Technology</b> . . . . .	41
	5.1 RD Experimental Studies . . . . .	43
	5.2 RD Simulation Studies and Process Design . . . . .	45
	5.3 Dynamics and Control of Reactive Distillation . . . . .	48
	5.4 Complex Reactive Distillation Configurations . . . . .	57
	References . . . . .	62
<b>6</b>	<b>Reactive Absorption Technology</b> . . . . .	67
	References . . . . .	75
<b>7</b>	<b>Reactive Extraction Technology</b> . . . . .	77
	References . . . . .	85
<b>8</b>	<b>Membrane Reactors</b> . . . . .	87
	References . . . . .	94

<b>9 Centrifugal Contact Separators</b> . . . . .	97
References . . . . .	100
<b>10 Concluding Remarks</b> . . . . .	101
References . . . . .	102



<http://www.springer.com/978-3-319-03553-6>

Process Intensification Technologies for Biodiesel  
Production

Reactive Separation Processes

Kiss, A.A.

2014, XV, 103 p. 38 illus., Softcover

ISBN: 978-3-319-03553-6