

Contents

Preface — V

List of contributing authors — IX

Daniel Sudhoff

1 Introduction to centrifugally enhanced separations — 1

Dennis Wenzel

2 Rotating packed bed in liquid-liquid and liquid-solid separation — 35

Kai Groß

3 Rotating packed bed hydraulics and liquid-side limited mass transfer — 75

Kolja Neumann, Dennis Wenzel

4 Rotating packed beds in flue gas cleaning — 103

Tobias Pyka, Jörg Koop

5 Rotating packed beds in distillation: rotor configurations — 131

Hina Qammar

6 Rotating packed beds in distillation: binary distillation — 159

Rouven Loll, Jörg Koop

7 3D printed packings for rotating packed beds — 189

Markus Illner, Matthias Hilpert, Jens-Uwe Repke

8 Rotating packed beds in distillation: rate-based modeling for multicomponent systems — 209

Dawid Zawadzki, Maciej Jaskulski, Michał Błatkiewicz

9 Modeling of two-phase flows in rotating packed beds — 267

Index — 307

