CONTENTS

Preface vii
Noam Lior

Introduction to the Book Series ix
Noam Lior

About the Authors xi

1. Water Desalination Revisited in Changing Physical and Economic Environments 1
Yehia M. El-Sayed

2. Environmental and Performance Aspects of Pretreatment and Desalination Technologies 79
Sabine Lattemann,* Sergio G. Salinas Rodriguez, Maria D. Kennedy, Jan C. Schippers, and Gary L. Amy

3. Economic Aspects of Water Desalination 197
Amitzur Barak

4. Advances in Hollow-Fiber Reverse-Osmosis Membrane Modules in Seawater Desalination 309
Atsuo Kumano

5. Adsorption–Desalination Cycle 377
Anutosh Chakraborty, Kyaw Thu, Bidyut Baran Saha,* and Kim Choon Ng*

6. Advanced Instrumentation, Measurement, Control, and Automation (IMCA) in Multistage Flash (MSF) and Reverse-Osmosis (RO) Water Desalination 453
Noam Lior,* Ali El-Nashar, and Corrado Sommariva

Index 659

*Corresponding author.