

CONTENT

FUNDAMENTAL ASPECTS

1. **Saltwater Properties I**
Dr. Ralph Hobby, University Duisburg-Essen, Germany
2. **Saltwater Properties II**
Dr. Ralph Hobby, University Duisburg-Essen, Germany
3. **Basic Principles of Pressure Driven Membrane Processes**
Dr. Stefan Panglisch, IWW, Germany
4. **Membrane Module Concepts**
Dr. Stefan Panglisch, IWW, Germany
5. **Membrane System Concepts**
Dr. Stefan Panglisch, IWW, Germany

PRACTICAL ASPECTS

6. **Seawater Composition**
Dr. Stefan Panglisch, IWW, Germany
7. **Membrane Fouling and Scaling**
Dr. Stefan Panglisch, IWW, Germany
8. **Membrane Operation and Cleaning Concepts**
Dr. Stefan Panglisch, IWW, Germany

9. **Pre-Treatment**
Dr. Stefan Panglisch, IWW, Germany
10. **Post-Treatment and Concentrate Disposal Options**
Dr. Stefan Panglisch, IWW, Germany
11. **Environmental Impact Assessment (EIA)**
Claus Mertes, Pöryr Deutschland GmbH, Germany
12. **Membrane Market and Costs**
Claus Mertes, Pöryr Deutschland GmbH, Germany
13. **Corrosion Aspects**
Basics on Materials in Desalination Plants. What means Corrosion?
Prof. Dr. habil. Günter Schmitt, IFINKOR – Institute for Maintenance and Corrosion Protection Technology gGmbH, Germany

EXERCISE

14. **Exercise I**
Plant design with Excel
Claus Mertes, Pöryr Deutschland GmbH, Germany
15. **Computer Aided Plant Design**
Dr. Stefan Panglisch, IWW, Germany

CASE STUDIES

- 16. Ultrafiltration Case Studies**
Patrick Buchta, inge AG, Germany
- 17. SWRO Process Applications and Practical Experiences**
Hans-Ulrich Baldes, WWS, Germany
- 18. Membrane Manufacturing and Characterization**
Prof. Dr. Mathias Ulbricht, University Duisburg-Essen, Germany
- 19. Pumps and Energy Recovery Devices**
Timo Ansbach, KSB Aktiengesellschaft, Germany
- 20. Hydrophobic Membranes for Post Treatment and Membrane Distillation**
Norbert Selzer, Membrana GbmH, Germany