

---

# Contents

## Part I Lithosphere Architecture

|                                                                                             |          |
|---------------------------------------------------------------------------------------------|----------|
| <b>Crustal and Upper Mantle Structures Beneath the Arabian Shield and Red Sea . . . . .</b> | <b>3</b> |
| Abdullah Al Amri, K. Abdelrahman, M.O. Andreae and M. Al-Dabbagh                            |          |

## Part II Reservoirs, Conduits and Fluids

|                                                                                                                           |           |
|---------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Pressure and Thermal Regimes and Systems in the Sedimentary Sequence of Central and Eastern Saudi Arabia . . . . .</b> | <b>33</b> |
| Mohamed Al Mahmoud                                                                                                        |           |

|                                                                                                              |           |
|--------------------------------------------------------------------------------------------------------------|-----------|
| <b>Optimal Aquifers and Reservoirs for CCS and EOR in the Kingdom of Saudi Arabia: An Overview . . . . .</b> | <b>51</b> |
| Marwan Jaju, Fadi Henri Nader, François Roure and Liviu Matenco                                              |           |

|                                                                                                                                                                                 |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Tectonostratigraphic Study of Carbonate Breccias (Calcuturbidites) in the Upper Triassic Baluti Formation (Northern Iraq): New Insights on Tethyan Geodynamics . . . . .</b> | <b>67</b> |
| Sa'ad Z.A. Kader Al-Mashaikie                                                                                                                                                   |           |

## Part III Tectonic Styles: From Rifts and Salt Tectonics to Foreland Inversions and Thrust Tectonics

|                                                                                                                                                  |           |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Structural and Stratigraphic Architecture of the Corinth Rift (Greece): An Integrated Onshore to Offshore Basin-Scale Synthesis . . . . .</b> | <b>89</b> |
| Sébastien Rohais and Isabelle Moretti                                                                                                            |           |

|                                                                                      |            |
|--------------------------------------------------------------------------------------|------------|
| <b>Styles of Salt Tectonics in the Sab'atayn Basin, Onshore Yemen . . . . .</b>      | <b>121</b> |
| Gabor Tari, Rudi Dellmour, Emma Rodgers, Chloe Asmar, Peter Hagedorn and Adel Salman |            |

|                                                                                                                                                    |            |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>The Effect of the Palmyra Trough and Mesozoic Structures on the Levant Margin and on the Evolution of the Levant Restraining Bend . . . . .</b> | <b>149</b> |
| Ramadan Ghalayini, Jean-Marc Daniel, Catherine Homberg, Fadi Henri Nader, Romain Darnault, Jean-Marie Mengus and Eric Barrier                      |            |

|                                                                                                       |            |
|-------------------------------------------------------------------------------------------------------|------------|
| <b>Tectonic Style and Structural Features of Alpine-Himalayan Orogeny in Central Arabia . . . . .</b> | <b>173</b> |
| Abdullah O. Bamousa, Abdullah M. Memesh, Saleh M. Dini and Ali A. Al-Zahrani                          |            |

---

|                                                                                                                                                                                                 |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>Fast-Track 2D Seismic Processing While Drilling to Ameliorate Foothills<br/>Exploration and Optimize Well Trajectory: An Example from the Central<br/>Kurdistan Region of Iraq . . . . .</b> | <b>187</b> |
| François Sapin, Hassan Allouche, Grégoire Sterbecq, Bertrand Chevallier<br>and Boerre Eriksen                                                                                                   |            |
| <b>Erratum to: Lithosphere Dynamics and Sedimentary Basins of the Arabian<br/>Plate and Surrounding Areas . . . . .</b>                                                                         | <b>E1</b>  |
| François Roure, Ammar A. Amin, Sami Khomsi and Mansour A.M. Al Garni                                                                                                                            |            |

Lithosphere Dynamics and Sedimentary Basins of the  
Arabian Plate and Surrounding Areas

Roure, F.; Amin, A.; Khomsi, S.; Al-Garni, M.A.M. (Eds.)

2017, XVII, 202 p. 138 illus., 107 illus. in color.,

Hardcover

ISBN: 978-3-319-44725-4