

EAGE/SPE Subsalt Imaging Workshop 2016

**Challenges of Subsalt Imaging and
Exploration**

**Dubai, United Arab Emirates
2-4 May 2016**

ISBN: 978-1-5108-2289-4

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2016) by the European Association of Geoscientists & Engineers (EAGE)
All rights reserved.

Printed by Curran Associates, Inc. (2016)

For permission requests, please contact by the European Association of Geoscientists & Engineers (EAGE)
at the address below.

European Association of Geoscientists & Engineers (EAGE)
PO Box 59
3990 DB Houten
The Netherlands

Phone: +31 88 995 5055
Fax: +31 30 634 3524

eage@eage.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Decoding the Seismic Signal: A Comprehensive Approach for Carbonate Buildup Imaging in the Red Sea	1
<i>L. Escalona</i>	
Constrained 3D VTI Full Waveform Inversion of Wide Azimuth Data from the Red Sea, Saudi Arabia.....	6
<i>Y. S. Kim, C. Tsingas</i>	
Integrating Geological Knowledge, Seismic and Non-seismic Technologies to Tap the Remaining HC Potential on the Example of East Ras Budran Offshore Concession, Gulf of Suez, Egypt.....	10
<i>D. L Lucic, A. R. Moustafa, H. E. Khateeb, I. Mohamed, P. Thomas, H. Sobhy</i>	
New Marine Acquisition Technologies for Subsalt and Pre-salt Seismic Exploration.....	15
<i>N. Moldoveanu, C. Cunnell</i>	
Improving Subsalt Imaging with a New Seismic Acquisition System	20
<i>L. Haumonte, L. Velay, M. Manin</i>	
Miocene to Present Tectonics in the Levant Basin (Lebanon) and the Role of the Messinian Evaporites Regional Seal.....	23
<i>B. Montaron, L. Montadert, W. Chbat, I. Dupin, V. Testelin</i>	
Sapropels in the Mediterranean - What Caused the Difference Between East and West?.....	24
<i>E. Rohling</i>	
A Forward Model of Messinian Salt Deposition in the Mediterranean Sea: Key Results and Implications for Basin Modeling.....	25
<i>B. A. Montaron</i>	
Allochthonous Salt Sheet Growth: Implications for Thermal Maturation & Hydrocarbon Prospective in the Deepwater Burgos & Perdido Basins, Mexico	30
<i>I. Davison</i>	
The Value of Re-processing for Intra/Pre-salt Exploration - A Case Study of the Sultanate of Oman 1st WAZ Survey.....	33
<i>J. Al-Riyami, Mj Van De Rijzen, B. V. Van Der Kooij, A. A. Bulushi</i>	
Magnetotelluric and Gravity Subbasalt Imaging: Case Studies from Ethiopia and Djibouti Republic.....	36
<i>S. Hautot, P. Tarits, P. Roach</i>	
Subsalt Imaging: Challenges and Practical Solutions.....	41
<i>H. Rynja, H. Vocks, G. J. Ouwerling</i>	
Waveform Inversion for Complex Salt Models: The Basic Objective, the Challenges and the Opportunities	43
<i>T. Alkhalfah</i>	
Improving the Interpretability of Subsalt Targets.....	44
<i>O. K. Zdraveva, D. Nochols, R. King, R. P. Fletcher, R. Bloor</i>	
Seismic Depth Imaging In Oman: Building up the Ladder of Learnings Toward a WAZ PreSDM Workflow.....	49
<i>J. Al-Riyami, A. Al-Mamari, M. J. Van De Rijzen</i>	
Author Index	