Contents

OPENING SESSION: THE ROLE OF NON-METALLICS IN FUTURE OF OIL AND GAS EXPLORATION

Paper 1  Opening Keynote
Operator Perspective: challenges and polymeric requirements - current and future
John Lawson ETC, Senior Technology Advisor, Chevron

Paper 2  Offshore Drilling: Use of elastomeric materials and future challenges
Nicolas Arteaga, Process Engineer, Cameron  paper unavailable at time of print

Paper 3  Case study: Installation of the world's first subsea rehabilitation system based on composite material
Robert Walters, Founder & Chairman, APS Dubai

CORROSION AND FAILURE: DEVELOPING QUALIFICATIONS AND SPECIFICATIONS FOR FUTURE INNOVATIONS

Paper 4  Nonmetallic Program for the Oil and Gas industry
- Practical challenges against the utilization of nonmetallics at Saudi Aramco and solutions to successful applications.
Mr. Abdullah Al-Dossary, Nonmetallic Engineer, Saudi Aramco  paper unavailable at time of print

Paper 5  Rapid Gas Decompression Resistance of Elastomeric O-Rings to Supercritical CO2
Peter Warren, Head of Materials Engineering, James Walker

Paper 6  Industry Standards - A Blessing or a Curse?
Alexandra Torgersen, Engineering Manager, FMC Technologies

Paper 7  CNT Technology and Dispersion
Michaël Claes, Global Technical Director, Nanocyl

UNLOCKING THE POTENTIAL IN NANOTECHNOLOGY FOR THE OIL AND GAS INDUSTRY

Paper 8  Anti-Corrosion Epoxy Coatings Containing Clay in Smectic Liquid Crystalline Order
Dr H.J. Sue, Professor, A&M University

Paper 9  Polymer Graphene Nanocomposites for Oil and Gas Processes
Gobet Advincula, Case Western Reserve University
HARSH TEMPERATURE ENVIRONMENTS - CHALLENGES AND SOLUTIONS

Paper 10  Challenges of Temperature Extremes for Elastomer Materials  
Glyn Morgan, Sector Manager, Oil & Gas, Element Material Technology

Paper 11  Cold Temperature Effects on Polymers - Cryogenic Spill Protection  
Sebastien Viale, Ph.D., Polymer Specialist - Advanced Subsea Architecture, Technip Innovation & Technology Center

Paper 12  Arlon 3000XT  
Kerry Drake, Senior Scientist, and Burak Bekisli, Scientist, Greene, Tweed & Co

MECHANISMS AND MANIFESTATIONS OF POLYMER AGEING AND FATIGUE, TECHNOLOGICAL SOLUTIONS, AND FUTURE OUTLOOK

Paper 13  Generation of Polymer Fatigue Data for the Oil & Gas Industry  
Andrew Hulme, Principal Consultant, Smithers Rapra

Paper 14  Drilling Fluid Influence on Elastomers  
Helmut Benning and Marcus Davidson, Research & Development, Baker Hughes

DEVELOPING AND MODELLING MATERIALS FOR THE FUTURE OF THE INDUSTRY

Paper 15  Modeling and Design of Reinforced Elastomeric Products  
Dr Stuart Brown, Managing Partner, Veryst Engineering

Paper 16  Development of Materials for Sealing Solutions in HPHT conditions  
Mathilde Leboeuf, R&D manager Europe, St-Gobain Seals

Paper 17  HNBR Rubber in CO2  
Daniel L Hertz III, President, Seals Eastern, Inc.