Theme

As the world population increases, access to affordable, safe and reliable sources of energy will be a key factor in promoting economic development and well-being for humankind. Oil and natural gas will continue to be the world’s leading energy resource for the foreseeable future. Meeting future demand in a sustainable and socially responsible manner will require massive investments, leading edge technologies, the highest skilled human resources, and superior ethical business practices. Producers, consumers, governments and societies need to cooperate responsibly to develop all energy resources. To do so, the industry has to energise its professionals; in particular youth, to become even more innovative in ensuring future growth.

Structure

Technical Programme Sessions

The technical programme of the 21st WPC is organised in 4 thematic blocks:

- **Block 1**: Exploration and Production of Oil and Natural Gas
- **Block 2**: Refining, Transportation and Petrochemistry
- **Block 3**: Natural Gas Processing, Transportation and Marketing
- **Block 4**: Sustainable Management of the Industry

Block 1. Exploration and Production of Oil and Natural Gas

Forums

- F01 - New opportunities in old fields
- F02 - Exploration and production in the Arctic
- F03 - Deep water exploration and production
- F04 - Unconventional oil and gas exploration and production
- F05 - New technologies for geosciences
- F06 - Challenges in complex geological environments
- F07 - Advanced drilling and production technologies
- F08 - Integrated reservoir management and surveillance

Best Practice Keynote Sessions

- BPK1 - Management of Arctic and deep water mega projects
- BPK2 - Best practice for managing E&P risks

Round Tables

- RT01 - Where should we look for new resources?
- RT02 - What do we need for new geographic frontiers?
- RT03 - How should we optimise cycle time from exploration to production?
**F01 - New opportunities in old fields**

Monday 16th June 10:15 - 11:45 (Block 1)
Poster Session Tuesday 17th June 11:00 - 13:00 (Poster Plaza)

This session will illustrate successes and challenges of mature fields. Hydrocarbons recovery from old fields represents enormous challenges. When the oil recovery ratio of all the existing fields is increased by 1%, the oil supply is extended by more than two years of production worldwide. This session aims to describe all the innovative technologies and approaches that give new opportunities in old fields. This includes technologies such as IOR (Improved Oil Recovery), EOR (Enhanced Oil Recovery), which can also be used on recent producing fields, as well as new ways available to redevelop mature fields: new reservoir models, new drilling technologies and new surface facilities for instance. Investments in old fields, to provide new production and cash flow, certainly constitute a solution to the current world energy growing demand.

**Chair**
Mr. Robert Howard, General Manager - Reservoir Management, Chevron Upstream and Gas, United States,

**Vice Chairs**
Mr. He LIU, Vice General Engineer, Research Institute of Petroleum Exploration and Development, CNPC, China,
Dr. Ravil Ibatullin, Director, TatNIPINeft Institute, Russian Federation,

**F01 Papers**

Field Scale Polymer Flooding of Heavy Oil: the Pelican Lake Story  
Eric Delamaide, General Manager, IFP Technologies (Canada) Inc., Canada,  
Co-authors: Gerard Renard; Rene Tabary, IFP Energies nouvelles, France; Patrick Dwyer, IFP Technologies (Canada) Inc., Canada;

Review of BP’s Global Gas Injection Projects  
James Brodie, Reservoir Engineer, BP, United Kingdom,  
Co-authors: Bharat Jhaveri, USA; Pinggang Zhang, United Kingdom; Sigrun Mellemstrand Hetland, BP, Norway;

Theories and Applications of CO₂ Flooding for Low Permeability Reservoirs  
Bingyu Ji, Chief Engineer, Petroleum Exploration & Production Research Institute, SINOPEC, China,  
Co-authors: Chengyuan Lv; Rui Wang; Yingfu He, Petroleum Exploration & Production Research Institute, SINOPEC, China;

Intelligent Automation of Mature Field Development Process. Case Study from the Romashkinskoe Field block  
Victor Zubarev, Head of software development department, OAO Tatneft, Russian Federation,  
Co-authors: Vladimir Fadeev; Alexey Bespalov; Airat Rakhmanov; Bulat Zakiev, OAO TATNEFT, RUSSIA;

**F01 Posters**

Chemical Flooding for a HT/HS Carbonate Reservoir  
Abdulkareem AlSofi, Petroleum Engineer, Saudi Aramco, Saudi Arabia,  
Co-authors: Ming Han, Saudi Arabia ; Alhasan Fuseni; Jinxun Wang, Saudi Aramco, Saudi Arabia;

Essential Contributions of Simulation Models to the Assessment and Design of Chemical EOR Projects  
Frédéric Roggero, Department head « Transfers in geological media », IFP Energies Nouvelles, France,  
Co-authors: Benjamin BRACONNIER; Philippe DELAPLACE; Bernard Bourbiaux; André FOURNO; Lahcen NABZAR;  
Quang-Long NGUYEN, FRANCE; Frédéric DOUARCHE, IFP Energies nouvelles, France;

Integrated IOR Technologies for Heavy Oil Pools  
Liubov Altunina, Director of Institute, Institute of Petroleum Chemistry, Siberian Branch, Russian Academy of Sciences, Russian Federation,  
Co-authors: Vladimir Kuvshinov, Institute of Petroleum Chemistry, Siberian Branch, Russian Academy of Sciences; Mikhail Chertenkov, LLC LUKOIL-Engineering, LUKOIL; Stanislav Ursegov, PechorNIPIneft Ltd, LLC LUKOIL-Engineering, Russia;

Application of Enhanced Oil Recovery: Russian Experience  
Elena Lazko, Partner, Deloitte CIS, Russian Federation,

Novel Approaches to Profile Modification in High Water Cut Oilfield---Case Study  
He Liu, Deputy Chief Engineer, Research Institute of Petroleum Exploration and Development, CNPC, China,  
Co-authors: Chunming Xiong; Xu Hanbing, Research Institute of Petroleum Exploration and Development, CNPC, China;

Experimental Investigation of the effect of injection rate and injection position during DDP, SCWD  
siyu yang, , RIPED CNPC, China,
The World Largest Nitrogen Based IOR Project in the Giant Field Cantarell, Mexico - Review and Case Study of a Forgotten Technology with High Potential
Ulrich Heucke, Director Business Development, Linde AG, Germany,
Co-author: Marcus Guzmann, The Linde Group, Germany;

Mature and Giant Field Performance Monitoring and Optimization System/Hassi Messaoud Algerian Field Case Study
Abdelmadjid Aissani, Senior Petroleum Engineer, SONATRACH, Algeria,

Huff and Puff Rigless Reduce Opex with Rig and Increase Value Present Liquid
Rafael Nunes, Student, Universidade Tiradentes, Brazil,
Co-authors: Ana Paula Santana, Universidade Tiradentes; André Silva, Petrobras, Brazil;

Smart Water Flooding Experiments with Automated Equipment for Inline Resistivity and Sound Velocity Measurements
Ioannis Xiarchos, Post Doc, Center for Energy Resources Engineering - Technical University of Denmark, Denmark,
Co-authors: Philip Loldrup Fosbol; Mohammad Monzurul Alam; Lykourgos Sigalas; Chaudhary Bilal Shaukat; Ida Lykke Fabricius; Alexander Shapiro; Kaj Thomsen, Center for Energy Resources Engineering - Technical University of Denmark, Denmark;

Enhanced Oil Recovery by ASP Flooding
Ruslan Mazitov, category -2 engineer, KogalymNIPIneft, LLC LUKOIL-Engineering, Russian Federation,

EOR Pilot Field Trial with The Polysaccharide Schizophyllan
Burkhard Ernst, Senior Engineer, Wintershall Holding GmbH, Germany,

F02 - Exploration and production in the Arctic

Monday 16th June 16:00 - 17:30 (Block 1)
Poster Session Tuesday 17th June 13:00 - 15:00 (Poster Plaza)

The Arctic region is one of the last remaining frontiers for E&P. Covering a large area under ice and mid-ocean conditions, access to geoscience & engineering data, knowledge, expertise and technology are critical for taking on the economic and technical challenges facing the industry. Innovative solutions requiring large investments, sound regulations and prudent environmental protection will be necessary to develop the Arctic resources. Building on exploration and production activities in offshore Arctic territories, established research programs, new concepts for development design, production and transportation are key topics addressed in this forum.

Chair Mr. Nicholas Alan Maiden, SVP Exploration, Statoil, Norway,
Vice Chairs Dr. Vasily Bogoyavlensky, Deputy director, Oil and Gas Research Institute, Russian Academy of Sciences, Russian Federation,

F02 Papers

Technologies for Russian Arctic Exploration and Development
Jed Hamilton, Senior Arctic Consultant, ExxonMobil Upstream Research Company, United States,
Co-author: Steve Harding, First Deputy Director, Arctic Research Center, Russia;

Exploration and Production in the Arctic
Sissel Eriksen, Director Exploration, Norwegian Petroleum Directorate, Norway,

The Arctic and World Ocean: Current State, Prospects and Problems of Hydrocarbon Resources Development
Vasily Bogoyavlensky, Deputy director, Oil and Gas Research Institute, Russian Academy of Sciences, Russian Federation,

Facing Environmental and Social Challenges for the Oil & Gas Industry in the Arctic
Piera Raffaella Turati, professional social initiatives, Eni E&P, Italy,
Co-authors: Melania Buffagni, SEQ-AMTE, Italy; Eirik Darell Holand; Erik Bjornbom, Eni Norge AS, Norway;

F02 Posters

Gas-To-Wire System for Gas Production from Methane Hydrates Reserves
Kyuro Sasaki, Professor, Kyushu University, Japan,
Co-authors: Yuichi Sugai; Shinji Ono, Kyushu University, Japan;

Technologies to Unlock Gas Resources in the Arctic
Edmond Coche, Extreme Cold Development, TOTAL, France,
Co-authors: Annie Audibert-Hayet; Kaj Riska; Philippe Blanc; Gérard Alvini, Total, France;
F03 - Deep water exploration and production

Tuesday 17th June 14:15 - 15:45 (Block 1)
Poster Session Wednesday 18th June 11:00 - 13:00 (Poster Plaza)

Fossil fuels will remain as the world’s major supply of energy in the future. The growing demand of energy requires increasing production by continuous discovery of new hydrocarbon fields, production at even greater water depths, more over pressured, more hostile environments, and reservoirs buried at great depths. Access to knowledge, technology and expertise with project excellence and operational integrity, have enabled the industry to pioneer exploration and production techniques in some of the most difficult environments, including deep and ultra-deep water depths. In addition, development of satellite reservoirs tied to very distant processing unit, while coping with the difficulties of more and more viscous oil are part of the technology challenges experienced and still has to be faced by the industry. Integrated solutions and E&P innovations continue to make the deep water a viable prospect globally, where some of the most recent giant discoveries will continue to be made.

Chair                      Mr. Joao Carlos Figueira, Senior Petroleum Geophysicist, PETROBRAS, Brazil,
Vice Chairs                Dr. Emmanuel Bekee, Asistant Director, Department of Petroleum Resources, Nigeria,

F03 Papers

Managing Risk in Deepwater Frontiers – Key Learnings from Five Continents
Andreas Masvie, Vice President, Russia & Kazakhstan, DNV, Norway,

Adapting to a “Fast Track” World: How to Combine a Development Project Road Map with Near Field Exploration Campaign. PROS and CONS from a Real Case Development Experience in West Africa Deep Water
Saadoun Banooori, Angola Reservoir Team Leader, Eni E&P, Italy,
Co-authors: Fabio Roncarolo; Raffaele Giardini; Loris Tealdi, eni, ITALY;

Extracting Value from Deep-water Resources Across the Full Asset Life-Cycle - Global Experience and Russia Applications
Tim Garfield, Senior Technical Consultant, ExxonMobil, United States,
Co-authors: Vitor Abreu, ExxonMobil Exploration Co.; Duncan Erratt, ExxonMobil Upstream Research Co.; Frank Goulding, ExxonMobil Production Co.; Randy Kissling, ExxonMobil Development Co., USA; Tim Streltsov, Rosneft, Russia;

Challenges and Solutions to Develop Brazilian Pre-salt Deepwater Fields
Anelise Lara, Executive Manager, Petrobras, Brazil,
Co-authors: Antonio Carlos Capeleiro Pinto; Celso Cesar Moreira Branco, Petrobras, Brazil;
F03 Posters

Torolf Christensen, Vice President Aasta Hansteen field development project, Development and Production Norway (DPN), Field Development (FD), Statoil, Statoil, Norway;

Advanced Technologies and Practical Solutions for Challenging Deepwater Drilling Applications
Michael Jellison, Senior Vice President - Engineering, National Oilwell Varco, United States,
Co-author: Alvaro Chan, Workstrings International, Brazil;

Deep Water Exploration and Development Potential and Future Prospect
Peihai Jiang, Sinochem, China,
Co-authors: Xiaoyan Zhu; Zhikun Jia, China; Mailun Duan, Sinochem, china;

Deepwater Flow Assurance - Evaluation of Existing Concepts and Emerging Trends: An Indian Perspective
Dhaval Gupta, Student, Reliance Industry Ltd., India,
Co-authors: Vijai Baskaran, Greka Drilling Ltd.; Vinay Gupta, Oil and Natural Gas Corporation Ltd.; Kamal Dani, Greka, India; Sagar Varyani, ;

Late Cretaceous Turbidites Exploration in the Equatorial Atlantic Margins, From Ghana and French Guiana to Brazil
Fangfeng Xiao, Sinochem Petroleum E&P, China,
Co-authors: Li Guo; Dajing Zhang; Huaxing Shi, Sinochem Petroleum E&P, China;

The Continued Success Story of the Deep-Water Gas Play Offshore Israel
Michael Gardosh, Head of G&G section, Ministry of Energy, Israel,

Innovative Cluster Based Development of Deepwater Discoveries in the East Coast of India - A Challenge and Necessity
Ravishankar Burla, Chief Engineer(Prod), ONGC Ltd., India,

Petroleum System and Exploration Implication of the Deepwater Qiongdongnan Basin, Northwestern South China Sea: Learning from the New Wells
Zhipeng SUN, Project Manager, CNOOC Ltd.- Zhanjiang, China,
Co-author: Zhenfeng WANG, ;

Offshore Development in the Argentinean & Uruguayan Sea: Stretching the Limit
Gustavo Acosta, Professor, ITBA, Argentina,

F04 - Unconventional oil and gas exploration and production

Tuesday 17th June 16:00 - 17:30 (Block 1)
Poster Session Wednesday 18th June 13:00 - 15:00 (Poster Plaza)

New technologies are needed across the entire range of E&P activities, including exploration, characterization, stimulation and responsible use of water resources. This session will address the broad range of technologies employed to responsibly explore for, characterize, and produce unconventional resources.

Chair
Mr. John Wright, President and Chief Executive Officer, Lightstream Resources, Canada,

Vice Chairs
Prof. Jerzy Stopa, Vice Chairman of Petroleum Engineering Chair, AGH-University of Science & Technology, Poland,

F04 Papers

Global Expansion of Shale Developments
Glenda Wylie, Director - Global Technical Marketing, Halliburton, United States,

Indian Shale Gas: Not a Distant Dream
Tapobrato Rana, Superintending Engineer (Production), Oil and Natural Gas Corporation, India,
Co-author: Debasis Roy, Oil and Natural Gas Corporation, India;

Colombian Energy Outlook Based on Unconventional Oil and Gas Reserves with Projection to 2030
Favio Yovany Jimenez Inocencio, Vice President, Ecopetrol, Colombia,
Co-authors: Vyacheslav Kafarov, Industrial University of Santander; Néstor Fernando Saavedra Trujillo, ECOPETROL, Colombia;

Innovative Unconventional² EOR, an Unconventional Tertiary Recovery Approach to an Unconventional Reservoir
Michael Schmidt, Supervisor, Enhanced Oil Recovery, Lightstream Resources Ltd., Canada,
Co-author: BK Sekar, Lightstream Resources Ltd., Canada;
F04 Posters

Water and Shale Gas Development
Melissa Stark, Partner, Clean Energy Lead, Accenture, United Kingdom,

West Siberia Unconventional Resources: Exploring for the Bazhenov Resource Play
Mike Peacock, Exploration Manager, ExxonMobil Russia Inc., Russian Federation,
Co-authors: Dan Jackofsky, ExxonMobil Russia Inc.; Igor Afanasiev, Rosneft, Russian Federation;

The Research on Characteristics of Microscopic Pore Structure and Effective Development of Changqing Tight Oil Reservoir
Zhengming Yang, Deputy Chief Engineer, CNPC, China,
Co-authors: Yutian Luo; Ying He, Research Institute of Petroleum Exploration and Development-Language, CNPC, China;

Bakken Development: Pathway to Success, Roadmap to a New Tomorrow
Torstein Hole, Senior Vice President US Onshore, Statoil, United States,
Co-author: Lance Langford, Statoil, United States;

Advances in Shale Gas Development in Poland
Rychlicki Stanislaw, Full professor, AGH - University of Science & Technology, Poland,
Co-authors: Jerzy Stopa, AGH - University of Science & Technology; Jaroslaw Polit, Polish Oil and Gas Company, Poland;

Shale Gas Prospects in Indian Basins: Contributions to World’s Unconventional Energy Resources
Kamal Dani, Assistant Manager, Greka Drilling Ltd., India,
Co-authors: Vijai Baskaran; Dharmendra Gupta, University of Petroleum and Energy Studies; Dhaval Gupta, Reliance Industry Ltd.; Vinay Gupta, Oil and Natural Gas Corporation, India;

Exploring Possible Nonconventional Pre-treatment Technologies to Transport Waxy, Extra-Viscous Crude Oils
Massimo Iovane, Project Engineer, Eni E&P, Italy,
Co-authors: Cristian Stampinato, Saipem; Michele Margarone; Sebastiano Correra, Eni E&P, Italy;

High-Resolution Seismic Acquisition and Processing of 3D-1C and 3D-3C Data for Shale Gas/Oil Plays in Mexico
Rafael Ávila-Carrera, Research Project Manager, Instituto Mexicano del Petróleo, Mexico,

F05 – New technologies for geosciences

Tuesday 17th June 14:15 - 15:45 (Room 5)
Poster Session Wednesday 18th June 15:00 - 17:00 (Poster Plaza)

The industry continues to generate opportunities via technological innovations to enhance its success in locating, extracting and transporting oil and gas supplies to meet global demand. Technology is a key driver in our industry’s ability to meet increasing demand. It has given us the ability to supply energy from resources once considered impossible to access. Technology allows us to maximize recovery of hydrocarbons, positively impact development effectiveness and improve operational reliability and integrity. Technology continues to expand and extend the possibilities - at it’s very best it is a game changer. This forum will address innovations from the outcrops to assets, ranging from exploring hydrocarbons more effectively and to developing new options. The challenge is to develop cost-effective technologies that reduce the environmental footprint of their utilization and tackle such issues as seismic advances to image in complex geological and environmental conditions.

Chair Mrs. Catherine MacGregor, President Europe and Africa, Schlumberger, France,

F05 Papers

Application of Triaxial Induction Measurements for Estimation of Oil Saturation for Complex Thin-Laminated Western Siberia Reservoirs
Anton Filimonov, Petrophysics Domain Champion, Schlumberger, Russian Federation,
Co-authors: Frank Shray; Dmitry Ezersky, Schlumberger; Mikhail Martynov, RN-Nyaganneftegaz; Aleksey Khabarov, RN-TPRC; Evgeny Shikunov, LLC “NOVATEK Scientific and Technical Center”; Chingiz Baybikov, CJSC “Terneftegaz”, Russian Federation;

High-Performance Computing: Towards a Safer, Faster and Sharper Exploration & Production
ALABERT François, Vice President Exploration Technologies, TOTAL, France,
Co-authors: Philippe MONTAGNIER; Frederic MAUBUEGE; Olivier DUBRULE; Evelyne TOURTE, Total S.A., France;

Simultaneous Source Acquisition for Exploration and Development Surveys
David Ellis, Seismic R&D manager, BP, United Kingdom,
Full Wavefield Inversion: A Paradigm Change in the Imaging and Interpretation of Seismic Data
Michael Deal, Geophysics Function Manager, ExxonMobil Upstream Research Company, United States,
Co-author: Gavin Wall, ExxonMobil Upstream Research Company, United States;

F05 Posters

Experimental Study on Hydraulic Fracturing in Shale and Its Application in Chinese Shale Gas Development
Baoping Zhang, Chief Scientist, SINOPEC, China,

Advanced Real-Time XRD-XRF Mineralogical and Chemical Analysis to Improve Carbonate Characterization in a HP-HT Deep Reservoir (Po Valley - Northern Italy)
Stefano Mazzoni, Operations Geology Team Leader, Eni E&P, Italy,
Co-authors: Giacomo Palmeri; Franco Sirtori; Sandro Venturini; Carlo Carugo; Elisabetta Previde-Massara, eni, Italia; Gianata Ferroni; Fabio Rivolta, GEOLOG, Italy;

Reservoir Triggering Events for Coupling Geomechanical and Fluid Flow simulations
Ulisses Mello, Director, IBM Research, Brazil,
Co-authors: Mookanahallipatna Ra Ramasesha Lakshmikantha; Jose Maria Segura Serra; Nubia Aurora Gonzalez Molano, Repsol, Spain; Carmen Paz, Brasil; Eduardo Rocha Rodrigues; Roberto Federico Ausas, IBM - Research Brasil; Freddy Mackay, IBM Research, Brazil;

Determination of the Initial Potential of a Source Rock
Hulya Yilmaz, Geological Engineer, TURKISH PETROLEUM CORPORATION, Turkey,
Co-author: Yasar Akcay, TURKISH PETROLEUM CORPORATION, Turkey;

Petroleum System Modelling To Understand the Hydrocarbon Generation and Charge Prediction in the Barmer Basin, India
Bodapati Narayana Swamy Naidu, Advisor Geology, Cairn India, India,
Co-authors: V. Kothari; Stuart Burley, Cairn India, India;

F06 - Challenges in complex geological environments

Wednesday 18th June 14:15 - 15:45 (Block 1)
Poster Session Thursday 19th June 11:00 - 13:00 (Poster Plaza)

Recently more and more new discoveries have found oil and gas in very complex geological environments, such as sub-salt layers, carbonate reservoirs with highly heterogeneouse reservoir quality, igneous and metamorphic rocks with poorly predictable fracture systems, heavily folded zones with steeply dipping layers, and reservoirs with fresh water aquifers amongst others. Modern technologies should be adapted to each of them to find the respective solutions individually. General solutions do not exist.

Chair Dr. Jason Canning, Head of Geology, BG Group plc, United Kingdom,
Vice Chairs Mr. Rafael Tenreyro-Perez, Exploration Manager, Cubapetroleo, Cuba,
Mr. Hossein Roshandel, Managing Director, Dana Oil and Gas Company, Iran,

F06 Papers

Progresses and Applications of Seismic Exploration Techniques for Complex Mountain Areas
Xiaobin Zhang, Chief Engineer, Sichuan Geophysical Company, Chuanqing Drilling Engineering Company Limited, CNPC, China,
Co-authors: Yalin Li; Xiaojun Han, Sichuan Geophysical Company, Chuanqing Drilling Engineering Company Limited, CNPC, China;

Basaltic Reservoirs of the Yurihara Oil and Gas Field : a Path to Geological Modeling
Koji Kawada, General Manager, North American Shale Project Dept. Americas & Russia Project Division, Japan Petroleum Exploration Co. Ltd. (JAPEX), Japan,
Co-author: Yasuo Yamada, Japan Petroleum Exploration Co.Ltd., (JAPEX), Japan;
Pressure and Migration Prediction by Hydrodynamic Modeling
Marcell Lux, HC Exploration Geologist, MOL Plc., Hungary,
Co-authors: Ahmed Amran; Marianna Vincze, MOL Plc., Hungary;

Geologically Complex Basins: Challenges and Opportunities
Kurt Rudolph, Chief Geoscientist, ExxonMobil, United States,
Co-authors: Duncan Erratt, ExxonMobil International Limited, United Kingdom; Patrick Lehmann, ExxonMobil Exploration Company, United States;

F06 Posters

Challenges in Petroleum Exploration in Heavily Folded Zones with Steeply Dipping Layers: An Example from Mizoram Exploration Block, NE India
Ajayananda Borthakur, Head -- Geoscience, Oil India Limited, India,
Co-authors: Diganta Changmai, Oil India Limited; Dilip K Mukhopadhyay, Indian Institute of Technology, Roorkee, India;

Geological Analysis of Complex Porosity System of the Ahwaz Sandstone Member
Katayoun Rashidi, MSc. Student, Islamic Azad University (North Tehran Branch), Iran,
Co-authors: Mehran Azizzadeh, Research Institute of Petroleum Industry (RIPI); Sadjjad Kazem Shiroodi, Iranian Offshore Oil Company (IOOC); Mahmoud Almasian, Islamic Azad University (North Tehran branch), Iran;

Complex Gas Bearing Carbonate Reservoir Evaluation - A Case Study From Saudi Arabia
Said Mahiout, Petroleum Engineer, Aramco, Saudi Arabia,
Co-authors: Edward Clerke; Ali Belowi; Khalid Qubaisi; Ammar Qatari, Aramco, Saudi Arabia;

Semi-Conventional Plays: the Case of the Low Permeability Chalk Reservoir
Alessandro Sandrin, Senior Geophysicist, Maersk Oil, Denmark,
Co-author: Finn Engstrom, Maersk Oil, ;

Rheology of Salt in the Persian Gulf Basin (an Integrated Approach, Geophysical, Geological and Volume Calculation)
Changiz Amirbehboudi, Manager of Interpretation and Reservoir Characterization, Dana Geophysics Company, Iran,
Co-authors: Mohsen SeyedAli, IOOC; Mohammadali Salehi; Noushin Ghasemi Dana; Mostafa Khorshtidi, Dana Geophysics Company; Ali Chehrazi, IOOC; Mohammad Reza Kamali, RIPI; Ehsan Nosrat, WSI, Iran;

NMR Pore Size New Modleing In Heterogeneous Carbonate Reservoir Characterization
Mohammad Ebrahim Shafiee, General Manager Technology Affairs, National Iranian Oil Company (NIOC), Iran,
Co-authors: Apostolos Kantzas, University of Calgary, Department of chemical and Petroleum Engineering, Canada, AB; Ali Esmaeilnejad, Iran University of Science and Technology (IUST), Iran;

An Integrated 3-D Modeling Which Leads to Promising Characterization of Heterogeneous Carbonate Reservoir
Saeed Sajjadian, NIOC, Iran,
Co-authors: Mohammad Ali Emadi; Vali Ahmad Sajjadian; Vahid Mahmoudian Ata Abadi, ;

Formation Testing Technologies - One of the Keys for Effective Oil-Rim Reservoir Development
Sergey Novikov, Formation Evaluation Reservoir Engineer, Schlumberger, Russian Federation,
Co-authors: Peter Weinhebber; Mikhail Charupa, Schlumberger; Maurizio Piana, ArcticGaz, Russian Federation;

New Progresses in Oil and Gas Exploration Technologies of Caspian Salt Basin
Wang Zhen, senior engineer, Research Institute of Petroleum Exploration & Development, CNPC, China,
Co-authors: Zheng Junzhang; Xue Liangqing; Wang Yankun; Kong Linghong; Xu Keqiang; Huang Xianxiong; Luo Man,

F07 - Advanced drilling and production technologies

Wednesday 18th June 16:00 - 17:30 (Block 1)
Poster Session Thursday 19th June 13:00 - 15:00 (Poster Plaza)

Advances in drilling and production technologies have increased the upper limit of ultimate recoverable resources from both new and mature fields. Challenging environments have required development of technologies to access resources in deeper water, sub-salt, high pressure, high temperature and sour gas fields. This session covers the full spectrum of drilling and production technologies.
F07 Papers

Technology Evolution in a Giant Saudi Aramco’s Field Development
James Arukhe, Lead Petroleum Engineer, Saudi Aramco, Saudi Arabia,
Co-authors: Shadi Hanbazzah; Abdulrahman Ahmari, Saudi Aramco; Moustapha Bal, Schlumberger; Saleh Al Ghamdi, SAUDI ARAMCO, Saudi Arabia;

The Drilling Technologies of Ultra-Deep High-Pressure Acid Gas Well in Northeast Sichuan Area, China
Niu Xinming, Drilling Research Institute Director, SINOPEC, China,
Sakhalin-1: Technologies to Efficiently Drill and Develop Resources While Expanding the ERD Envelope
Michael Walker, Sr. Drilling Consultant, ExxonMobil Development Company, United States,
Co-author: Rich Molloy, Exxon Neftegas Limited, USA;
Evolution of Fracturing Fluids in Russia: Trends, Innovations, and Field Application Results
Denis Vernigora, Fluid Technical Engineer, Schlumberger, Russian Federation,
Co-authors: Marina Bulova, Russia; Dan Fu, Malaysia; Bernhard Lungwitz, Brazil; Philippe Enkababian, US; Olesya Olennikova, Schlumberger, Russian Federation;

F07 Posters

Wellcon : A safer Approach for Well control
Gopal Bansal, ASSISTANT EXECUTIVE ENGINEER (E1), OIL AND NATURAL GAS CORPORATION LIMITED, India,

Extremely Hard Rock Drilling In Proterozoic Formations : An Experience from 142 Rig-Days by Conventional to 142 Rig-Hrs by Air Percussion Drilling
Sanjay Kishore Shrivastava, DGM (DRILLING), ONGC, India,

Oil Recovery Enhancement of Long-Term Operation Oil Wells by Nano Metal Particles Exposure
Elmira Ramazanova, Director, Geotechnological Problems of Oil, Gas and Chemistry SRI, Azerbaijan,
Co-authors: Fakhraddin Murvatov, Geotechnological Problems of Oil, Gas and Chemistry SRI; Alimammad Shabanov, Geotechnological Problems of Oil, Gas and Chemistry SRI; Haji Malikov, Geotechnological Problems of Oil, Gas and Chemistry SRI; Nazim Velieyev, State Oil Company Azerbaijan Republic, Azerbaijan;

Mitteplate: 25 Years of Applied Technology and the Look Ahead
Thies Dose, General Manager Reservoirs, RWE Dea AG, Germany,
Co-authors: Martin Jungbluth, RWE Dea; Uwe Balasus-Lange, RWE Dea AG, Germany;

A New Additional Downhole Well Barrier While Drilling: Field Experiences in Drilling Operations
Paolo Ferrara, Technical Leader - Drilling & Completion R&D, Eni E&P, Italy,
Co-authors: Paolo Ferrara; Alberto Maliardi; Claudio Molaschi, eni, Italy; Joachim Oppelt, Germany; Arald Grimmer, Baker Hughes, ;

Aluminium Alloys Casing for Timan-Pechora field with High H2S and CO2 Content
Vladimir Sledkov, Head of Drilling & Completion Technologies Department of LUKOIL-Engineering Ltd., LUKOIL, Russian Federation,
Co-authors: Dmitry Basovich , Akvavik DP; Denis Loparev, LUKOIL-Engineering Ltd., ;

F08 - Integrated reservoir management and surveillance

Thursday 19th June 14:15 - 15:45 (Block 1)
Poster Session Wednesday 18th June 13:00 - 15:00 (Poster Plaza)

The surveillance of the reservoirs is a tool of controlling the validity of the static models (“geofantasy”). Feeding back the surveillance data to the static and dynamic models for resolution of them is / can be improved. This will add to the prolongation of the life cycle of the production or even to identification of upsides. Additionally, a better understanding of the processes in the reservoir can provide ideas of efficient water management and early application of secondary tertiary production methods.

Vice Chairs
Mr. Morten Aagesen, Senior Director, DONG E&P - Commercial & Finance, Denmark,
Dr. Kazuhiko TEZUKA, Senior Manager of Development and Engineering Laboratory, Research Center, Technical Division, Japan Petroleum Exploration Co., Ltd. (JAPEX), Japan,
F08 Papers

Optimized Water Injection in a Mature Chalk Field by Application of Streamline Simulation and Gas Lift Optimization
Kent Johansen, Reservoir engineer, Dong energy, Denmark,
Co-authors: L. J. K. Jensen; Charlotte Lindelöw-Marsden; Simon Bakshi, Dong Energy, Denmark;

A successful story of reservoir management
Silvia Vimercati, reservoir Engineer, Eni E&P, Italy,
Co-authors: Emanuele Vignati; Stefano Raniolo; Hector Giraud, Eni E&P, Italy; Pablo Gentil; Lucas Atencio, EniPetroleum, USA;

Simulation Study and Field Performance Analysis of the Prudhoe Bay Updip Zone 4 Miscible Gas Injection EOR Process
Samson Ning, Sr. Reservoir Engineer, BP, United States,
Co-authors: Yirong Jiang; John Isby, BP, USA;

Maximizing Oil Production and Optimizing Water Flood Performance in Carbonate Reservoirs via Utilization of Streamline Simulation Technology: A Case Study
Mohamed Nagib, Lead Engineer, Aramco, Saudi Arabia,
Co-authors: Qusai Alabdrubalnabi; Hassan Zayer; Paul Smith; Jamil Thuwaini, Saudi Aramco, Saudia Arabia;

F08 Posters

Application of Comprehensive Production Optimization Techniques Based on Study of Detailed Reservoir Characteristics at Offshore Waterflooding Oilfield
Wang Yunxian, Supervisor, CNOOC, China,
Co-authors: Zhao Chunming; Yang Qinghong , CNOOC Ltd.-Tianjin; Liu Ming , CNOOC Ltd.; Fan Haiyan, CNOOC Uganda Limited; Wang Lirong , CNOOC Ltd.; Zhao Xiujuan; Zhou Zijun; Hou Dongmei; Feng Xin , CNOOC Ltd.-Tianjin, China;

Enhanced Gas Recovery from South Pars Gas Reservoir
valiahmad sajjadian, Technical manager, National Iranian Oil Company, Iran,
Co-authors: Mohammadali Emadi; Saeed Sajjadi, National Iranian Oil Company, Iran;

Using Separated Molecular Weight and Pressure for Zonal Layer Injection Technique to Improve Pay-Gross Thickness Ratio in ASP Flooding
Jiecheng Cheng, Deputy Chief Engineer, Daqing Oilfield Limited Company, CNPC, China,
Co-authors: Junzheng Wu; Meng Cai, Daqing Oilfield Limited Company, CNPC, China;

Comprehensive Reservoir Monitoring Program: Challenges, Design, Implementation, and Added Value in a Large Carbonate Reservoir
Ali AlJulaih, Petroleum Engineer, Saudi Aramco, Saudi Arabia,
Co-author: Naseem AlDawood, Saudi Aramco, Saudi Arabia;

Data Integration and Surveillance Enhances Reservoir Characterization and Management of a Big Gas Field
Akim Kabir, Consultant Petroleum Engineer, Saudi Aramco, Saudi Arabia,

Recent Developments and Remaining Challenges of Chemical Flooding EOR Techniques in China
Youyi Zhu, Director, Research Institute of Petroleum Exploration and Development, CNPC, China,
Co-authors: Xinmin Song; Yuzhang Liu, Research Institute of Petroleum Exploration and Development, CNPC, China;

21st century well logging and permanent downhole monitoring application as a “smart fields” indication
Danila Gulyaev, docent, Gubkin Russian State University of Oil and Gas, Russian Federation,
Co-authors: Viktor Martynov; Andrey Ipatov; Mikhail Kremenetskiy, Gubkin university, Russian Federation;

Long-term Microseismic Monitoring for Geomechanical Surveillance of Reservoir and Seal Integrity
Yusuke Kumanosu, Geophysicist, JGI, Japan,
Co-authors: Kazuhiro Tezuka; Akihisa Ashida; Yutaka Ohsaki, JAPEX; Yoshihiro Nakatsuka, JOGMEC, Japan;

DIET: An Integrated Approach for Getting the Right Surveillance Data and Maximizing Its Value
Hani Al-Kharaz, Senior Advisor, RasGas Company Limited, Qatar,
Co-authors: Asfandiar Ansari; David Blackall; Michael Martin; Mohammad Farooqui, RasGas Company Limited, Qatar;

Application of Chemical Tracers for Clean-up and Production Inflow detection for multi-zone completion: successful eni experiences
giacomo nutricato, completion engineer, Eni E&P, Italy,
Co-authors: roberta russo; giuseppe galli; antonio sgambati; carmen repetto; fabio roncarolo; carmela sarli, eni e&p, italy;
BPK1 - Management of Arctic and deep water mega projects

Monday 16th June 12:00 - 13:00 (Block 1)

The oil and gas industry generates mega projects. In the recent past, we have seen such very large, integrated and complex projects in the deep waters. Innovative technologies have made these projects possible (giant FPSOs, subsea oil / gas separation...). Arctic appears now to have quite large hydrocarbons resources with new technical, logistical or environmental challenges. Extreme weather conditions (very low temperatures, strong winds, presence of ice bergs...) and a very sensitive Arctic environment constitute new difficulties for the oil and gas industry. This session aims to describe the best practices in the management of such deep water or Arctic mega projects, from the discovery till the first oil. This includes not only the technical aspects, but also the human resources or HSE challenges for instance.

Chair
Mr. James Flood, Vice President, ExxonMobil Development Company, United States,

Speakers
Mr. Michel HOURCARD, Senior Vice President Development E&P, TOTAL, France,
Mr. Neil Gilmour, Vice President Development, Integrated Gas, Shell, Singapore,

BPK1 Papers

Management of Arctic and deep water mega projects
Michel HOURCARD, Senior Vice President Development E&P, TOTAL, France,

Shell technology innovation unlocks major new energy resources
Neil Gilmour, Vice President Development, Integrated Gas, Shell, Singapore,

BPK2 - Best practice for managing E&P risks

Tuesday 17th June 12:00 - 13:00 (Block 1)

The key issue in enhancing the attractivity of E&P projects for investors is to demonstrate that we are able to assess, mitigate and control the risk elements inherent in these. In subsurface modern acquisition and processing, visualization technologies matched to direct surface observations (mapping) and subsurface core analyses help to generate more reliable static models. Up-to-date drilling, completion and processing technologies help achieve an early development of the fields. Other risks i.e. marketing, financial, economic, political and legal risks also have to be considered.

Chair
Mr. Paulo Costacurta, E&P Strategy&Portfolio General Manager, PETROBRAS, Brazil,

Speakers
Mr. Martin Bachmann, Member of the Board, Ressort "E&P - Exploration and Development”, Wintershall Holding GmbH, Germany,
Mr. Ali Moshiri, President, Chevron, United States,

BPK2 Papers

Best practice for managing E&P risks
Ali Moshiri, President, Chevron, United States,

Reducing E&P risks through sophisticated partnerships, rigorous portfolio management and innovative technology
Martin Bachmann, Member of the Board, Ressort "E&P - Exploration and Development”, Wintershall Holding GmbH, Germany,

Best practice in managing E&P risks: The right people using the right technology in the right partnerships
Ali Moshiri, President, Chevron, United States,

RT01 - Where should we look for new resources?

Monday 16th June 10:15 - 11:45 (Room 5)

The oil and gas industry is responsible to deliver the new supplies of energy in a safe, secure and environmentally responsible way to meet global demand. Meeting this rising demand will require us to develop many challenging resources and we will need to pursue all commercially viable energy sources. This will take the ingenuity of our people and continued advancements in technology. Many of these potential resources will be in harsh and remote locations or come from unconventional resources such as shale gas and oil sands as well as enhanced recovery of existing conventional fields. In the future, the search for new resources will continue to require more efficient exploration and production technologies, rejuvenate old ideas and move to new frontiers at a continuously increasing pace.
RT02 - What do we need for new geographic frontiers?

Wednesday 18th June 12:00 - 13:00 (Block 1)

When E&P operations commence in new areas, care must be taken to protect both the environment and local communities. What new technologies are needed to enable safe and responsible exploration and production from these new frontiers? How do we engage with the local communities to respect and address their current concerns and priorities from the earliest stages of exploration through to production and abandonment?

Moderator
Mr. Miguel Moyano, Sustainability Director, ARPEL, Uruguay,

Panelists
Mr. Jay Pryor, Vice President, Business Development, Chevron Corporation, United States,
Mr. David Martin, Executive Vice President HSE and Social Performance, Shell Upstream International, Netherlands,
Mr. Sandra Martinez, Corporate HSE and Community Relations Manager, Pluspetrol SA, Argentina,
Dr. Sun Xiansheng, President, CNPC Economics & Technology Research Institute, China,

RT03 - How should we optimise cycle time from exploration to production?

Thursday 19th June 12:00 - 13:00 (Block 1)

Haste can lead to waste and unintended consequences. How can we profitably and responsibly expedite all phases of exploration and production so as to minimize the time between acreage acquisition and first oil? Risks to be addressed include adequate assessment of recoverable hydrocarbons to appropriately scale facilities and ensure that precautions and procedures are in place to safeguard the environment.

Moderator
Mr. Philip Whittaker, Associate Director in energy practice, BCG, Spain,

Panelists
Dr. Jeferson Luiz Dias, Exploration, PETROBRAS, Brazil,
Mr. Simon Durkin, VP Safety, Environment & Social Performance, Shell, Netherlands,
Mr. Misfer Azzahrani, General Manager at Upstream, Saudi Aramco, Saudi Arabia,
Mr. Ahmed Usman, Vice President and Chief Reservoir Engineer, Baker Hughes, United States,

Block 2. Refining, Transportation and Petrochemistry

Forums
F09 - Reducing the carbon footprint of fuels and petrochemicals
F10 - Innovative catalytic processes for hydrocarbon conversion
F11 - Technologies for biofuels production
F12 - Oil and products pipeline transportation and storage
F13 - Valorisation of Natural Gas Liquids (NGLs)

Best Practice Keynote Sessions
BPK3 - Ensuring prudent operations in refineries
BPK4 - Optimising transportation, blending and storage of oil and oil products

Round Tables
RT04 - Influence of local product specifications on refinery modernisation
RT05 - Sustainability of biofuels from different feedstocks
RT06 - Challenges for integrating refinery and petrochemical complexes
Techniques will be discussed which allow for the reduction of \( \text{CO}_2 \) emissions during the production and / or consumption of fuels and petrochemicals. Pertinent examples are: \( \text{CO}_2 \) recovery, cogeneration of electricity, recent developments in catalytic refining processes (deep hydrotreating, fluid catalytic cracking (FCC)), efficient hydrogen production and the catalytic valorisation of \( \text{CO}_2 \).

Chair
Dr. Mikhail Rodkin, Vice President, BASF, United States,

Vice Chairs
Dr. Jinichi IGARASHI, Executive Officer, General Manager, Central Technical Research Laboratory, JX Nippon Oil & Energy Corporation, Japan,

F09 Papers

**Life Cycle Analysis of Greenhouse Gas Emissions and Water Consumption of Energy Resources**
*Michael Matturro*, Lab Director, Corporate Strategic Research, ExxonMobil Research & Engineering Company, United States,
Co-authors: Adam Usadi, ExxonMobil Research & Engineering Company; Ramkumar Karuppliah, Exxonmobil Research & Engineering Company; Ian Laurenzi; Aranya Venkatesh; Venkatesh Vasudevan, ExxonMobil Research & Engineering Company, USA;

**What Do Greenhouse Gas Scenarios Tell Us?**
*Dawn Manley*, Senior Manager, Sandia National Laboratories, United States,

**Accelerating Process and Catalyst Development in Reforming Reactions with High Throughput Technologies**
*Sascha Vukojevic*, Sr. Business Development Manager, hte GmbH, Germany,
Co-authors: Stephan A. Schunk; Hauck Philipp; Kaiser Harry, hte GmbH, Germany;

F09 Posters

**A New Residue Hydrotreating Technology of Integration of Ebullated Bed and Fixed Bed**
*Tao Yang*, senior engineer, Fushun Research Institute of Petroleum and Petrochemicals, China,

**The Development and Prospect of Diesel Deep Desulfurization Technology**
*Rong Guo*, Director of Hydroprocessing Center, SINOPEC, China,
Co-authors: Xiangchen Fang; jihua Liu; chengmin Yang, SINOPEC, China;

**Synthesizing Beta Zeolite with Heterogeneous Seed-Assisted in the Absence of Organic Template**
*Bin Xie*, Engineer, Daqing Petrochemical Research Center, PRI, CNPC, China,
Co-authors: Chunmei Yu; Zhihua Zhang, Daqing Petrochemical Research Center, PRI, CNPC, China;

**Greenhouse Gas Emission Reduction: An ORYX GTL Experience**
*Pon Saravanan*, Greenhouse Gas Management Specialist, ORYX GTL, Qatar,

**Research Needs for Advanced Internal Combustion Engines**
*Hong G. Im*, Professor of Mechanical Engineering, Clean Combustion Research Center, Saudi Arabia,
Co-authors: SukHo Chung; Mani Sarathy; William Roberts, KAUST, Saudi Arabia;

**Dry Reforming of Methane Over Novel Composite Catalysts for High Yield Synthesis Gas**
*Abdulaziz Bagabas*, Associate Professor, King Abdulaziz City for Science and Technology, Saudi Arabia,
Co-authors: Michael Johnson, University of Oxford, United Kingdom; Abdullah Alabdulrahman, King Abdulaziz City for Science and Technology, Saudi Arabia; Liam France, University of Oxford, United Kingdom; Ahmad Alshammari, King Abdulaziz City for Science and Technology, Kingdom of Saudi Arabia; Peter Edwards, University of Oxford, United Kingdom; Hamid Al-Megren, King Abdulaziz City for Science and Technology, Saudi Arabia;

**The Outline of JATOP (Japan Auto-Oil Program) and the Topics of Outcome - Measures and Issues in High Concentration Biodiesel Fuel Use**
*Manabu Watanabe*, Deputy Director, Japan Petroleum Energy Center (JPEC), Japan,
Synthesis of Dimethyl Carbonate from CO2 and Metanol  
Jussara Miranda, PROFESSOR, Federal University of Rio de Janeiro, Brazil,  
Co-authors: HEITOR BRENO FERREIRA, FEDERAL INSTITUTE OF RIO DE JANEIRO; CLAUDIO J A MOTA; THAIS SCHONTAG; IGOR A VOGEL; LUCAS ANDRADE, FEDERAL UNIVERSITY OF RIO DE JANEIRO, BRAZIL; Rita Maria Brito Alves; Paulo Couthinho, BRASKEM, Brazil;

F10 - Innovative catalytic processes for hydrocarbon conversion  
Monday 16th June 16:00 - 17:30 (Block 2)  
Poster Session Tuesday 17th June 13:00 - 15:00 (Poster Plaza)

This forum will discuss catalytic solutions to improve feedstock and/or product flexibility. Topics will include catalytic conversion of heavier refinery feedstocks (high sulphur and nitrogen contents); possibilities to directly use crude oil as feedstock for FCC and novel processes for isobutane / alkene alkylation on solid acid catalysts. Moreover, the flexibility between gasoline and diesel production and the increase of light alkene yields from FCC will also be topics covered in this forum.

Chair: Prof. Avelino Corma, Professor, ITQ Valencia, Spain, Spain,  
Vice Chairs: Mr. RAJ KUMAR GHOSH, Director (Refineries), Indian Oil Corporation Ltd., India,  
Dr. Rainer Albert Rakoczy, Global Product Manager Fuel Upgrading Catalysis, Clariant SE, Germany,

F10 Papers

Nanoemulsion Concept to Enhance Deep Slurry Hydrocracking Process  
Marzieh Shekarriz, Head of Novel Technology Research Group, Research Institute of Petroleum Industry, Iran,  
Co-authors: Jamshid Zarkesh; Forouzan Hajialiakbari; Ali Asghar Khalili, Research Institute of Petroleum Industry, Iran;

GTL: Innovation in Diesel Yield Improvement  
Mostafa Shahin, Senior Process Engineer, ORYX GTL, Qatar,  
Co-author: Mansoor Al-Marri, ORYX GTL, Qatar;

Commercialization of Hybrid Titania Catalyst for Hydrodesulfurization of Diesel Oil  
Akihiro Muto, Research & Development Center, Chiyoda Corporation, Japan,  
Co-authors: Dai Takeda; Yukitaka Wada; Shinichi Inoue, Research & Development Center, Chiyoda Corporation, Japan;

High Severity Fluidized Catalytic Cracking (HS-FCC) - Go for Propylene!  
Iwao Ogasawara, Senior Manager, JX Nippon Oil & Energy Corporation, Technical & Engineering Service Dept., Japan,

Direct Conversion of Ethene to Propene and Butenes over Medium Pore Zeolites  
Sascha Follmann, PhD Student, University of Kaiserslautern (TU), Germany,  
Co-author: Stefan Ernst, University of Kaiserslautern (TU), Germany;

F10 Posters

Commercial Experience of Operating FCC Unit with Low Catalyst-to-Feed Ratio  
Mikhail Levinbuk, Professor of the Technology of Oil Refining Department, Gubkin Russian State University of Oil and Gas, Russian Federation,  
Co-authors: Ilya Maksimov; Sergey Kuznetsov, JSC Gazprom neft Moscow Refinery, Russia;

An Efficient Solution to the Conversion of Heavy Hydrocarbon Residue  
Khusain Kadiev, Leading Researcher, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russian Federation,  
Co-authors: Salambek Khadzhiev, Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russian Federation; David M. Wadsworth, Chevron Lummus Global (CLG), United States;

A Single Step Catalytic Process for the Direct Conversion of Naphtha to Middle Distillates  
Viswanadham Nagabhatla, Principal Scientist and Professor, Indian Institute of Petroleum, India,

A Novel Process for Synergistic Simultaneous Cracking of Lighter and Heavier Hydrocarbons to Produce Light Olefins  
S. Saravanan, Deputy Manager Research, Indian Oil Corporation Ltd, R&D Centre, India,  
Co-authors: Brijesh K. Verma, India; Manoj K. Yadav, Indian; Debasis Bhattacharyya; Brijesh Kumar; R.K Malhotra, Indian Oil Corporation Ltd, R & D Centre, India;
Utilization of RDS/RFCC for Residual Oil Upgrading
MORITA Masato, Idemitsu Kosan Co., Ltd., Japan,
Co-authors: Tetsuya WATANABE; Michio FUJIMOTO, Idemitsu Kosan Co., Ltd., Japan;

ALKILRAN – Ecologically Clean Process of Alkylate Production
Ilijas Gerzeliev, Leading scientist, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russian Federation,
Co-author: Salambek Khadzhiev, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russia;

Hydrodynamic Study of New Nano Catalytic Heavy Residue Hydroconversion Process
Jamshid Zarkesh, plan director, NIOC-RIPI, Iran,
Co-authors: Amin Shafeghat; Seyed Javid Royaee; Ali Jebreili; Behnoosh Moshtari; Maryam Ghaedian, Research Institute of Petroleum Industry (RIPI), Iran; Salambek Khadzheiv; Hussain Kadiev, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russia;

Application of SAPO-34 and Modified HZSM-5 Catalyst in MTG process: Effects of Dual Catalyst Bed in Improvement of Hydrocarbons Yield
Sohrab Fathi, Phd of Chemical Engineering, Amirkabir University of Technology (Tehran Polytechnic), Iran,
Co-authors: Morteza Sohrabi; Cavus Falamaki, Amirkabir University of Technology (Tehran Polytechnic), Iran;

F11 - Technologies for biofuels production

Tuesday 17th June 14:15 – 15:45 (Block 2)
Poster Session Wednesday 18th June 11:00 - 13:00 (Poster Plaza)

Current and improved technologies for the production of biofuels will be discussed, in particular the synthesis of bio alcohols (bio ethanol and bio butanol) from different feedstocks; the production of biodiesel via esterification of fatty acids or via their co-processing. Also, the synthesis of dimethyl carbonate from bio-based feedstocks (e.g. from methanol and CO2) will be addressed in this forum.

Chair: Prof. Luiz Augusto Horta Nogueira, Professor, Universidade Federal de Itajuba, Brazil,
Vice Chairs: Dr. Hans Gosselink, Team Lead Biodomain, Shell Projects & Technology, Netherlands, Ms. Melissa Stark, Partner, Clean Energy Lead, Accenture, United Kingdom,

F11 Papers

Catalysis as a Promising Approach to Biofuels Production
Mark Tsodikov, Head of laboratory, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russian Federation,

Processing of Fast Pyrolysis Oil-Derived Tar Fraction in Fluid Catalytic Cracking Unit
Desavath Viswanatha Naik, Scientist, CSIR-Indian Institute of Petroleum, India,
Co-authors: vimal kumar; Basheshwar Prasad, Indian Institute of Technology Roorkee; Mukesh Kumar Poddar; Krishna Kant Singh; Neeraj Atheya; Dilip Kumar Adhikari, CSIR Indian Institute of Petroleum, India;

Building a "Bio-Perspective" from Petroleum Revenues: a Pathway Through Bioplatforms' Oriented Biofineries in Rio de Janeiro State, Brazil
Victoria Santos, PhD Student, Energy Planning Program/COPPE/UFRJ, Brazil,
Co-authors: Alexandre Szklo; Alessandra Magrini, Energy Planning Program, Graduate School of Engineering, Universidade Federal do Rio de Janeiro, Brazil;

Research and Development of SINOPEC Bio-jet Fuel Technology
Hongliang Qu, Senior Engineer, Research Institute of Petroleum Processing, China Petroleum & Chemical Corporation, China,

Pilot Thermopervaporation Membrane Bioreactor for the Low-Cost Biobutanol Production
Vladimir Volkov, Chief of laboratory, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russian Federation,
Co-author: Ilya Borisov, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russia;

F11 Posters

Colombian Biofuels Perspective
Jorge Bendeck Olivella, President, Colombian Biofuels Federation, Colombia,
Co-author: Vyacheslav Kafarov, Industrial University of Santander, Colombia;

Biofuels Production Thrust - An Indian Initiative
Rajesh B, Deputy General Manager, Hindustan Petroleum Corporation Limited, India,
Co-authors: Neeraj Kishore Rai; Giriraj Prasad Meena, Hindustan Petroleum Corporation Limited, India;
F12 - Oil and products pipeline transportation and storage

Wednesday 18th June 14:15 - 15:45 (Block 2)
Poster Session Thursday 19th June 13:00 - 15:00 (Poster Plaza)

The Forum will discuss state-of-the-art technology, procedures, processes and methods employed by pipeline, terminals and maritime transportation companies that operate in the logistics of oil, natural gas and by-products transportation. The immense transportation infrastructure developed along the years needs to be maintained and expanded in order to allow oil and gas to flow from the well to the end users. This industrial segment is of extreme relevance in guaranteeing the competitiveness of the oil and gas industry, as well as assuring safety and reliability. This Forum will provide an opportunity for delegates to learn and share innovative experiences and best practice in the areas of design, construction, assembly and materials; automation, supervisory systems and measurement; maintenance and rehabilitation; inspection techniques; structural integrity, reliability and risk analysis; corrosion prevention; subsea pipelines; GIS and mapping; environment and operational safety; as well as terminals and storage systems and the interface pipeline/terminal and tanker/terminal.

Chair
Mr. Bela KELEMEN, Refining and Marketing Senior Vice President, Slovnaft, Hungary,

Vice Chairs
Mr. DI Peter Illyes, Head of Asset Development Tankfarms & Pipelines, OMV RM GmbH, Austria,
Mr. Mohammaed Al-Gahtani, Manager, Distribution, Saudi Aramco, Saudi Arabia,

F12 Papers

Conceptual Approaches to Oil and Gas Production, Refining and Distribution from Iran Reserves in Caspian Sea
Farrokh Kamali, Technical Advisor, Iran LNG Company (ILC), Iran,

Manoj Kumar Jadhaw, MANAGER ROU PIPELINES, Bharat Petroleum Corporation Limited, India,

Protection of Oil-Loading Tanker Terminals from Damages Occurring due to Hydraulic Shock Waves (Based on Existing Russian Terminals Examples)
Nikolay Arbuzov, chief of department, IMS Industries, Russian Federation,

Optimising the Trading and Transport Chains by Using Ship-to-ship Transfer
Yvonne Mason, Managing Director, SafeSTS, United Kingdom,

F12 Posters

Sensing Technology for Monitoring Refinery Piping Integrity
Ronald Unnerstall, Technology Vice President, Refining and Logistics Technology, BP Products North America Inc., United States,
Co-author: Steve Orwig, BP Products North America Inc., USA;
Case Study in Economic Impact of Using Drag Reducing Agent on Cost of Pumping Crude Oil in Western Desert, Egypt
Hesham Abdou, General manager in operations department, Agiba Petroleum Company, Egypt,

Increasing Pipelines Productivity Using Drag Reducers in Transporting Crude Oil
Dinesh Devadass, Senior Engineer, Indian Oil Corporation Limited, India,

Effect of ‘Natural Gas’ from Renewable Sources on Underground Gas Storages
Kai Schulze, Manager Production Chemistry, RWE Dea, Germany,

Risk Assessment on Underground Salt Cavern Gas Storage
Jinheng Luo, Director, Institute of Oil Pipeline Engineering Technology, CNPC, China,
Co-authors: Lifeng Li; Xinwei Zhao, Institute of Oil Pipeline Engineering Technology, CNPC, China;

New Reagents to Remove H2S and Mercaptans from Oil Streams and Technologies for their Application
Foat Ismagilov, Deputy General Director for Science, OOO NIPI ONGM, Russian Federation,
Co-author: Alexander Kryukov, OOO NIPI ONGM, Russia;

Improvement of Tank Farm Production Flexibility by Optimised Fuel Blending
Markus Maly, Public Policy Issues and Advocacy, OMV Refining and Marketing GmbH, Austria,
Co-authors: Ernst Seidl; Peter Illyes, OMV Refining & Marketing GmbH, Austria;

F13 - Valorisation of Natural Gas Liquids (NGLs)

Thursday 19th June 14:15 - 15:45 (Block 2)
Poster Session Thursday 19th June 11:00 - 13:00 (Poster Plaza)

Short chain alkanes derived from natural gas liquids (NGLs) can be an abundant source for the production of fuels and petrochemical basic products. Examples are the catalytic 5 conversion of C3 and C4 alkanes to aromatic hydrocarbons, the catalytic dehydrogenation of, for example, propane to propylene or the alkylation of aromatics with ethane / propane.

Chair Dr. Rainer Albert Rakoczy, Global Product Manager Fuel Upgrading Catalysis, Clariant SE, Germany,
Vice Chairs Mr. Yasuo HOSONO, GM Technology Development Unit, Chiyoda Corporation, Japan,
Dr. Anton Maximov, Deputy Director, Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russian Federation,

F13 Papers

Exploiting Hidden Opportunities in LPG Plants for Valorization of Natural Gas Liquids: A case Study
Sukanandan J N, CHIEF ENGINEER (PRODUCTION), Oil and Natural Gas Corporation, India,
Co-author: AJAY KUMAR FOTEDAR, ONGC, INDIA;

Production of High-Octane Fuel Components by Alkylation of Benzene with Mixtures of Ethane and Propane
Yvonne Traa, Senior Academic Staff Member, University of Stuttgart, Germany,
Co-author: Dennis Wan Hussin, University of Stuttgart, Germany;

Ethane Oxidative Dehydrogenation in Membrane Reactors
Andrey Yaroslavtsev, Head of Laboratory, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russian Federation,
Co-author: Leonid Kustov, Zelinskii Institute of Organic Chemistry, Russian Academy of Sciences, Russia;

Technologies for BTX Production from advantaged gaseous Feedstocks
Boris Malyshkin, Sales Director Catalysts for Petrochemicals / Russia and CIS countries, Clariant Produkte (Deutschland) GmbH, Russian Federation,
Co-author: Ernst Köhler, Clariant Produkte (Deutschland) GmbH, Germany;

F13 Posters

Energy Utilization in NGL Recovery Plants by Modifying Recycle Streams to Demethanizer Tower
mohammad Reza Jafari Nasr, Research Associate and Member of Board of Directors, Research Institute of Petroleum Industry (RIPI), Iran,

New Insights through Density Functional Theory Helps Light Naphtha Aromatization
Annaji Rajiv Kumar Tompala, Deputy Manager, Hindustan Petroleum Corporation Limited, India,
Co-authors: Venkateswarlu Choudary Nettem; Sudarshan Ragi Reddy; Ravishankar Raman, Hindustan Petroleum Corp. Ltd., India;
Tailored Non-Noble Metal-Based Zeolites for Light Naphtha Conversion with High Aromatic Selectivity
Ravishankar Raman, Senior Manager, Hindustan Petroleum Corporation Limited, India,
Co-authors: VC Rao Peddy; Venkateswarlu Choudary Nettem, Hindustan Petroleum Corp. Ltd.; Ganapati Shanbhag; Janardhan H L; Anand Halgeri, PPISR; Sriganesh Gandham, Hindustan Petroleum Corp. Ltd., India;

A New Correlation to Predict Viscosity in Wet Gas Reservoirs
Hosein Vahdani, Reservoir Engineer, NIOC, Iran,
Co-author: Ehsan Ghanaatpisheh,

Exploring NGL and Ethane from Bangladesh Natural Gas to Help Flourish Petrochemical Industry
Abdus Sattar, Ex-Managing Director, Petrobangla, Bangladesh,

BPK3 - Ensuring prudent operations in refineries

Monday 16th June 12:00 - 13:00 (Block 2)

It is essential that modern and environmentally acceptable refineries are operated in a safe and efficient manner. Successful examples for prudent operation of a refinery will be presented and the ways to their implementation described, including disaster management plans.

Chair: Mr. Artur Thernesz, Refining and Marketing Executive Director, INA R&M, Croatia,
Speakers: Mr. Jean-Luc Karnik, Chief Executive Officer, IFP Training, France,

Prof. Vladimir Kapustin, CEO, VNIPINeft, Russian Federation,

BPK3 Papers

Ensuring Prudent Operation in Refineries
Jean-Luc Karnik, Chief Executive Officer, IFP Training, France,

BPK4 - Optimising transportation, blending and storage of oil and oil products

Wednesday 18th June 12:00 - 13:00 (Block 2)

An integral part of any production and use of oil and / or products is their efficient and safe transportation and/or storage. Moreover, blending of several product streams is often required in order to obtain marketable products. These complex interrelations will be dealt with in this session.

Chair: Mr. Carlos Felipe Guimaraes Lodi, Corporate Planning General Manager, PETROBRAS, Brazil,
Speakers: Mr. Alexander Plavin, Commercial Director, MTZK-SVAP, Russian Federation,

Mr. Jose Luis López de Silanes, Chairman, CLH, Spain,

RT04 - Influence of local product specifications on refinery modernisation

Tuesday 17th June 12:00 - 13:00 (Block 2)

In different locations around the world refineries produce products (e.g. fuels, lubricants) to meet local specifications. Sometimes these differences in specifications are driven by political interests (e.g. the sulphur content of transportation fuels and heating oils) or by the technical requirements (e.g. low temperature flow properties). The influence of these factors on modernising/revamping refineries will be discussed by experts from different parts of the world.

Moderator: Mr. Robert Storey, Managing Director, Turkey, Socar, Turkey, United Kingdom,
Panelists: Mr. Jaime Berbes, Director Technology, CEPSA, Spain,
Dr. Nello Uccelletti, Senior Vice Président, Onshore, Technip, France,
Mr. Sri Ganesh Gandham, Executive Director Refineries, Hindustan Petroleum Corporation Limited, India,
Dr. Dawood Nassif, VP of Strategic Investment, BAPCO Refinery, Bahrain,

RT05 - Sustainability of biofuels from different feedstocks

Tuesday 17th June 16:15 - 17:30 (Block 2)

Biofuels are produced from different sources e.g. sugar cane, corn and fatty acids. In future cellulose or lignin may add to this feedstock spectrum. Renowned experts in the field will discuss the sustainability of biofuels from different feedstocks and also in comparison to the sustainability of fuels produced from fossil
RT06 - Challenges for integrating refinery and petrochemical complexes

Thursday 19th June 12:00 – 13:00 (Block 2)

This session will deal with synergies between a refinery and a petrochemical plant in order to optimise feedstock utilisation of common investments. Panel members will throw light on the different directions and the pros and cons of this issue.

Moderator  
Mr. Patrick Rooney, Manager for the Chemicals Strategy and Development Department, SAUDI ARAMCO, Saudi Arabia,

Panelists  
Mr. Patrick Pouyanne, President Refining & Chemicals Member of the Executive Committee, Total, France,
Mr. Udo Besser, Head of Petrochemicals, OMV RM GmbH, Austria,
Mr. Per Erik Holsten, Head of Global Industry Group, Chemical, Oil & Gas, ABB, Norway,
Mr. K Tyurdenev, President, United Petrochemical Company, Russian Federation,
F14 Papers

Small-To-Mid-Scale LNG - A New LNG World Is Emerging
Marcus Lang, Executive Vice President Natural Gas Plants, Linde Engineering, Germany,

Effect of Climate on LNG Technology Selection
Mark Roberts, Technology Manager, Air Products and Chemicals Inc., United States,
Co-authors: William Kennington; Dr. Annemarie Weist, Air Products and Chemicals Inc., United States;

Prelude FLNG - a practical application of technical innovation
Sander Stegenga, Development Manager, Shell, Singapore,
Co-authors: Harry van der Velde, Shell Global Solutions International B.V., The Netherlands; Jim Marshall, Shell Development (Australia) Pty Ltd, Australia;

Gas Hydrates as a Future Energy Resource - A New Challenge from the World’s First Offshore Production Test Toward Commercial Development
Yoshihiro Masuda, Associate Professor, Frontier Research Center for Energy and Resources (FRCER), School of Engineering, The University of Tokyo, Japan,
Co-authors: Tatsuo Saeki, Japan Oil, Gas and Metals National Corporation (JOGMEC); Hideo Narita, Methane Hydrate Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Japan;

F14 Posters

Study on Sloshing Height of LNG Tank Subjected to Seismic Excitation
Tuanhai Chen, engineer, CNOOC, China,
Co-author: Chao Zhang, CNOOC, P. R. China;

Natural Gas to Hydrocarbons – an Alternative Way to the Synthesis of Valuable Petrochemicals
Mary Magomedova, Head of Chemical Engineering Department, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russian Federation,
Co-authors: Natalya Kolesnichenko; Galina Lin, Topchiev Institute of Petrochemical Synthesis, Russian Academy of Sciences; Salambek Khadzhiev, Institute of Petrochemical Synthesis, Russian Academy of Sciences, Russian Federation; Michael O’Brien, Extiel, United States;

Design Consideration of NGL Recovery for Lean Feed Gas Processing
Tsuneo Watanabe, Technology Consultant, Chiyoda Corporation, Japan,

Environmental Impacts of Developing CNG in Algeria
Amel Djeghdjegh, Engineer, NAFTAL- SONATRACH, Algeria,

ExxonMobil’s LNG Business: Experiences and Technologies
Charles Mart, Manager, Facilities Technology, ExxonMobil Upstream Research Company, United States,
Co-author: Paul Sibal, ExxonMobil Production Company, United States;

LNG imports - a Strategic Choice for GCC region
Shailendra Mohite, Senior Engineer, Kuwait Petroleum International, Kuwait,

Marketing & Distribution of LNG through “LNG at Doorstep” (i.e. Inland Transportation of LNG) & Its Potential to Facilitate for “Small Scale LNG” and for “LNG as Transport Fuel”
VENKATESHWAR PRASAD SINHA, General Manager (LNG), Indian Oil Corporation Limited, India,

Turning South America into a Key LNG World Supplier While Enhancing the Local Industry: PERU LNG after 4 Years of Operation
Rafael Segovia, Commercial Advisor & Special Projects, Shell Operaciones Peru, Peru,

An Insight into ORYX GTL’s Operation and the Journey to Stability
Paul Vardanega, Production Manager, ORYX GTL, Qatar,

Technology Development, Application and Potential Growth in GTL
Onno van Kessel, Senior Business Development Manager GTX, Shell International Exploration and Production, Netherlands,
Co-authors: Martijn van Hardeveld; Sanjay Rungta, Shell Global Solutions International, Netherlands;

Gas Hydrate Identification and Extraction in Venezuelan Coastal Energy Potential as Strategic and Comprehensive Development Element
Maria Telleria, gas engineer, PDVSA offshore production division, Venezuela,

Floating Natural Gas to Methanol Process: a Process Engineering View
Camila Machado, Master’s degree Student, Federal University of Rio de Janeiro, Brazil,
Co-authors: Camila Machado, Federal University of Rio de Janeiro; Rita Alves, Braskem S.A.; José Medeiros; Ofélia Araújo, Federal University of Rio de Janeiro, Brazil; Paulo Coutinho, Braskem S.A., Brasil;
F15 - Impact of the growing unconventional gas supply

Tuesday 17th June 14:15 - 15:45 (Block 3)
Poster Session Wednesday 18th June 11:00 - 13:00 (Poster Plaza)

The growing supply of unconventional gas, particularly shale gas and CBM, has transformed the North American natural gas market and depressed prices to levels not seen for decades. The jury is still out on how quickly new technologies can be applied to other regions of the world (e.g., Europe, Asia, South America) and the supply response that can be expected. The growth in unconventional gas supply promises to have a major impact on extending the life of fossil fuel resources around the world and the forum will discuss the challenges associated with new supplies of unconventional gas.

Chair
Mr. Cunzhang YAN, President, PetroChina Foreign Cooperation Administration Department, China,

Vice Chairs
Dr. Konstantin Simonov, Director, National Energy Security Fund, Russian Federation,

F15 Papers

Who Goes There: Friend or Foe? - Gas, Russia and the Middle East
Carl Hughes, Deloitte Global Energy and Resources Leader, Deloitte Touche Tohmatsu Limited, United Kingdom,

Can China Copy America's Shale Gas Revolution?---Challenge of Shale Gas Reserve and Supply in China
Yuxin Zhu, Senior Engineer, PetroChina Foreign Cooperation Administration Department, China,
Co-authors: Bentao Gong; Youlin Sun, PetroChina Foreign Cooperation Administration Department; Chunmei Ge, Foreign Cooperation Department; CNPC; Chenglin Liu, Chinese Academy of Geological Sciences; Ce Zheng, China University of Petroleum, China;

Renewable Energies versus CCS Technologies for Shale Gas; Which One to Invest for Sustainable Energy Supply & Cleaner Environment?
Erfan Vafaieefard, Head of Business Development / Researcher, Institute for International Energy Studies / Skema Business School, Iran,
Co-authors: Maryam Sohrabi, Institute for International Energy Studies (IIES), Iran; Hamzeh Zarei, University of Melbourne, Australia;

The Future of Global Shale Gas Development: Will Industry Earn the Social License to Operate?
Susan Sakmar, Visiting Assistant Professor, University of Houston Law Center, United States,

F15 Posters

Unconventional Gas Production in Brazil: Current Status and Perspectives
Patricia Santos, Technical coordinator, Petrobras, Brazil,
Co-author: Alexandre Szklo, PPE/COPPE/UFRJ, Brazil;

Scenario for World Energy Production in XXI century: Hydrocarbons Will Dominate
Vladimir Kutcherov, Professor, Gubkin Russian State University of Oil and Gas, Royal Institute of Technology, Russian Federation,
Co-authors: Anatoly Zolotukhin, Gubkin Russian State University of Oil and Gas, University of Stavanger; Victor Martynov, Gubkin Russian State University of Oil and Gas, Russia;

New Players and Their Role in Natural Gas Supply Diversification
Rimma Subhankulova, Founder, World Energy Expert Group, Russian Federation,

Conventional PSC: Challenges from Unconventional Oil and Gas International Operations
Haiping Wang, Senior Engineer, PetroChina Company Limited, China,
Co-authors: Xiaofeng Zhang; Yuzhen Huang, PetroChina Company Limited, China;

The Impact of the Unconventional Gas Supply on the Link Between Oil and Gas Prices in the US Market
Abderrezak Benyoucef, Head of Department, Sonatrach/Algerian Petroleum Institute, Algeria,
Co-author: Frédéric LANTZ, IFP-School, France;

The Shale Sail & Dogwatch
Shivika Mehta, Senior Officer, Hindustan Petroleum Corporation Limited, India,
Co-author: Mrinal Madhav, PP&AC, Ministry of Petroleum & Natural Gas, India;

New Market Dynamics after Shale Gas
Mario Ramos, HEAD OF GAS TRADING, GAS NATURAL FENOSA, Spain,
Co-authors: ANA CORTES; ROSA MARIA SANZ; MANUEL FERNANDEZ, GAS NATURAL FENOSA, SPAIN;

Shale Gas Booming Impact on LNG and Petrochemicals Market
Asep Karmana Alfi, Senior Project Development Engineer, Qatar Petroleum, Qatar,
21 WPC Technical programme

Shale Gas Exploration: Why Should India Be Cautious to Commit?
Saurabh Agarwala, Senior Engineer (R&D), Engineers India Limited, India,
Co-authors: Ravi Kant Gupta; Ganesh Prasad; Ajay N. Deshpande, Engineers India Limited, India;

The Role of Unconventional Hydrocarbon Resources on the Middle East's Future Energy Market
Rosa Farboudmanesh, Expert, Institute for International Energy Studies, Iran,
Co-author: Majid Mohammadi, Institute for International Energy Studies, Iran;

F16 - New developments in long distance transportation of gas - pipelines, ships and cross border issues

Wednesday 18th June 14:15 - 15:45 (Block 3)
Poster Session Thursday 19th June 13:00 - 15:00 (Poster Plaza)

The growing demand for natural gas has necessitated the initiation of more new logistic solutions between producing and consuming countries. The landlocked natural gas producing countries are obliged to look at the possibilities to arrange for pipeline connections. Those producers and consumers that have access to the sea can consider erecting LNG facilities. This forum will highlight the latest developments in this field focusing on cross border issues both in technical and geopolitical terms.

Chair
Mr. Dinesh K Sarraf, CMD, ONGC, India,

Vice Chairs
Mr. Ibrahim Palaz, President and CEO, TOROS Energy Limited, Turkey,
Mr. Thilo Wieland, Vice President Senior Project South Stream/Nord Stream (Ressort Russia), Wintershall Holding GmbH, Germany,

F16 Papers

Chinese Technology Development of Oil & Gas Storage and Transportation
Xiansheng Sun, President of CNPC Economics and Technology Research Institute, Economic & Technology Research Institute, CNPC, China,
Co-authors: Yanpeng Ding; Hongna Hao, CNPC, China;

Transforming LNG Shipping to Succeed in Rapidly Changing Markets
John Krousouloudis, General Manager - Ship Management, Shell Shipping and Maritime, United Kingdom,

Technical Assurance of Design, Construction and Installation of Cross Border Pipelines - Key Learnings from Nord Stream and Blue Stream
Nils Andreas Masvie, Vice President, DNV AS, Norway,

Gas Supply in South-East Europe
Igor Dekanić, Full Professor, University of Zagreb, Faculty of Mining, Geology and Petroleum Engineering, Croatia,

F16 Posters

Gas to Liquids Technology
Eshu Kumar, Dy.Manager(Engg.) Retail, Bharat Petroleum Corporation Limited, India,

Global Gas Trade Prospects on the Horizon in 2035 Vision and Strategy for Trade in Natural Gas
Mohsen Haerinejad, Expert, Oil Industries Commissioning & Operation Co., Iran,

Peace Pipelines - A Geopolitical Context.
Mrinal Madhav, Asst. Director (International Cooperation), Petroleum Planning & Analysis Cell, Ministry of Petroleum & Natural Gas, India,
Co-author: Ms Shivika Mehta, HINDUSTAN PETROLEUM CORPORATION LIMITED, India;

Kinetics of “Diffusion” Cracks and Delaminations in Gas Pipe-Lines
Il’ya Nickolaevich Dashevskiy, Senior Research Scientist, Institute for Problems in Mechanics, Russian Academy of Sciences, Russian Federation,

Pollution Damage Caused by Oil Tanker Accidents
NAIT ALI NADIA, engineer, Reims University, France,

Dragon Submarine Export System-CIGMA. Dragon-Güiria Field (Venezuela). Mariscal Sucre Project. Offshore Production Division
Jimmy Arenas, Project Engineer, PDVSA, Venezuela,
Co-author: Ismael Gonzalez, PDVSA, Venezuela;
Cross Border Hydrocarbon Reservoirs Risk Management: Cooperation or Challenge in Lack of a Comprehensive International Law

Hossein Iranmanesh, Managing Director, Institute for International Energy Studies, Iran,
Co-authors: Erfan Vafaiefard, Institute for International Energy Studies (IIES); Mansoor Moazami, Iran Ministry of Petroleum; Mostafa Salari, Institute for International Energy Studies (IIES), Iran;

Improvement in Integrity of the Long Distance Transportation of Oil and Gas Systems Performing Technique to Evaluate Non-Critical Defects During Pipeline Construction

Gennady Vasiliev, Head of the Department of Pipeline and Storage Facilities Construction and Rehabilitation, Gubkin Russian State University of Oil and Gas, Russian Federation,
Co-author: Boris Lange, NPO Specneftegaz-T, Russia;

F17 - Meeting the growing demand for gas from Asia - implications for supply and transportation

Thursday 19th June 14:15 - 15:45 (Block 3)
Poster Session Thursday 19th June 11:00 - 13:00 (Poster Plaza)

Natural gas is entering an age of rapid development. It is predicted that gas demand will increase more in Asia than any other regions of the world. For the next decade Asia will be the place for a growing gas supply and demand business. So supply and demand should be integrated to formulate a secure business chain. Unique technologies and large investments are needed to unlock this potential.

Chair Mr. Ning Ning, Vice President, RIPED-Langfang, CNPC, China,
Vice Chairs Mr. A.M.K. Sinha, Director (Planning & Business Development), Indian Oil Corporation Ltd., India,

F17 Papers

Meeting the Growing Demand for Gas from Asia - Implications for Supply and Transportation

Armelle Lecarpentier, Chief Economist, CEDIGAZ, France,
Co-author: Daniel Champion, CEDIGAZ, France;

Supply, Demand and Prospect of Natural Gas in Northeast Asia

Jialiang Lu, Director, Research Institute of Petroleum Exploration & Development-Langfang, CNPC, China,
Co-authors: Suping Zhao; Yang Li; Chunxiao Guan; Qiaojing Li, Research Institute of Petroleum Exploration & Development-Langfang, CNPC, China;

Meeting the Growing Demand for Gas from Asia: Role of LNG

Suman Mishra, Manager (Gas Mgmt), Indian Oil Corporation Limited, India,
Co-author: Ranjith Kumar, Indian Oil Corporation Limited, India;

Pricing Mechanisms Development in the East Asian Gas Market

Irina Mironova, Analyst, PhD candidate, Energy Research Institute, Russian Academy of Sciences, Russian Federation,

F17 Posters

Caspian Region Gas Politics: Struggle Between Main Energy Players

Oguzhan Akyener, Technical Manager, TPAO, Azerbaijan,

Gas Pricing System in Asia Pacific Region: Influence from USA and Europe

Jinseok Sung, PhD researcher, Gubkin Russian State University of Oil and Gas, South Korea,

A Comparative Analysis: 7 Different LNG Supplies to the Republic of Korea

Jinseon Roh, PhD Student in Economics, Gubkin Russian State University of Oil and Gas, South Korea,

Comparative Study on Shale Characteristics of Different Sedimentary Facies, China

Qin Zhang, Engineer, Research Institute of Petroleum Exploration & Development-Langfang, CNPC, China,
Co-authors: Wenhua Bai, Research Institute of Petroleum Exploration & Development-Langfang, CNPC; Zhenglian Pang, Research Institute of Petroleum Exploration & Development, CNPC, China;

Asean Gas Outlook and Policy Implications

Abhishek Rohatgi, Research Associate, Energy Studies Institute, National University of Singapore, Singapore,
Co-author: Nahim Bin Zahur, Energy Studies Institute, National University of Singapore, Singapore;

Modular Process Plants and Integrated Modular Buildings: a Strategic Approach to Fast Track Delivery and Quick Start-Up

Roberto Collinelli, Sales & Marketing Director (Asia and C.I.S.), COMART (a company of Tozzi Industries), Italy,
Meeting the Growing Demand for Gas from Asia - Implications for Supply and Transportation
Stephanie Aqui, Senior Commercial Analyst, Qatargas Operating Company Limited, Qatar,

Asian Gas Story: Innovation, Investment and International Partnership Holds the Key for Future Revolution
Debamalya Sinha, Deputy Manager, Bharat Petroleum Corporation Limited, India,

BPK5 - Best practice in hydraulic fracturing
Monday 16th June 12:00 – 13:00 (Block 3)

The growing supply of natural gas from unconventional sources such as tight gas and shale gas has been facilitated by the application of sophisticated hydraulic fracturing technologies. To achieve commercial production rates there are many issues and challenges associated with the safe, environmentally responsible and cost effective application of this technology which will be addressed in this session.

Chair Mr. Yuzhang Liu, Vice President, Research Institute of Petroleum Exploration and Development, CNPC, China,
Speakers Mr. Francois Auzerais, Senior Research Advisor, Schlumberger Production Group, United States,
Mr. Adnan Kanaan, Manager, Gas Reservoir Management, Saudi Aramco, Saudi Arabia,
Dr. Abdolnabi Hashemi, Advisor, North Drilling Company, Iran,

BPK5 Papers

Acid Fracturing Treatment in an Iranian Carbonated Reservoir
Abdolnabi Hashemi, Advisor, North Drilling Company, Iran,

Hydraulic Fracturing Best Practices
Adnan Kanaan, Manager, Gas Reservoir Management, Saudi Aramco, Saudi Arabia,

Best Practice in Hydraulic Fracturing: Reducing the Environmental Footprint
Francois Auzerais, Senior Research Advisor, Schlumberger Production Group, United States,

BPK6 - Management of gas mega projects
Tuesday 17th June 12:00 – 13:00 (Block 3)

Management for mega gas projects is changing especially for unconventional gas or offshore gas. It is vital to have well planned and integrated disciplines. HSE management; procurement and installation are critical. New technology adoption and a value chain consideration are closely related to the commissioning and operation of the project.

Chair Prof. Anatoly Zolotukhin, Research Director, Institute of Arctic Petroleum Technology, Gubkin Russian State University of Oil and Gas, Russian Federation,
Speakers Ms. Melody Meyer, President, Chevron Asia Pacific E&P Co., United States,
Mr. Wael Sawan, Managing Director Pearl GTL, Shell Qatar, Qatar,

BPK6 Papers

Management of gas mega projects: Pearl GTL
Wael Sawan, Managing Director Pearl GTL, Shell Qatar, Qatar,

Mega Gas Projects: Managing Above Ground Risk at Gorgon and Wheatstone
Melody Meyer, President, Chevron Asia Pacific E&P Co., United States,

BPK7 - Best Practices in new gas technologies for processing and transportation
Wednesday 18th June 12:00 – 13:00 (Block 3)

As the industry develops more challenging gas resources, new technologies in gas processing and transportation can play a vital role in the viability of the project. Key areas for improvement include new catalysts, drag reduction additives, and advances in compressor and other machinery design that allow for higher efficiency, greater reliability, and lower maintenance costs. Improvements in land and marine transport and storage options will also be discussed. To secure regulatory approval, processing and transportation systems, especially in pristine areas must meet increasingly stringent standards to minimize the impact on unique and/or fragile ecosystems and local communities.
BPK7 Papers

Necessity of recovery of associated gas and novel applicable technologies
Iraj Ghorbani, President, Delvar Afzar Industrial Gases Co., Iran,

Best Practices in New Gas Technologies for Processing and Transportation Saudi Aramco’s Contribution
Salem Al-Huraish, Manager for Khursaniyah Gas Plant, Saudi Aramco, Saudi Arabia,

RT07 - Are we heading towards a global gas market?

Monday 16th June 16:00 - 17:30 (Block 3)

The increasing need for environmentally cleaner fuels has positioned natural gas to the fore. Crude oil has got a daily exchange based on pricing mechanisms. The same does not apply uniformly to natural gas which is differentially priced on different continents. Consequently the global market develops slowly. The LNG spot pricing has facilitated the development of the global market. In this discussion different views are tackled about the relation of global markets and market price differentiation.

Moderator
Mr. Rune Bjørnson, SVP Natural Gas, Statoil, Norway,

Panelists
Mr. Peter Clarke, Vice-President, ExxonMobil Gas & Power Marketing, United States,
Mr. Laurent Maurel, Senior Vice President Strategy, Markets & LNG, Total - Gas & Power, France,
Mr. Juan Antonio Vera García, Director Corporate Strategy, CEPSA, Spain,
Dr. Ken Koyama, Managing Director, Chief Economist, The Institute of Energy Economics, Japan,

RT08 - What is the future of natural gas?

Tuesday 17th June 16:00 - 17:30 (Block 3)

Gas is nowadays regarded as affordable, acceptable, abundant and a reliable source of energy. The utilisation of gas has been getting broader. The gas value chain is being extended. With competitiveness of gas price and technology innovation, the downstream of the gas business is rapidly developing. Gas vehicles, gas shipping, including CNG and LNG, are becoming popular. Small scale land LNG facilities are being built. Gas as a fuel is entering even more households around the world. What is the role of gas as a fuel in the future?

Moderator
Mr. Nobuo Tanaka, Global Associate for Energy Security and Sustainability, Institute of Energy Economics, Japan, Japan,

Panelists
Mr. Dick Benschop, Vice President Gas Market Development, Shell, Netherlands,
Mr. Olivier Appert, Chairman and CEO, IFP Energies nouvelles (IFPEN), France,
Dr. Fatih Birol, Chief Economist, IEA, France,
Dr. Tatyana Mitrova, Head of oil and gas industry department, Energy Research Institute, Russian Academy of Sciences, Russian Federation,
Mr. Colin Parfitt, President, Supply and Trading, Chevron, United States,
Mr. Shigeru Muraki, Chief Economist, Tokyo Gas, Japan,
Ms. Melody Meyer, President of Chevron Asia Pacific E&P, Chevron, United States,

Block 4. Sustainable Management of the Industry

Forums

F18 - Financing investments in the oil and gas industry: challenges and opportunities
F19 - Ensuring the security of supply of equipment, materials and local content infrastructure
F20 - Operational issues surrounding HSE and management of disasters
F21 - Regulatory issues: governance, risks and compliance - GRC
F22 - The role of innovation and technology in shaping the oil and gas industry
F23 - Energy efficient technologies ensuring environmental sustainability of the oil and gas industry
F24 - Human resources: challenges and opportunities
F25 - The role of the oil and gas industry in tackling energy poverty

**Best Practice Keynote Sessions**

BPK8 - Knowledge management  
BPK9 - Ethics and anti-corruption

**Round Tables**

RT09 - Where are we now in the climate change agenda?  
RT10 - International cooperation  
RT11 - Transformation of oil companies into energy companies  
RT12 - Geopolitics

**F18 - Financing investments in the oil and gas industry: challenges and opportunities**

Monday 16th June 10:15 - 11:45 (Block 4)  
Poster Session Tuesday 17th June 11:00 - 13:00 (Poster Plaza)

Capital costs and financial risks are increasing as reserves are developed in challenging or remote regions and/or large scale developments, such as LNG and infrastructure projects. Creative financing techniques and new sources of finance will be required to manage the allocation of risks through mechanisms such as insurance, contracts and international capital markets, to ensure that sufficient funding is available to finance new projects.

Chair: Mr. John Martin, Managing Director, Oil & Gas Strategic Client Coverage Group, Standard Chartered Bank, United Kingdom,  
Vice Chairs: Dr. Attahir Yusuf, Group Executive Director, Commercial & Investments, NNPC, Nigeria,

**F18 Papers**

Sakhalin Energy Project Financing - Lessons Learned  
Rob Van Velden, Finance Director, Sakhalin Energy Investment Company, Russian Federation,

Financing the Oil & Gas Industry against a Transformational Landscape  
Peter Gaw, Managing Director and Global Head - Oil, Gas & Chemicals, Standard Chartered Bank, United States,

Innovative financing solutions for oil & gas companies  
Andy Brogan, Partner Global Oil & Gas, Transaction Advisory Services, Ernst & Young, Ernst & Young, United Kingdom,  
Co-author: Andrea Teasdale, Ernst & Young, United Kingdom;

EBRD: Cooperation Avenues in the Russian Oil and Gas Sector  
Aida Sitdikova, Director, Energy and Natural Resources, Russia & CIS., European Bank for Reconstruction and Development, Russian Federation,

**F18 Posters**

Applying Investment Portfolio Analysis to the Development Strategies of the Integrated Consortium in Western Africa  
Zuoqian Wang, Engineer, Research Institute of Petroleum Exploration and Development, CNPC, China,  
Co-authors: Guanghua Zhai; Jianying Zhang, Research Institute of Petroleum Exploration and Development, CNPC, China;

A way of calculating well economics in JO Wafra Field  
MESHEL ALGHANIM, SENIOR RESERVOIR ENGINEER, KGOC/CHEVRON, Kuwait,

Evaluating petroleum projects under uncertainty: Application of real options analysis and machine learning techniques  
Mohammad Alami Bayat, Expert in Economic and Investments Dept., Ministry of Petroleum, Iran,

Refining 2021: Who Will Be in the Game?  
Doerler Joerg, Director, A.T. Kearney, Russian Federation,

Industry specifics in employment of methods of traditional (conservative) and evolutionary concepts of oil and gas companies crisis management.  
Olga Bolshakova, Docent, State University of Management, Russian Federation,
Forecasting long-term crude oil price using a combination of particle swarm optimization and genetic algorithm
Morteza Andalib Sahnehseraei, Mechanical Maintenance Engineer, National Iranian Gas Company, Iran,
Co-authors: Mohammad Javad Mahmoodabadi, Sirjan University of Technology; Reza Modabberi, National Iranian Gas Company, Iran;

Competing Factors Influencing Upstream Investment in the International Oil Industry: Evidence from OPEC Countries
Habib Nuhu, Deputy Chief Geologist, Department of Petroleum Resources, Nigeria,
Co-author: Heo Eunnyeong, Seoul National University, Republic of Korea;

F19 - Ensuring the security of supply of equipment, materials and local content infrastructure

Monday 16th June 16:00 - 17:30 (Block 4)
Poster Session Tuesday 17th June 13:00 - 15:00 (Poster Plaza)

Ensuring the security of supply of materials, equipment, technology, services, as well as human and financial resources is critical for the oil and gas industry. Major economical crises are impacting the capability of many industries and creating a scenario of uncertainties. On top of that new local content policies are being introduced in many countries adding complexity to the capability of the oil and gas industry to secure the supply of energy required for the next decades.

Chair Dr. Paulo Sergio Rodrigues Alonso, Advisor to the President - Executive Coordinator, PROMINP "The Brazilian Government Industry Mobilization Programme", PETROBRAS, Brazil,
Vice Chairs Mr. Samir Brikho, Chief Executive, Amec plc, United Kingdom,
Mr. Hatef Haeri, President, ICG Group, Iran,

F19 Papers

Local Content Challenges in Upstream Overseas Projects
Nikolay Seregin, Director of Department, JSC BASHNEFT, Russian Federation,

Lessons Learned from Diverse Perspectives Developing Future Operations: Sakhalin, Eastern Canada, and Malaysia (National Content / Supplier Development Story)
Natalie Stirling-Sanders, Upstream National Content Manager, ExxonMobil Global Services Company, United States,

Ensuring the Security of Supply of Equipment, Materials and Local Content
James Arnott, Managing Director, Business Services Lead-Accenture Capital Project Services (EALA), Accenture, United Arab Emirates,

Local Content for Economic Development in Iraq
Hans Nijkamp, Vice President Iraq, Shell Exploration and Production International, Saudi Arabia,
Co-author: Alexander Nieuwenhuizen, Shell, Netherlands;

F19 Posters

Materials Management: Gold Mine for Upstream Oil and Gas
Schroeter Ingo, Principal, A.T. Kearney, Germany,

Winning Supply Chains Integrate Today's Capabilities with Tomorrow's Goals
Schroeter Ingo, Principal, A.T. Kearney, Germany,

Increasing Threats in IT Security for Critical Infrastructure: New Approaches and Experiences
Stephan Klein, VP, Vice President Energy and Natural Resources, SAP AG, Germany,
Co-authors: Ben Krutzen, Shell, Netherlands; Gordon Muehl, SVP, Germany; Volkmar Lotz, SAP AG, France;

The Role of Responsible Security Operations in Business Success and Community Livelihoods
Roper Cleland, Social Responsibility Manager, IPIECA, United Kingdom,

Multi-Criteria Risk Analysis and Mitigation in Upstream Petroleum Supply Chain through Analytical Hierarchy Process
Samir Shamshery, Dy. General Manager, M/s Oil and Natural Gas Limited, India,
Co-author: Rajni Shamshery, M/s Oil and Natural Gas Corporation Limited, India;

A Mismatch of Big Oil and SMEs: a Relationship of Nuisance, Necessity or Fate?
Mikhail Lykhin, Owner, Individual Entrepreneur Mikhail Lykhin, Russian Federation,
Internationalization of SMEs in the Oil and Gas Supply Chain
Mikhail Lykhin, Owner, Individual Entrepreneur Mikhail Lykhin, Russian Federation,
F20 - Operational issues surrounding HSE and management of disasters

Tuesday 17th June 14:15 - 15:45 (Block 4)
Poster Session Wednesday 18th June 11:00 - 13:00 (Poster Plaza)

In order to provide sustainable operations in the oil and gas sector, industry practices need to pay special attention to the environment, safety, labour protection and especially to practices of prevention, localisation and response to disasters.

Chair
Mr. Jeff Woodbury, Vice President SSHE, ExxonMobil Corporation, United States,

Vice Chairs
Mr. Philippe MARCUS, Executive Vice President, GDF SUEZ Exploration & Production International SA, France,
Mrs. Adriana Petrovic, Director of Sustainable Development & HSE, INA Industrija nafte d.d., Croatia,

F20 Papers

Safety Culture Development on Robust BO&I Program with IIF
Toru Sugimoto, Corporate HSE Manager, JGC Corporation, Japan,

Enhancing Offshore Safety and Environmental Performance - Key Learnings from Major Offshore Accidents
David Walker, CEO, DNV GL Group, Norway,
Co-author: Henrik Overgaard Madsen, DNV GL Group, Norway;

Following Through: How Industry and Government are Improving the Safety of Offshore Energy Development in the Post-Macondo Era
Holly Hopkins, Sr. Policy Advisor, American Petroleum Institute, United States,

Asset Integrity Management System Implementation
Cyrus Rezaei, Senior Consultant-HSE, Kuwait Oil Company, Kuwait,
Co-authors: Ahmed Abbas, Manager HSE Kuwait Oil Company (KOC); Faisal Abdulla Mirza, Team Leader HSE Systems Kuwait Oil Company (KOC), Kuwait;

F20 Posters

Keystones to Building A Culture of Safety
Jack Toellner, Senior Safety Consultant, ExxonMobil, United States,

Research and Monitoring to Support Responsible Offshore Oil and Gas Development in the Presence of the Western Gray Whale Population off Northeast Sakhalin Island, Russia
Daniel Egging, Sakhalin-1 SSH&E Manager, ExxonMobil Development Company, United States,
Co-author: Jennifer Dupont, ExxonMobil Upstream Research Company, USA;

Application of Simultaneous Operations in Saudi Aramco's Causeway Oilfields Development
James Arukhe, Lead Petroleum Engineer, Saudi Aramco, Saudi Arabia,
Co-authors: Shadi Hanbzazah; Abdulrahman Ahmari; Laurie Duthie; Saleh Al Ghamdi, Saudi Aramco, Saudi Arabia;

A RasGas Experience Conducting the Survey of Flare Passing Valves Using Acoustic Technology
Tachta Hidayat, ADVISOR (HOT ENGINEERING SECTION), RasGas Company Limited, Indonesia,
Co-author: Archie Musamma, RasGas Company Limited, Qatar;

ORYX GTL: The Road to Zero Harm and Beyond
Gerald Charles, Head of HSE, ORYX GTL, Qatar,

Analysis and Assessment of Risks Arising from Human Factors in Offshore Drilling Activities
Hadi Farahani, Faculty member, Research Institute of Petroleum Industry (RIPI), Iran,
Co-author: Payam Amir-Heidari, Amirkabir University of Technology, Iran;

Safety and Environmental Management Systems - a Foundation for Enhanced Safety Culture
Charlie Williams, Executive Director, Center for Offshore Safety, United States,

Moving from a prescriptive compliance to a performance compliance to manage Safety Risks: 3 years experience of Maximize Safety project
Annamaria Petrone, Safety Engineer, Eni E&P, Italy,

New Methodologies to Foresee Consequences of Major Accident Hazards and Enhance Emergency Response and Oil Spill Preparedness
Annamaria Petrone, Safety Engineer, Eni E&P, Italy,
F21 - Regulatory issues: governance, risks and compliance - GRC

Tuesday 17th June 16:00 - 17:30 (Block 4)
Poster Session Wednesday 18th June 13:00 - 15:00 (Poster Plaza)

Good governance, regulatory compliance and risk management are all key factors in ensuring the industry’s sustainability. This session will describe how these factors need to be addressed thoroughly and effectively by all the industry stakeholders.

Chair  
Mr. George Osahon, Director, Department of Petroleum Resources, Nigeria,

Vice Chairs  
Mrs. Leanne Geale, Chief Ethics and Compliance Officer, Shell, Netherlands,
Mr. Szabolcs FERENCZ I., Senior Vice President of Corporate Affairs, MOL, Hungary,

F21 Papers

How Did We Win the Sustainability Game Through Enterprise Risk Management?  
Lakshmanan Ramanathan, Deputy Manager - CQA, Engineers India Limited, India,
Co-author: Sanjay Kumar Badlani, Engineers India Limited, India;

São Francisco Basin - Brazil: a Challenging Frontier  
Anderson Souza, Senior Engineer, CEMIG, Brazil,
Co-authors: Roberto Borges; Giovani Silva; Monica Cordeiro; Romildo Filho, CEMIG, Brazil;

The Peruvian Main Transportation and Distribution Pipelines Guarantee as a Means of Promoting Natural Gas Industries and Energy Access  
Lucio Andrés Sánchez Povis, LAWYER, SANTIVÁÑEZ ABOGADOS, Peru,
Co-author: Cecilia del Pilar Fernández Canchos, Energy and Mines Ministry of Peru, Peru;

A Comparative Study of Regulatory Issues: Governance, Risks and Compliance  
Shameek Chanda, Assistant Manager (Employee Relation), Bharat Petroleum Corporation Limited, India,

F21 Posters

Asset Integrity Meter  
Abdullah Al-Ghailani, Inspection Unit Supervisor, Saudi Aramco, Saudi Arabia,

REACH Compliance in MOL Plc.  
Judit Tóth, Reservoir modeling expert, MOL Plc., Hungary,
Co-author: Krisztina Nagy, MOL Plc., Hungary;

Branding Qatargas Through Our Liaison Offices, a Tool for Successful Business Cooperation  
Kuncheria George, Commercial Analyst, Qatargas, Qatar,

Global Oil & Gas Taxation Trends  
Alexey Kondrashov, Partner | Global Oil & Gas Tax Leader, Ernst & Young, Russian Federation,
Co-author: Andrea Teasdale, Ernst & Young, United Kingdom;

Assimilation of Noise Footprint Within Petroleum Refinery and Adoption of Strategy for Its Control and Sustainable Management of Human Health  
S.V.R. SUBRAMANYAM, Assistant General Manager, Engineers India Limited, New Delhi, India,
Co-authors: R.S. Prasad; J.K. Joshi; L.K. Vijh, Engineers India Limited, New Delhi, India;

Energy Policy of China in the Next 5 Years  
Ksenia Kushkina, Ph.D student, Institute of World Economics and International Relations, Russian Academy of Sciences, Russian Federation,

Sustainable Business Models for Harnessing benefits of Sustainable Procurement in Upstream Petroleum Supply Chain through Life Cycle Assessment  
Samir Shamshery, Dy. General Manager, M/s Oil and Natural Gas Limited, India,

F22 - The role of innovation and technology in shaping the oil and gas industry

Wednesday 18th June 14:15 - 15:45 (Block 4)
Poster Session Thursday 19th June 11:00 - 13:00 (Poster Plaza)

Innovation and technology is vital in promoting best practice, piloting new research and linking the industry to academic and research institutions. This session will discuss how innovation and technology is used by the industry to ensure it continues to move forward to become ever more productive and efficient.

Chair  
Mr. Samer Ashgar, Manager, EXPEC Advanced Research Center, Saudi Aramco, Saudi Arabia,

Vice Chairs  
Mr. Yueqiang LI, Senior Vice President, CNPC Technical Services Company, China,
F22 Papers

Building Technology Innovation System Contribute NOC Transition
Hong Yang, Engineer, Economics & Technology Research Institute, CNPC, China,
Co-authors: Jianzhong Lu; Jian Jun Zhang, Economic & Technology Research Institute, CNPC, China;

Driving Force of Innovation and Technology Application Development in Oil and Gas Industry
Hualin Zhang, Director, CNPC, China,
Co-authors: Kaicheng Zhu, Research Institute of Petroleum Exploration & Development, CNPC; Yong Pei, CNPC; Xinchun He, Research Institute of Petroleum Exploration & Development, CNPC, China;

The Technical Edge - How Science and Technology Will Transform the Way We Find, Produce and Use Energy
David Eyton, Head of Technology, BP, United Kingdom;

EOR/IOR-Nanotechnologies: Present and Future
Alexander Khavkin, Deputy General Director, JSC IGiRGI, Russian Federation,
Reservoir Simulation and Modeling - a Vision of 2020
Thomas James Byer, PETROLEUM ENGINEERING CONSULTANT, Saudi Aramco, Saudi Arabia,

F22 Posters

Leading Organizations Build Case for Green Infrastructure
Sachin Kapila, Manager: Environmental Footprint Innovation and Strategic Partnerships, Shell, United Kingdom,

How to Use Big Data Technologies to Optimize Operations in Upstream Petroleum Industry
Abd Elkader Baaziz, Senior Manager at SONATRACH & PhD Researcher at IRSIC, Sonatrach & IRSIC Laboratory at Aix-Marseille University, Algeria,
Co-author: Luc Quoniam, Aix-Marseille University, France;

Dariuosh Vafi, Faculty Member, IIES, Institute for International Energy Studies, IIES (Institute for International Energy Studies), Iran,

The Nature and Role of Technology in Upstream Petroleum Industry
Seyed Mahdia Motahhari, Manager of reservoir studies and field development division, Research Institute of Petroleum Industry, Iran,
Co-authors: Seyed Kamran Bagheri, Scuola Superiore Sant’Anna, Italy; Seyed Saleh Hendi, Research Institute of Petroleum Industry, Iran;

Controlled Release of Oil Field Chemicals
Dmitry Kosynkin, Petroleum Engineer, Saudi Aramco, Saudi Arabia,
Co-authors: Mazen Kanj, Lebanon; Jim Funk, Saudi Aramco, USA;

Tackling the Dilemma of Innovation-Risk & Inevitability: A Road Map for Systemic Innovation in Oil & Gas Industry
Apoorve Khandelwal, Senior Research Scientist, Bharat Petroleum Corporation Limited, India,

Nanotechnology in E&P, Microscopic Solutions to Mega Scale Problems
Shahab Ayatollahi, Professor, Shiraz University, Iran,

Hydraulic Fracturing as a Development Strategy - Successful Case Histories from the Congo Basin: A Matter of Technology and Risk Attitude
Loris Tealdi, Vice President, Eni E&P, Italy,
Co-author: Raffaele Perfetto, eni E&P, Italy;

F23 - Energy efficient technologies ensuring environmental sustainability of the oil and gas industry

Wednesday 18th June 16:00 - 17:30 (Block 4)
Poster Session Thursday 19th June 13:00 - 15:00 (Poster Plaza)

Energy efficient technologies, including carbon capture and storage (CCS), are seen as a potential major contributor in reducing greenhouse gas emissions. This session will address the latest developments from the entire value chain.

Chair
Dr. Jean-Francois MINSTER, Senior Vice President, TOTAL SA/Scientific Development, France,

Vice Chairs
Mr. Takashi Yasuda, Executive Officer, CTO, Technology Innovation Center, JGC Corporation, Japan,
F23 Papers

**Improving Energy Efficiency with Cogeneration Technology**
David O’Brien, ExxonMobil, United States,

**Treated Industrial and Process Water**
Noora Al-Derham, Specialist (Development Planning), RasGas Company Ltd., Qatar,
Co-author: Tachta Hidayat, RasGas Company Ltd., Qatar;

**Energy Management in Use: What Has Been Changed after ISO 50001 Introduction?**
Johannes Penzkofer, Director, GCE Group, Germany,
Co-author: Sergei Galkin, GCE Group, Russian Federation;

**Technical-Economic-Environmental Assessment of Hybrid Process for CO2 Capture from Natural Gas**
Lorena Fernanda Dos Santos de Souza, Research Technician, EQ - UFRJ, Brazil,
Co-authors: Ofélia Araújo; José Medeiros, Escola de Química, Federal University of Rio de Janeiro, Brazil;

F23 Posters

**Gas Flaring Reduction in Kuwait Oil Company**
Eisa AlHaddad, Intruments Maintenance Engineer, Kuwait Oil Company, Kuwait,
Co-author: Khalid Ben Amerah, Kuwait Oil Company, Kuwait;

**Planning for Zero CO2 Emission from LNG Production Plant**
Farrokh Kamali, Technical Advisor, Iran LNG Company (ILC), Iran,

**CCS–EOR Pilot Project of PetroChina in Jilin Oilfield, China**
Liao Xinwei, 18 Fuxue Road, Changping, Beijing China, China University of Petroleum, Beijing, China,
Co-authors: Shen Pingping, RIPED, PETROCHINA; Li Ju, China University of Petroleum-Beijing, China;

**Subsurface Bio-Electrochemical Conversion of Carbon Dioxide into Methane by using Indigenous Microorganisms**
Naoya Fukushima, Assistant Professor, The University of Tokyo, Japan,
Co-authors: Haruo Maeda, INPEX Corporation, Japan; Kozo Sato; Hajime Kobayashi, The University of Tokyo, Japan;

**Simultaneous Optimization of Carbon Dioxide Sequestration and Enhanced Oil Recovery in Oil Reservoirs Using Multi Objective Genetic Algorithm_Case Study**
Mohammad Amin Safarzadeh, Research Institute of Petroleum Industry, Iran,
Co-author: Seyed Mahdia Motahhari, Research Institute of Petroleum Industry, Iran;

**Minimizing Fresh and Wastewater Using Water Pinch Technique in Petrochemical Industries**
Wasif Mughees, Researcher/Student, King Saud University, Saudi Arabia,
Co-authors: Wasif Mughees; Malik Al Ahmad; Muhammad Naeem, King Saud University, Saudi Arabia;

**Handling Impacts of Upstream Refinery Operations on Effluent Treatment Plant**
Jayant Kumar Joshi, Head Environment, Engineers India Limited, India,
Co-authors: Parveen Goel; Mayank Gupta; Lalit Vijh, Engineers India Limited; Manoj Joshi, Independent Consultant, India;

**ORC Plants Application for Secondary Energy Resources Recycling in Oil and Gas Sector Enterprises**
Alexey Zakharov, Director, GCE Group, Russian Federation,

**Renewable Energies versus CCS & Energy Efficient Technologies; Which One to Subsidize for Sustainable Energy Supply & Cleaner Environment?**
Maryam Sohrabi, Senior Energy Researcher, Institute for International Energy Studies (IIES), Iran,
Co-authors: Erfan Vafaiefard, Institute for International Energy Studies / Skema Business School, Iran; Hamzeh Zarei, University of Melbourne, Australia;

**Optimizing Operational and Environmental Stewardship in Offshore Operations**
Brito Irma, GERENTE DE AMBIENTE DE DIVISION PRODUCCION COSTA AFUERA, Petroleos de Venezuela, PDVSA, Venezuela;

F24 - Human resources: challenges and opportunities

**Thursday 19th June 14:15 - 15:45 (Block 4)**
**Poster Session Wednesday 18th June 15:00 - 17:00 (Poster Plaza)**

In the oil and gas industry, manpower is one of the key drivers to success. This session will include all aspects of human resources, including education, recruitment, training and retention. It will also address actions necessary to attract both women and the younger generation to the technical professions in the industry.
F24 Papers

Human Resources: Challenges and Opportunities
James Arnott, Managing Director, Business Services Lead-Accenture Capital Project Services (EALA), Accenture, United Arab Emirates,
Co-author: John Downie, Accenture, United Kingdom;

Needed to Fill the Talent Gap - Generation Y at Work
Katharina Gruenberg, Economist, Shell Upstream International, Netherlands,

Bridging the Skill Gap - Attracting Women Talent to Oil & Gas Industry
Mansi Dubey, Deputy Manager (HR), Bharat Petroleum Corporation Limited, India,
Co-authors: Swati Singh; Apoorve Khandelwal, Bharat Petroleum Corporation Limited, India;

Fueling African Oil & Gas Growth with Local Talents
Antoine Rostand, Managing Director, Schlumberger Business Consulting, France,

F24 Posters

The Dual Training System as a System of Long-Term Power Factor of Human Resources of the Exploration Companies
Alexandra Murtazina, economist, TNG-Group, Russian Federation,

Classics and Innovations in Educational Technologies of Gubkin University
Ravilya Safieva, professor, Gubkin Russian State University, Russian Federation,

Recruiting Gen Y Through Social Media in Oil and Gas Industry
Musa Bilgehan Akgun, HR Specialist, TPAO, Turkey,
Co-author: Gokce Kut, TPAO, Turkey;

Integration Of Multicultural Project Teams in Oil and Gas Companies
Zoheit Benmerkhi, Maintenance Planning Manager, Sonatrach, Algeria,

Reinventing HRM Boundaries: Enrolling the Indirect Workforce in Oil & Gas Sector for “Responsible Conduct”
Chaityparna Banerjee, Assistant Manager (Employee Relations), Bharat Petroleum Corporation Ltd., India,
Co-authors: Mansi Dubey ; Ullas Batra , Bharat Petroleum Corporation Ltd., India;

Production Engineering Specialist Program is Helping Saudi Aramco to Meet Technical Challenges in Upcoming Mega Projects
Karam Yateem, Lead Petroleum Engineer, Saudi Aramco, Saudi Arabia,
Co-authors: Samih M Alsyed; Syed A Warsi; James O Arukhe, Saudi Aramco, Saudi Arabia;

How to Involve Students and Young Professionals in Shaping the Global Energy Future: the World Energy Council’s and World Petroleum Council’s Youth Initiatives
Anna ILLARIONOVA, PhD Sudent, WPC youth member from Russia, Russian Foreign Trade Academy, Russian Federation,

F25 - The role of the oil and gas industry in tackling energy poverty

Tuesday 17th June 16:00 - 17:30 (Room 5)
Poster Session Wednesday 18th June 13:00 - 15:00 (Poster Plaza)

Energy poverty is an increasingly acknowledged global challenge that impacts economic growth, development and social well being. As social responsibility becomes more and more a way of doing business for the oil and gas industry, so efforts to find ways to tackle energy poverty have become urgent. What can the oil and gas industry do as part of these efforts? How will energy poverty initiatives shape the operations of our industry? And the relations with local communities? How should the industry design its CSR policies to cope with energy poverty?

Chair
Mr. Roberto Ramallo, Director, Corporate Social Responsibilty, Pluspetrol SA, Argentina,

Vice Chairs
Ms. Nazan Senol Topguder, EOR Advisor, Turkish Petroleum Corporation (TPAO) Research Center, Turkey,
Mr. Victor Briggs, Managing Director, Nigerian Petroleum Development Comapany, NPDC - NNPC, Nigeria,
**F25 Papers**

**Oil Reform and Poverty Abatement in Mexico: A New Perspective for Inclusive Green Growth**  
Remzi Xhemalce, Chief of Department of International Oil Markets, Secretariat of Energy, Mexico,

**How World’s Resources Companies Can Help Address Energy Poverty**  
Jean Marc Ollagnier, Resources CEO, Accenture, France,

**Unleashing the Heroic Spirit of Oil Industry- Energising Business & Society simultaneously**  
Apoorve Khandelwal, Senior Research Scientist, Bharat Petroleum Corporation Limited, India,  
Co-authors: Ullas Batra, Bharat Petroleum Corporation Limited; Mansi Dubey, Bharat Petroleum Corporation Ltd., India;

**F25 Posters**

**The Analysis of CSR in Energy & Environmental Issues with Futures Studies Methodology (Case Study: PSEEZ (The Capital of Iran Energy))**  
Ali Rahneshin, Senior in Foreign Procurement, Borzouyeh(Nouri)Petroleum Co /PSEEZ/Hormozgan University, Iran,  
Co-authors: Reza Ahmadi Kahnali, Hormozgan University; Maryam Vakilzadeh, NIPC; Peyman Razmjoo, BPC, Iran;

**Scenarios for a Sustainable Future Energy to 2050: Three Exploratory Scenarios to 2050**  
Ali Rahneshin, Senior in Foreign Procurement, Borzouyeh(Nouri)Petroleum Chemical Co /PSEEZ/Hormozgan University, Iran,  
Co-authors: Maryam Vakilzadeh, NIPC, Iran; John A. Sweeney, Hawaii University, USA; Reza Ahmadi Kahnali, Hormozgan University, Iran;

**Role of Kazakhstan's Energy Sector in the Enhancement of ECO Energy Cooperation**  
Rosa Farboudmanesh, Expert, Institute for International Energy Studies, Iran,  
Co-author: Majid Mohammadi, Institute for International Energy Studies, Iran;

**Policies for Tackling Energy Poverty in Peru**  
Cecilia del Pilar Fernández Canchos, Economic Analyst of the General Bureau of Hydrocarbons and Fuel Price Stabilization Fund, Energy and Mines Ministry of Peru, Peru,  
Co-author: Lucio Andrés Sánchez Povis, Law Firm “Santiváñez Abogados”, Peru;

**Transformation of Indian Oil & Gas Companies into Integrated Energy Companies: a Realistic Vision or Delusion?**  
Swati Singh, Deputy Manager (Training), Bharat Petroleum Corporation Ltd., India,  
Co-authors: Chaityparna Banerjee; Mansi Dubey, Bharat Petroleum Corporation Ltd., India;

**Eradicating Energy Poverty through CSR: Empirical Evidences and Lessons from Indian Hydrocarbon Sector**  
Amanpreet Chopra, Manager, Chairman & Managing Director Office, Engineers India Limited, India,  
Co-author: Mohit Goel, Engineers India Limited, India;

**Rasoi Ghar - A Successful CSR Initiative for Rural Development in India**  
Barman Sanjay Kumar, Chief Manager, Hindustan Petroleum Corporation Limited, India,  
Co-authors: Sonal Desai, India; A Surya Rao, Indai; Sanjay Barman; Narayan Krishnamuryth; Gayatri Chandrashekar, HINDUSTAN PETROLEUM CORPORATION LTD, India;

**Managing Energy Sources to Emit Environment Contaminants and Its Effect on Providing Needs.**  
Amin Amraei, Director, Pooya Sepehr Kish Energy Development (PSKED), Iran,  
Co-authors: Asadoolah Kalantar, Iranian Oil Pipeline & Telecommunication Company, Iran; Farid Amraei, Iranian Oil Pipeline and Telecommunication Company, Iran;

**Changing the Geopolitical Scope Around Arctic Hydrocarbon Resources**  
Maria Morgunova, PhD student, Gubkin Russian State University of Oil and Gas, Russian Federation,  
Co-author: Elena Tselina, Gubkin Russian State University of oil and gas, Russia;

**New Process for Hydrogen Energy Storage and Transportation in a Large-Scale**  
Yoshimi Okada, Principal Researcher, Chiyoda Corporation, Japan,  
Co-authors: Hironori Kawai; Kenichi Imagawa; Makoto Yasui, Chiyoda Corporation, Japan;

**BPK8 - Knowledge management**

Monday 16th June 12:00 - 13:00 (Block 4)

This Best Practice Keynote will address processes, strategies and policies to identify, create, represent, distribute and enable adoption of insight and experiences in the oil and gas industry. The main focus are the organisational objectives, such as improved performance, competitive advantages, innovation and sharing knowledge, as an enabler of organizational learning.
Chair  Mr. David E.A. Williams, Managing Partner, Global Oil and Gas, The Highland Group, United Kingdom,

Speakers  Ms. Rima Al-Awadhi, Team Leader Knowledge Management, Kuwait Oil Company, Kuwait,  
Mr. Thierry Pilenko, Chairman and CEO, Technip, France, 

BPK8 Papers  

**How can we better share & leverage expertise within the industry?**  
Thierry Pilenko, Chairman and CEO, Technip, France,

**Knowledge Retention**  
Rima Al-Awadhi, Team Leader Knowledge Management, Kuwait Oil Company, Kuwait,

BPK9 - Ethics and anti-corruption  

Tuesday 17th June 12:00 - 13:00 (Block 4)  

Ethical and non-corrupt behaviors are key factors in ensuring the oil and gas industry’s sustainability. Lessons learned and best practices from corporate responsibility and transparency initiatives will be presented in this session.

Speakers  Mr. Philip Jordan, Senior Vice President Ethics, TOTAL S.A., France,  
Mr. Jonas Moberg, Head of the International Secretariat Extractive Industries Transparency Initiative, EITI (Extractive Industries Transparency Initiative), Norway,  

Chair  Mr. Alexander Sokolov, Partner (Financial Advisory Services), Deloitte CIS, Russian Federation,

BPK9 Papers

**Ethics and Business-Sustainable Growth and Value Creation for Stakeholders**  
Philip Jordan, Senior Vice President Ethics, TOTAL S.A., France,

Presentation Jonas Moberg, EITI  
Jonas Moberg, Head of the International Secretariat Extractive Industries Transparency Initiative, EITI (Extractive Industries Transparency Initiative), Norway,

RT09 - Where are we now in the climate change agenda?  

Wednesday 18th June 10:45 - 11:45 (Plenary Hall)  

The oil and gas based industry accepts being a part of the climate change problem, and as such sees itself as a key player in finding and developing solutions. This Round Table will address the current status of the industry’s responses to mitigate climate change.

Moderator  Mrs. Hege Marie Norheim, SVP Environment & Climate, Statoil, Norway,

Panelists  Mr. Brian Sullivan, Executive Director, IPIECA, United Kingdom,  
Ms. Anita George, Senior Director of the World Bank Group Energy and Extractives Global Practice, World Bank, United States,  
Mr. Dirk Forrister, President and CEO, International Emissions Trading Association, Switzerland,  
Mr. Orlando Enrique Cabrales Segovia, Deputy Minister of Energy, Deputy Minister of Energy, Colombia,

RT10 - International cooperation  

Wednesday 18th June 14:15 - 15:45 (Room 5)  

In order to guarantee that the oil and gas industry will supply the energy needed to responsibly energise our growing world there is a greater recognition that cooperation and collaboration are required in the future to create commercial, operational and political synergies. What are the key elements for a successful strategy? What are the areas that NOCs / IOCs and SOCs can best cooperate with each other and with the other key stakeholders such as governments, suppliers, communities etc.?
RT11 - Transformation of oil companies into energy companies

Wednesday 18th June 16:00 - 17:30 (Room 5)

Many NOCs and IOCs have undergone or are undergoing changes which will see them transform themselves into National / International Energy Companies (NEOs / IEOs). This session will address and discuss the trend and the subsequent associated challenges which it brings.

Moderator: Mr. Pedro Miras Salamanca, Chairman, Spanish National Committee of the WPC, Spain
Panelists:
- Mr. Wim Thomas, Chief Energy Advisor, Shell, United Kingdom
- Mr. Petter Nore, Chief Energy Analyst, Norwegian Ministry of Foreign Affairs, Norway
- Mr. Pekka Tiitinen, Head of Discrete Automation and Motion division Member of the Group Executive Committee of ABB Ltd, ABB, Switzerland
- Mr. Neil Duffin, President, ExxonMobil Development Company, United States
- Mr. Michael Borrell, Senior Vice-President Continental Europe-Central Asia, TOTAL, France
- Mrs. Hosnia Hashim, Vice President, Operations, Kufpec, Kuwait

RT12 - Geopolitics

Thursday 19th June 14:15 - 15:45 (Room 5)

The petroleum business is interconnected, globalised and interdependent, and as such geopolitical issues can impact many areas, such as access to exploration areas and poor boundary demarcation zones for example. These in turn impact supply and price as well as having a disruptive effect in general. These geo-political factors will be discussed from the perspective of business, government and academia.

Moderator: Mr. Jorge Marques de Toledo Camargo, Member of the Board of Directors, IBP, Brazil
Panelists:
- Mr. Kirill Kravchenko, CEO, NIS-Gazpromneft, Serbia
- Mr. Norbert Schwieters, Global Energy, Utilities & Mining Leader, PWC, Germany
- Mr. Arturo Gonzalo Aizpiri, Corporate Director of Institutional Relations and Corporate Responsibility, Repsol, Spain
- Mr. Olivier Cleret de Langavant, Senior Vice President Strategy Business Development R&D, TOTAL E&P, France

RT12 Posters

Geopolitics

Volkan Ediger, Coordinator, Strategy Development and Research; Head of Energy Systems Engineering Department, Kadir Has University, Turkey,