



11th Scientific and Technical Days

**INNOVATION AND PARTENERSHIP, WITHIN AN ENERGY
TRANSITION GLOBAL CONTEXT**

ORAN (ALGERIA), 16 - 19 APRIL 2018

The National Company SONATRACH organizes, under the patronage of His Excellency the President of the Republic, Abdelaziz BOUTEFLIKA, the 11th edition of the Scientific and Technical Days (JST11), and the 3rd edition of the ExpoSciences3 Scientific Exhibition.

This event will take place from 16th to 19th April 2018 at the Oran Convention Center (CCO), under the theme: "Innovation and partnership in the global context of energy transition".

Since its launching in 1994, this international event, is a space for sharing and exchange between specialists and academic researchers of their knowledge and their know-how and to debate the scientific and technical updates (hereinafter the list) of the energy world.

The practical modalities for participation and any other information related to this event are detailed on the website of this event: jst.sonatrach.dz

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I. TECHNOLOGICAL ADVANCES IN UPSTREAM

1. *Technical and Technological Innovation in Reservoir Modeling and Processes to Improve the Recovery Rate of Production (IOR / EOR ...).*
2. *Advances in seismic imaging, sedimentology, stratigraphy, geochemistry and geomechanics techniques.*
3. *Drilling and completion technology: advances in drilling techniques, cementing and well integrity, well intervention, stimulation...*
4. *Best practices in the operation of surface installations and monitoring of well performance.*

II. TECHNOLOGICAL ADVANCES IN DOWNSTREAM

1. *Contribution of new technologies in improving the efficiency of LNG units.*
2. *Refining Processes and configuration of refineries.*
3. *New technologies in the LNG chain.*
4. *New technologies in petrochemicals.*
5. *Prospects for refining capacity, margins, and demand for petroleum products.*

III. CORPORATE STRATEGY AND THE EVOLUTION OF ENERGY MARKETS

1. *Strategies of Oil & Gas companies in a transitional context (Alliances, partnerships, choice of investment, market shares...).*
2. *Energy market outlook, price stability and investment.*
3. *Prospects for the evolution of oil and gas industry confronting the energy transition: strategy and organization.*
4. *Evolution of energy and technology markets, towards which transition?*

IV. CLIMATE CHANGE, RENEWABLE ENERGY AND ENERGY EFFICIENCY

1. *Climate change: Understanding, reacting and anticipating.*
2. *Renewable Energies: What tools and what Management?*
3. *Energy efficiency: Savings and innovative solutions.*
4. *Waste Management, Chemicals and Air Releases: New and Innovative Solutions.*

V. NON-CONVENTIONAL RESOURCES

1. *Prospects and challenges in the exploration and development of non-conventional resources.*
2. *Innovative technologies for improving the performance of fracturing operations.*
3. *Supply Chain Best Practices for Development and Exploitation of Unconventional Resources.*
4. *Optimization of drilling campaigns: implantations, drilling rigs, new technologies. ...*

VI. HUMAN RESOURCES DEVELOPMENT

1. *New Approaches to Occupational Health.*
2. *Promoting employability of people with disabilities.*
3. *New approaches to HR strategic planning.*
4. *Succession planning and succession preparedness.*
5. *Innovation in HR management and training tools.*
6. *Intergenerational transfer of knowledge and communities of practice.*
7. *New labor organizations.*

VII. DIGITALIZATION - DIGITAL TRANSFORMATION IN OIL AND GAS SECTOR

1. *Trends and innovations of IT Infrastructures (Cloud, mobility, convergence ...).*
2. *Security of information systems and industrial installations (Cybersecurity, Cloud, risk management, etc.).*
3. *Digital transformation and new stakes and challenges of applications and solutions (Dematerialization, Open source, Agility ...).*
4. *Feedback from oil & gas companies about information systems (ERP, Internal development, digitization, IOT, CRM, security...).*
5. *Issues of data control for Oil & Gas (Analytics, Piloting, Big data, Artificial Intelligence, KM...).*

VIII. FACILITIES INTEGRITY AND TECHNOLOGICAL CHALLENGES

1. *Classified facilities and risk prevention.*
2. *Innovations in Techniques of Inspection of Pipes and Surface Facilities.*
3. *New diagnostic and repair techniques and systems of protection of surface installations and hydrocarbon transport pipelines.*
4. *Construction of hydrocarbon transport pipelines and integrity.*
5. *Abandonment of facilities: current approaches, solutions and regulations.*

IX. ENGINEERING AND R&D IN ENERGY INDUSTRY

1. *Evolution of engineering professions in the energy industry.*
2. *Modeling and dimensioning of Renewables plants.*
3. *Technological innovations for increasing plant life and optimizing availability.*
4. *Development and implementation of a value engineering analysis process on all phases of the project life cycle.*
5. *R & D in the energy industry.*

X. LOCAL INTEGRATION AND LOCAL PARTNERSHIP

1. *Local partnership and transfer of national know-how (public / private, intra-group).*
2. *Development of local industry serving the energy sector (feedback and perspectives).*
3. *University: source of innovation for the energy industry.*
4. *Position of the National Integration in the Oil & Gas Sector.*
5. *Corporate Social Responsibility of Oil & Gas companies in local development (Energy, ICT, road networks, culture, etc.).*

XI. RISK MANAGEMENT

1. *Management of occupational hazards.*
2. *New techniques for investigating accidents and incidents.*
3. *New techniques for managing emergencies and crises (CSI).*
4. *Modern management of buildings and industrial facilities.*
5. *Risk management as a transverse discipline.*