



**11<sup>th</sup> Scientific and Technical Days**  
**INNOVATION AND PARTNERSHIP,**  
**WITHIN AN ENERGY TRANSITION GLOBAL CONTEXT**  
**Oran, November 19<sup>th</sup> – 22<sup>nd</sup>, 2017**

**CALL FOR PAPERS**

SONATRACH is organizing its 11<sup>th</sup> Scientific and Technical Days (JST11) from **November 19<sup>th</sup> – 22<sup>nd</sup>, 2017** at the Oran Convention Center.

This international forum of exchange has allowed since its launch in 1994, the Executives of SONATRACH as well as the specialists and experts from different backgrounds and also the university researchers, to share their knowledge and their know-how and to debate the scientific and technical updates related to SONATRACH Activities.

The aim of these days is to allow:

- SONATRACH executives and the national and international scientific community to discuss the latest developments and innovations in order to deal with the challenges of energy transition.
- The national and international actors in the energy sector to present their technologies and know-how.
- Exchanging experiences and debating on development and partnership opportunities in the energy sector.

The selected topics for JST11 are detailed below. We invite you to participate, through making contributions on these topics. The issues to be dealt with, the practical arrangements for participation and other additional information are detailed on the dedicated website: [jst.sonatrach.dz](http://jst.sonatrach.dz)

The best papers will be awarded by topic and published in a JST11 special edition, for the 54<sup>th</sup> anniversary of SONATRACH.

The following dates shall be remembered :

|                                     |   |
|-------------------------------------|---|
| <b>May 31<sup>st</sup>, 2017</b>    | Deadline for receipt of initial papers (abstract + full text).          |
| <b>July 15<sup>th</sup>, 2017</b>   | Notification of acceptance to authors (oral presentations and posters). |
| <b>August 31<sup>st</sup>, 2017</b> | Deadline for receipt of final selected papers.                          |

Proposals for papers shall be sent, exclusively, through the website "[jst.sonatrach.dz](http://jst.sonatrach.dz)" and as per the JST11 submission template, on May 31<sup>st</sup>, 2017, at the latest.

**CONTACT & INFORMATION**

JST11 Technical Secretary  
SONATRACH LRP Activity Headquarters at Oran  
Tel. : +213 (0) 41 422 635 - Fax : +213 (0) 41 421 848  
Web site : [jst.sonatrach.dz](http://jst.sonatrach.dz) – Mail : [sec.jst11@sonatrach.dz](mailto:sec.jst11@sonatrach.dz)

## 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.*