

# Call for Contributions

## Note: Onsite and Remote Options

To accommodate many situations, we are offering the option for either *physical presence* or *virtual participation*. We would be delighted if all authors manage to attend in person but are aware that special circumstances are best handled by having flexible options.

## Submission:

1. **Inform the Chairs:** with the Title of your Contribution

2. **Submission URL:**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICSNC+2020+Special>

Please select Track Preference as **OG4IR**

## Special track

### OG4IR: 4<sup>th</sup> Industrial Revolution Applications in Oil & Gas Upstream Industry

#### Chairs and Coordinators

Dr. Abdallah A. Alshehri, Petroleum Scientist, Saudi Aramco, Saudi Arabia

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Dr. Klemens Katterbauer, Deep Learning Specialist, Saudi Aramco, Saudi Arabia

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#### along with

**ICSNC 2020**, The Fifteenth International Conference on Systems and Networks Communications

October 18, 2020 to October 22, 2020 - Porto, Portugal

<https://www.iaria.org/conferences2020/ICSNC20.html>

The Fourth Industrial Revolution (4IR) can contribute to decision-making, enhance efficiency, and save capital and operational costs like never. It is the integration of multiple game-changers such as Internet of Things (IoT), remote sensing and big data. It has led to major transformations in the oil and gas industry, enabling to optimize recovery from oil and gas fields as well as enhancing the understanding of the subsurface formation. 4IR technologies maximize the potential of data, automation, and integration and to establish an autonomous and intelligent advisory platform to enhance productivity through multidisciplinary integration and cyber-physical automation.

The challenges faced in the oil and gas industry distinguish themselves in terms of the harsh environment conditions that are encountered in the subsurface. They are:

- Artificial Intelligence (AI) in downhole sensor optimization.
- Wireless communication optimization in reservoir environments.
- Robotics for the optimization of fracturing.
- In-reservoir sensing technologies.

## Potential topics include, but are not limited to:

- Simulation & High-Performance Computing
- Big Data & Advanced Analytics
- Smart Sensor & Intelligent Devices
- Internet of Things (IoT)
- Real-time Reservoir Properties Prediction
- AI in Remote Sensing Applications
- Advanced Sensing
- Machine Learning
- Robotics Technology
- Case Studies

## Important Datelines

*Inform the Chairs (see Contacts below): as soon as you decide to contribute*

Submission: August 24

Notification: September 13

Registration: September 23

Camera-ready: September 23

## Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on [www.iaria.org](http://www.iaria.org)]
- Presentations: slide only [slide-deck posted on [www.iaria.org](http://www.iaria.org)]
- Demos: two pages [posted on [www.iaria.org](http://www.iaria.org)]

## Paper Format

- See: <http://www.iaria.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaria.org/editorialrules.html>

## Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

## Paper Submission

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICNSC+2020+Special>

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## Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaria.org/registration.html>

## Contacts

Chairs:

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