## **Call for Contributions**

# 1. Inform the Chair

2. Submission URL:

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICCGI+2021+Special

Please select Track Preference as FPBNS

**3.** Note: For 2021, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on site scientific events. However, we are ready to adapt any which way the conditions dictate.

# Special track

# **FPBNS: Fluid Phase Behavior in Nano-confined Shale**

Chair

Prof. Dr. Yueliang Liu, PhD, School of Petroleum Engineering, China University of Petroleum (East China), Qingdao, China sdliuvueliang@163.com

along with

ICCGI: The Sixteenth International Multi-Conference on Computing in the Global Information Technology
<a href="https://www.iaria.org/conferences2021/ICCGI21.html">https://www.iaria.org/conferences2021/ICCGI21.html</a>
July 18, 2021 to July 22, 2021 - Nice, France

In nanopores, the thermodynamic properties of confined fluids can be very different from that in bulk. The saturation points of confined fluids are shifted and strong fluid-surface interaction may result in significant surface adsorption and inhomogeneous density distributions. A number of theoretical and experimental approaches have been applied to the study of phase behavior of confined fluids. However, these approaches cannot consider the intermolecular and fluid-surface interactions which play key roles in the phase behavior of nano-confined hydrocarbons. Advancing the understanding of phase behavior of confined fluids is not only crucial to the shale/tight gas and oil recovery, but also of fundamental importance to many industrial applications, such as heterogeneous catalysis, pollution control and separation processes.

In this Special Track, we are focusing on the recent developments in experimental and theoretical research work in fluid phase behavior in nano-confined shale. In addition, some promising novel directions of research work are also well considered, e.g., how adsorption/desorption behavior of the confined fluid behaves in nanopores; how the residual shale oil is motivated from the nanopores to the fractures; new nano-materials used for shale reservoir development, *etc*.

#### Topics include, but not limited to

- Modeling confined fluid phase behavior;
- Adsorption/desorption in shale;
- Confined fluid dynamics;
- New experimental techniques for measurements;
- Synthesis of nano-materials for shale development.

## **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]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

## **Important Datelines**

Inform the Chair or Coordinator: As soon as you decide to contribute

Submission: June 14, 2021 Notification: June 26, 2021 Registration: July 2, 2021 Camera ready: July 3, 2021

*Note:* The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chair.

## **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=ICCGI+2021+Special Please select Track Preference as **FPBNS** 

#### 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

#### Contact

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