

GDR2026 Hydrates de gaz

CNRS – IFREMER – ENSTA - Mines Paris Tech – BRGM – IFPEN – INRAE

<http://hydrates.cnrs.fr>

Les Journées « HYDRATES 2021 »

21 et 22 Octobre 2021

– Anglet –



Format of the contributions (english recommended for slides at least)

- **Plenary** : 40 minutes including 10 minutes of discussion.
- **Oral communication** : 20 minutes including 5 minutes of discussion.



PROGRAM

Jeudi 21 Octobre 2021

9h00-9h15 Welcome speach (15 minutes)

9h15-9h55 Plenary : Processes (40 minutes)

- **Praveen Linga (NUS, Singapore)** - Innovative applications with clathrate hydrate as a technology enabler

9h55-10h35 : Session 1 : Processes (20 minutes each)

- **Mohammad Abdallah (IFPEN)** - Multi-scale characterization of gas hydrates formed in the presence of anti-agglomerant additive
- **Vinicius De Almeida (EMSE)** - Impact de la formation d'hydrates de gaz sur les régimes d'écoulement en production pétrolière en fonction de la teneur en eau

10h35-10h55: Coffee break

10h55-11h35 : Session 2 : Processes (20 minutes each)

- **Madina Naukanova (EMSE)** - Modeling of Gas-Liquid Two-Phase Flow in a Rock&Roll ring flow loop
- **Angsar Serikkali (EMSE)** - Crystallization of mixed clathrate hydrates in presence of salts : an experimental and thermodynamic study for energy capture/storage and water treatment

11h35-12h15 Molecular science and thermodynamics (40 minutes)

- **Jose Miguez (Universidad de Huelva, Spain)**

12h15-13h40 : Lunch time

13h40-14h40 : Session 3 : Molecular science and thermodynamics (20 minutes each)

- **Marc Fleury (IFPEN)** - A Peltier cooled NMR probe for studying gas hydrates
- **Vincent Ballenger (UTINAM)** - Relative thermodynamic stability of clathrate structures from Lattice-Switch Monte Carlo simulations
- **Sophie Espert (ISM Bordeaux)** - Protonic conductivity in strong acid hydrates

14h40-15h00: Coffee break

15h00-16h00 : Session 4 : Molecular science and thermodynamics (20 minutes each)

- **Sadain Zafar (PhLAM, Univ Lille)** - Influence of Salt (NaCl) concentration on water recovery with CO₂ hydrates evidenced by in-situ Raman Spectroscopy
- **Nicolas Cinq (LQPO)** - Optimisation of SCC-DFTB potential to model aqueous systems: from liquid water to gas hydrates
- **Ababakari Oumarou Ali** - Comparative study of the formation, the stability and the growth of methane hydrates in free, confined and ultra-confined organic environments by molecular modelling

16h00-16h20: Coffee break

16h20-17h00 Plenary : Astrophysics and Planetary science (40 minutes)

- **Aurélie Guilbert-Lepoutre (LGTPE, Lyon)** – Les comètes depuis la mission spatiale Rosetta

17h00-17h40 : Session 5 : Astrophysics and Planetary science (20 minutes each)

- **Antoine Patt (UTINAM)** - Molecular selectivity and guest partitioning of Titan's mixed hydrates by means of Monte Carlo simulations
- **Natalia Esteves (Univ. Lyon)** - Clathrate hydrates FTIR spectroscopy to understand cometary ices

18h00-20h00 : Seaside walk in Biarritz

20h30 : Aperitif and Diner

Vendredi 22 Octobre 2021

9h00-9h40 Plenary : Geosciences (40 minutes)

- **Bénédicte Ferre (CAGE - Norway)** - Methane release and variability offshore Svalbard

9h40-10h40 : Session 6 : Geosciences (20 minutes each)

- **Juliette Faucher (Ifremer)** - An experimental kinetic study of methane hydrate formation in seawater-derived electrolytes
- **Art-Clarie Constant Agnissan (Ifremer/Univ. Bordeaux)** - Experimental investigation on methane hydrate distribution and cage occupancy in clay-rich sediments
- **Charelène Guimpier (ISM Bordeaux)** Methane hydrates in sedimentary matrices

10h40-11h15: Closure of "journées hydrates 2021"

11h15-11h30 : Coffee break

11h30-12h30: COPIL

12h30-13h30 : Lunch break

13h30-14h30: end of COPIL