

PetroPhase2019
Kanazawa Japan



Program & Guidance

Petro Phase 2019

The 20th International Conference on
Petroleum Phase Behavior and Fouling

Kanazawa, June 2-6

Venue Ishikawa Ongakudo

<http://www2.issjp.com/petrophase2019/>

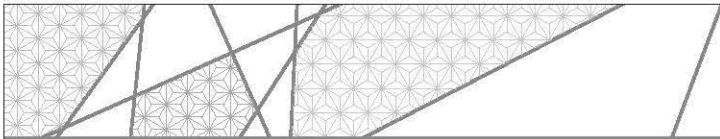


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Welcome to PetroPhase 2019

Dear PetroPhase 2019 Attendee,

On behalf of the Organizing Committees, we would like to extend a warm welcome to everyone who has come all the way from around the world to 20th International Conference on Petroleum Phase Behavior & Fouling - PetroPhase 2019! This is the 20th anniversary conference held for the first time in Asia. We are very honored to be able to host such a memorable meeting in the beautiful city of Kanazawa, Japan.

PetroPhase is an international conference aimed at researchers in industry and academia dedicated to the study of the properties and chemistry of petroleum fluids and their effect on producing, processing, and refining in the upstream, mid-stream, and downstream industries. The conference started in 1999 as "The International Conference on Petroleum Phase Behavior & Fouling" and has since evolved into an annual event alternating venues among countries all around the world.

To commemorate the 20th anniversary, we invited Dr. Irv Wiehe as a plenary speaker, who is the founder of PetroPhase, the authority on petroleum fouling and phase behavior. Starting with this plenary session, the conference consists of 51 oral and 130 poster presentations from leading academic and industry experts. In addition to the regular sessions, a special session of "Unconventional Gas & Crudes" is set up to present research on shale and gas hydrate.

The host city of Kanazawa is the capital of Ishikawa Prefecture located on the main island of Japan, a nice city (one of Japan's hidden gems) known as "Little Kyoto" due to its resemblance with the old imperial capital. On Wednesday afternoon we prepared a tour to Kenroku-en (one of the most beautiful gardens in Japan) and Kanazawa Castle Park before the Gala dinner (dinner party). In between specialized discussions, the participants can feel a great taste of traditional Japan: geisha and samurai districts (Higashi Chaya district) and fantastic foods.

A total of approximately 180 participants are expected, including participants from overseas: China, France, U.K, Canada, U.S.A, Denmark, Brazil, Russia, South Korea, Australia, Colombia, Singapore, UAE, Italy, Germany, Finland, Malaysia, Netherlands, and Norway. We are grateful for your participation and support in PetroPhase 2019.

We hope that all of you will enjoy a week of this meeting and deepen exchanges among researchers while touching the culture of the city of Kanazawa.

Warmest Regards,

Chair of the PetroPhase 2019

Yoshihiro Masuda, The University of Tokyo

Co-Chairs of the PetroPhase 2019

Toshikazu Ebato, Japan Oil, Gas and Metals National Corporation (JOGMEC)

Ryuzo Tanaka, Idemitsu Kosan Co., Ltd.

Committee List

Organizing Committee

Chair: Yoshihiro Masuda (The University of Tokyo)

Co-Chairs: Toshikazu Ebato (Japan Oil, Gas and Metals National Corporation (JOGMEC))

Ryuzo Tanaka (Idemitsu Kosan Co., Ltd.)

Members: Kazuhiro Inamura (Japan Petroleum Energy Center (JPEC))

Hajime Kobayashi (The University of Tokyo)

Yunfeng Liang (The University of Tokyo)

Toshifumi Matsuoka (Fukada Geological Institute)

Masato Morimoto (National Institute of Advanced Industrial Science and Technology (AIST))

Sumihiko Murata (Kyoto University)

Masazumi Takayanagi (Japan Oil, Gas and Metals National Corporation (JOGMEC))

Hideharu Yonebayashi (INPEX CORPORATION)

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Co-Chairs: Yunfeng Liang (The University of Tokyo, Japan)

Masato Morimoto (AIST, Japan)

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Simon Andersen (Technical University of Denmark, Denmark)

Jean Francois Argillier (IFPEN, France)

Edo S. Boek (Queen Mary University of London, UK)

Walter Chapman (Rice University, USA)

Milind Deo (University of Utah, USA)

Scott Fogler (University of Michigan, USA)

Pierre Giusti (TOTAL, France)

Lamia Goual (University of Wyoming, USA)

Murray Gray (Alberta Innovates and University of Alberta, Canada)

Ryan Hartman (New York University, USA)

Michael P. Hoepfner (University of Utah, USA)

Kazuhiro Inamura (JPEC, Japan)

David Jennings (Baker Hughes, USA)

Peter Kilpatrick (Illinois Institute of Technology, USA)

Hajime Kobayashi (The University of Tokyo, Japan)

J. Douglas Kushnerick (ExxonMobil, USA)

Vladimir Kuryakov (Oil and Gas Research Institute of RAS, Russia)

Raymond A. Levey (Energy and Geoscience Inst., USA)

Carlos Lira-Galeana (Mexican Inst. of Petroleum, Mexico)

Jules J. Magda (University of Utah, USA)

John McLennan (University of Utah, USA)

Daniel Merino Garcia (Repsol, Spain)

Sumihiko Murata (Kyoto University, Japan)

Ryan P. Rodgers (National High Magnetic Field Lab, FSU, USA)

John Shaw (University of Alberta, Canada)

Johan Sjøblom (NTNU, Norway)

Ryuzo Tanaka (Idemitsu Kosan, Japan)

Frans van den Berg (Black Oil Solutions, The Netherlands)

Nicolas von Solms (Technical University of Denmark, Denmark)

Rama Venkatesan (Chevron, USA)

Jianxin Wang (Chevron, USA)

Irwin Wiehe (Soluble Solutions, USA)

Harvey Yarranton (University of Calgary, Canada)

Andrew Yen (Ennova LLC, USA)

Hideharu Yonebayashi (INPEX, Japan)

Hongbo Zeng (University of Alberta, Canada)

Honggang Zhou (TOTAL S. A., France)

Sponsor List (in alphabetical order)

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INPEX CORPORATION



JXTG Nippon Oil & Energy Corporation

Gold



SHIMADZU CORPORATION

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Baker Hughes, a GE company



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VINCI TECHNOLOGIES



Virtual Materials Group, Inc.



Yokogawa Electric Corporation

Coffee Break



Schlumberger

General Information

Registration Hours

June 2, Sunday	16:00 - 20:00
June 3, Monday	8:00 - 18:00
June 4, Tuesday	8:00 - 18:00
June 5, Wednesday	8:00 - 18:00
June 6, Thursday	8:00 - 14:00

Information on Japan

Climate

During June in Kanazawa, the average temperature is around 21°C (69.8°F) with a comparatively mild climate. High precipitation may occur if in the event of Typhoon.

Currency

The official currency of Japan is the Japanese Yen (¥). Foreign currency or traveler's checks can be changed into Japanese yen at major banks, hotels, and airports. Credit cards are widely accepted. Commonly recognized cards include Visa, MasterCard, and American Express.

Time zone

Japan is on Japan Standard Time (JST) - Greenwich Mean Time (GMT) plus 9 hours.

Tipping

There is no custom of tipping anywhere in Japan, even at hotels and restaurants. On certain occasions, however, a service charge is added to the bill.

Electrical Appliances

The voltage in Japan is 100-110 volts for electrical appliances. Electrical sockets usually accept only two-pronged (vertical) plugs.

Insurance

It is recommended that participants take out adequate medical, travel and personal insurance prior to the commencement of travel. The organizers can accept no liability for personal injuries or for loss or damage to property belonging to the Congress participants, either during or as a result of the event.

Social Program

Opening Reception

Date / Time: June 2, Sunday 18:00 - 20:00

Venue: ANA Crowne Plaza Kanazawa
16-3 Showa-Machi, Kanazawa-shi

Enjoy the gathering and networking with conference participants. Buffet meals and drinks will be served.

Gala Dinner & “Kenrokuen Garden” Tour

Date / Time: June 5, Wednesday 19:00 - 21:00

Venue: KANAZAWA TOKYU HOTEL
2-1-1, Korinbo, Kanazawa-shi, Ishikawa 920-0961

Before the Gala Dinner, we invite dinner participants to a free visit to “Kenrokuen Garden” - one of the most beautiful gardens in the country and the Kanazawa Castle Park.

Bus transportation is available from Ishikawa Ongakudo (Conference venue) to Gala Dinner venue via tour. The bus will leave at 16:00 from outside the Conference venue. Make sure you gather in time.

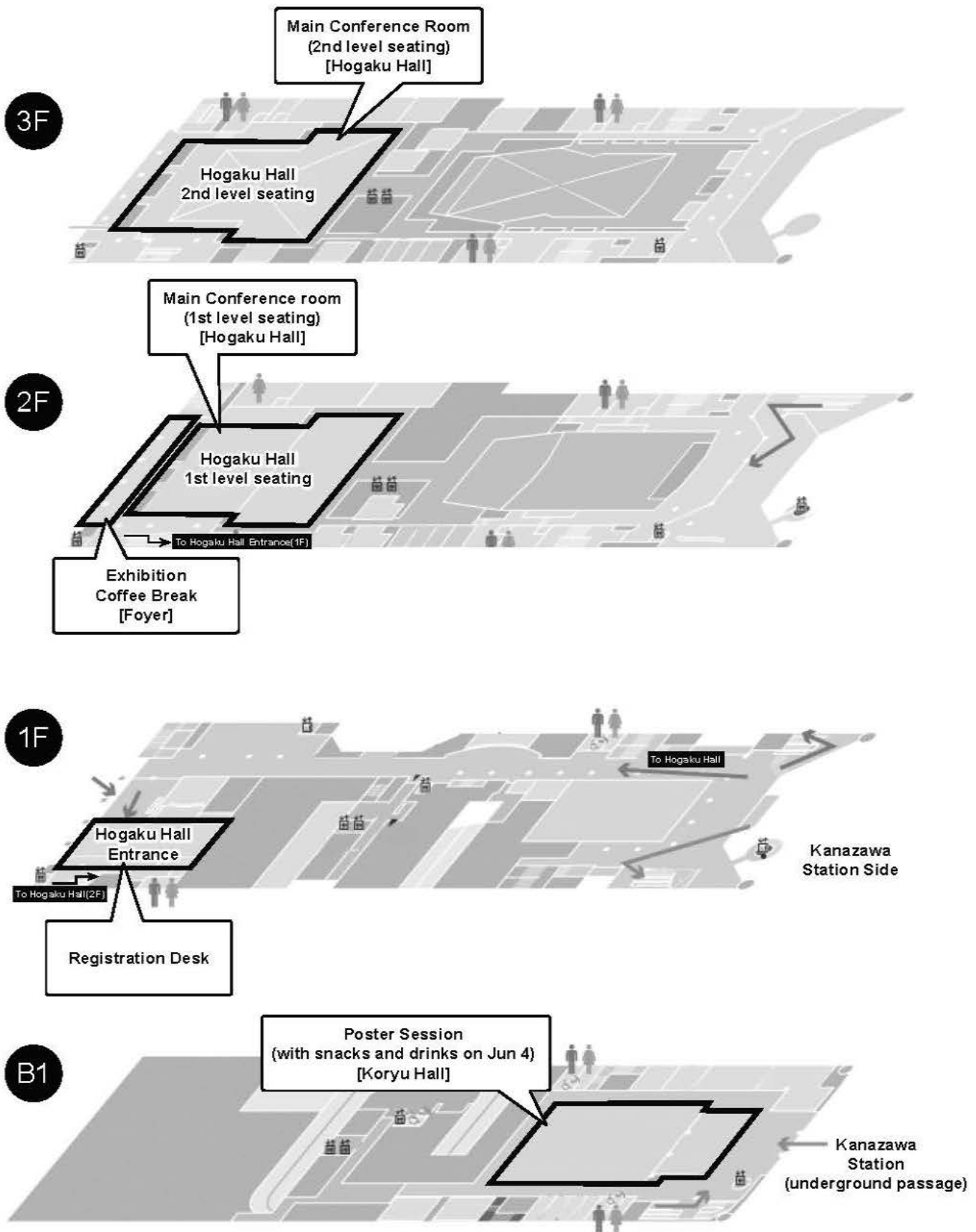
There is no direct bus to Gala Dinner. For those who intend not to participate in the above tour, please make your own way to the Gala Dinner venue.

Bus transportation is also available from the Gala Dinner venue to Conference venue on the way back.

General schedule for the Tour and Gala Dinner is as follows:

- 16:00- Bus leaves the Conference venue for tour
- 16:30- Tour at “Kenrokuen Garden” and Kanazawa Castle Park
- 18:15- Bus leaves the Park
- 19:00- Gala Dinner starts
- 21:00- Gala Dinner ends
- 21:30- Arrive at Conference venue

Floor map





Program

Program at a Glance

Jun 2 (SUN)

16:00-18:00 Registration

18:00-20:00 Opening Reception

FA: Flow Assurance UF: Upgrading & Fouling

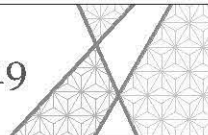
PP: Petroleum Properties & Phase Behavior

UC: Unconventional Gas & Crudes

MH: Methane Hydrate

Jun 3 (MON)	
8:30	Opening remarks
8:34	P-1 Plenary Lecture
9:14	FA-K-1 Keynote Lecture
9:54	FA-O-1
10:16	Coffee Break
10:40	FA-O-2
11:02	FA-O-3
11:24	FA-O-4
11:46	FA-O-5
12:08	FA-O-6
12:30	Lunch
14:00	UF-K-1 Keynote Lecture
14:40	UF-O-1
15:02	UF-O-2
15:24	UF-O-3
15:46	Coffee Break
16:20	UF-O-4
16:42	UF-O-5
17:04	UF-O-6
17:26	UF-O-7
17:48	

Jun 4 (TUE)	
8:30	PP-K-1 Keynote Lecture
9:10	PP-O-1
9:32	PP-O-2
9:54	PP-O-3
10:16	Coffee Break
10:40	PP-O-4
11:02	PP-O-5
11:24	PP-O-6
11:46	PP-O-7
12:08	PP-O-8
12:30	Lunch
14:00	UC-K-1-MH Keynote Lecture
14:30	UC-O-1-MH
14:52	UC-O-2-MH
15:14	UC-O-3-MH
15:36	Group photo
16:00	Poster Session
18:00	



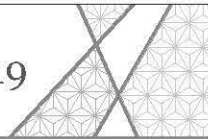
PC: Petroleum Chemistry
 Shale: Shale Gas & Oil
 IPE: Interfacial Phenomena & Emulsions
 EOR: Enhanced Oil Recovery

<i>Jun 5 (WED)</i>	
8:30	PC-K-1 Keynote Lecture
9:10	PC-O-1
9:32	PC-O-2
9:54	PC-O-3
10:16	Coffee Break
10:40	PC-O-4
11:02	PC-O-5
11:24	PC-O-6
11:46	PC-O-7
12:08	PC-O-8
12:30	Lunch
14:00	UC-K-2-Shale Keynote Lecture
14:30	UC-O-4-Shale
14:52	UC-O-5-Shale
15:14	UC-O-6-Shale
15:36	Coffee Break
16:00	Tour
19:00	Gala Dinner
21:00	

<i>Jun 6 (THU)</i>	
8:30	IPE-K-1 Keynote Lecture
9:10	IPE-O-1
9:32	IPE-O-2
9:54	IPE-O-3
10:16	PetroPhase 2020 Announcement
10:25	Coffee Break
10:40	UC-O-7-EOR
11:02	PP-O-9-EOR
11:24	PP-O-10-EOR
11:46	IPE-O-4-EOR
12:08	PP-O-11-EOR
12:30	Closing
12:40	

Program – Jun 3 (Monday)

8:30-8:34	[Opening Remarks] Session chairs: Yoshihiro Masuda and Ryuzo Tanaka	
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	Irwin Wiehe, Soluble Solutions	
	[Flow Assurance] Session chairs: Yoshihiro Masuda and Ryuzo Tanaka	
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	Gordon M. Graham, Scaled Solutions Ltd.	
9:54-10:16	FA-O-1 A Rheological Study of Water in Oil Emulsions with Implications on Cold Start of Gelled Waxy Oils Containing Water	18
	Yichen Wang, Department of Chemical Engineering, University of Utah	
	[Flow Assurance] Session chairs: Carlos Lira-Galeana and Hideharu Yonebayashi	
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	Mohamed Saidoun, TOTAL SA	
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	Weiyi Kong, The University of Utah	
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	Frederic Tort, TOTAL Additifs et Carburants Speciaux	
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	Andrew Robert Farrell, Scaled Solutions Ltd	
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	[Upgrading & Fouling] Session chairs: Frans Van den Berg and Peter Kilpatrick	
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	Tiago Sozinho, IFP Energies nouvelles	
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[Upgrading & Fouling] Session chairs: Murray Gray and Kazuhiro Inamura

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	Diana Catalina Palacio Lozano, University of Warwick/Department of Chemistry, Universidad Industrial de Santander/Department of Chemistry	

Program – Jun 4 (Tuesday)

[Petroleum Properties & Phase Behavior] Session chairs: Hajime Kobayashi and Milind Deo

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John M. Shaw, University of Alberta
- 9:10-9:32 **PP-O-1 Unusual asphaltenes and their solubility behavior** 31
Frans van den Berg, Black Oil Solutions
- 9:32-9:54 **PP-O-2 Measurement of Hansen solubility parameter of porphyrins and metalloporphyrins and their evaluation for metal effect** 32
Hideki Yamamoto, Kansai University
- 9:54-10:16 **PP-O-3 PVT Measurements Accuracy through Reference Fluid Properties and Systematic Statistical Error Propagation Analysis** 33
Afzal Memon, Schlumberger Technology Corporation

[Petroleum Properties & Phase Behavior] Session chairs: Michael Hoepfner and Harvey Yarranton

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Loic Barre, IFP Energies nouvelles
- 11:02-11:24 **PP-O-5 SANS analysis of E-SARA asphaltene subfractions** 35
Dewi Ballard, University of Leeds
- 11:24-11:46 **PP-O-6 Self-Assembly in Liquid Hydrocarbon Systems Assessed by Multiscale Neutron Scattering** 36
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- 12:08-12:30 **PP-O-8 Droplet jetting during liquid-liquid phase separation in confined spaces** 38
Xuehua Zhang, Department of chemical and materials engineering

[Methane Hydrate] Session chairs: Yoshihiro Masuda and Vladimir Kuryakov

- 14:00-14:30 **UC-K-1-MH Keynote Lecture**
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Poster

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