

Japan Formation Evaluation Society – A Chapter of SPWLA

The 24th Formation Evaluation Symposium of Japan

Special Session: Complex Reservoirs

PROGRAM

**JOGMEC-TRC, Chiba
October 11 - 12, 2018**



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<https://jfes-spwla.org/symposium/24thSymp/jfes2018.html>

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Program

Thursday, October 11

<i>Slide Center</i>	Entrance Hall
Opening	Lecture Hall
Keynote	Lecture Hall
<i>Coffee Break</i>	Lobby
Invited Talks	Lecture Hall
<i>Lunch</i>	Cafeteria
Invited Talk	Lecture Hall
Special Session: Complex Reservoirs I	Lecture Hall
<i>Coffee Break</i>	Lobby
Special Session: Complex Reservoirs II	Lecture Hall
<i>Coffee Break</i>	Lobby
Special Session: Complex Reservoirs III	Lecture Hall
General meeting	Lecture Hall
<i>Icebreaker</i>	Cafeteria

Friday, October 12

<i>Slide Center</i>	Entrance Hall
Reservoir Characterization I	Lecture Hall
<i>Coffee Break</i>	Lobby
Reservoir Characterization II	Lecture Hall
<i>Coffee Break</i>	Lobby
Formation Evaluation	Lecture Hall
<i>Coffee Break</i>	Lobby
Geophysics	Lecture Hall
<i>Closing</i>	Lecture Hall

Technical Session: Thursday, October 11

Opening

9:20 **Safety Notes**

Chairperson: Tetsuya Yamamoto (JAPEX)

9:25 **Opening Address:** Professor Masanori Kurihara (President of JFES; Waseda University)

Keynote

Chairperson: Hideo Komatsu (INPEX)

9:35 **Keynote Address:** Mr. Adam Haecker (Regional Director of SPWLA, North America; Continental Resources)

Technical Announcement

Chairperson: Tetsuya Yamamoto (JAPEX)

10:15 **Invitation to Technical Booths**

10:30-10:45 **Coffee Break**

Invited Talk : Complex Reservoirs

Chairperson: Takehiro Minawa (MOECO)

10:45 **Invited Talk 1: STIMULATION CHALLENGES FOR JAPANESE UNCONVENTIONAL GAS RESERVOIR: HIGH TEMPERATURE, HIGHLY HETEROGENEOUS, TIGHT VOLCANIC FORMATION:**
Dr. Tatsuo Shimamoto (INPEX)

11:15 **Invited Talk 2: THE ONNAGAWA SHALE, MONTEREY-LIKE BIOSILICEOUS SHALE OF JAPAN AND ITS CHARACTERISTICS AS TIGHT OIL RESERVOIR:**
Dr. Satoru Yokoi (JAPEX)

11:45-13:15 **Lunch**

Invited Talk : Complex Reservoirs

Chairperson: Takehiro Minawa (MOECO)

13:15 **Invited Talk 3: MACHINE LEARNING, AUTOMATION AND DATA ANALYTICS FOR WELLBORE APPLICATIONS:**
Dr. Ridvan Akkurt (Schlumberger)

Special Session: Complex Reservoirs I

Chairperson: Yoshinori Sanada (JAMSTEC)

- 13:45** **A** **PRODUCTION DATA ANALYSIS USING RATE TRANSIENT ANALYSIS AND MINI-FRAC TEST REPORT REVIEW AT THE NORTH MONTNEY UNCONVENTIONAL SHALE GAS FIELD, BRITISH COLUMBIA:** Hiroko Kozawa (JAPEx), Hiroaki Kadono, Yoshiharu Ito, Sunao Takagi (JOGMEC), Ayae Goto (JAPEx)
- 14:05** **B** **INVESTIGATING INFLUENCES ON ORGANIC MATTER POROSITY AND PORE MORPHOLOGY IN DUVERNAY FORMATION ORGANIC-RICH MUDSTONES:** Levi J. Knapp, Takashi Nanjo, Shinnosuke Uchida (JOGMEC), Omid Haeri-Ardakani (Geological Survey of Canada), Hamed Sanei (Aarhus University)
- 14:25** **C** **IMPACT OF SMALL FRACTURES ON POROSITY AND PERMEABILITY: IMPLICATIONS FROM DOLOMITE VEINS IN ONNAGAWA TIGHT FORMATIONS:** Tetsuzo Fukunari (JOGMEC), Takashi Tsuji, Kentaro Takeda, Tetsuya Tamagawa (JAPEx), Shigehiro Kitamura, Yoshiharu Ito (JOGMEC)
- 14:45-15:00** **Coffee Break**

Complex Reservoirs II

Chairperson: Takuya Ishibashi (AIST)

- 15:00** **D** **PRODUCTIVITY EVALUATION OF PRONOUNCED HETEROGENEOUS GAS RESERVOIR DRILLED AT HIGH OVERBALANCE:** Liu Jian Xin, Wei Xiaohan (CNOOC), Gao Bei, Chen Jichao, Zhang Wei (Schlumberger)
- 15:20** **E** **LITHOLOGY CHARACTERISTICS AND LOGGING IDENTIFICATION OF THE BASEMENT ROCKS: TAKING BURIED HILLS IN CHAD, BONGOR BASIN AS AN EXAMPLE:** Linhui Yan, Yuwen Chang, Zhongyuan Tian, Xianbing Li, Li Wang, Xuerui Zheng (Petrochina RIPED)
- 15:40** **F** **AN OBJECT-BASE MODELING AND SIMULATION OF CO₂ PLUME DYNAMIC IN SALINE FORMATION IN NAM VANG FIELD, CUU LONG BASIN, VIETNAM:** Hung Vo Thanh, Yuichi Sugai, Kyuro Sasaki (Kyushu University)
- 16:00-16:15** **Coffee Break**

Complex Reservoirs III

Chairperson: Aiko Takada (JAPEx)

- 16:15** **G** **DEVELOPMENT OF DOUBLE-PERMEABILITY TYPE COMPOSITIONAL SIMULATOR FOR PREDICTING ENHANCED COALBED METHANE RECOVERY:** Hiroaki Sakai, Masanori Kurihara (Waseda University)
- 16:35** **H** **CASE STUDY: UNCERTAINTY ANALYSIS OF RESERVOIR PARAMETERS IN LOW RESISTIVITY HEAVY OIL RESERVOIR TO UNDERSTAND RESERVOIR PERFORMANCE:** Wu Yiming, Wan Jun (CNOOC), Gao Bei, Li Huigeng, Cao Yang (Schlumberger)
- 16:55** **I** **EFFECTS OF MATRIX PROPERTIES ON SURFACTANT ENHANCED OIL RECOVERY IN FRACTURED RESERVOIRS:** Xiaoqian Cheng, Jon Kleppe, Ole Torsæter (Norwegian University of Science and Technology)

17:15-17:40 **General Meeting**

17:40-19:00 **Icebreaker**

Technical Session: Friday, October 12

Reservoir Characterization I

9:25 **Safety Notes**

Chairperson: Takayuki Kanno (Schlumberger)

9:30 **J DEVELOPMENT OF OPTIMIZATION PROGRAM FOR ESTIMATING THREE – PHASE RELATIVE PERMEABILITY FROM UNSTEADY – STATE CORE FLOODING EXPERIMENT BY GENETIC ALGORITHM AND ITERATIVE LATIN HYPERCUBE SAMPLING: Kenta Takahashi (Waseda University), Hideto Utsunomiya (Hitachi Ltd.), Masanori Kurihara (Waseda University)**

9:50 **K DEVELOPMENT OF PROGRAM COUPLING FLOW SIMULATOR WITH GEOMECHANICS SIMULATOR USING ADAPTIVE MESH REFINEMENT MODEL AND ANALYTICAL SOLUTION FOR SIMPLE ONE-DIMENSIONAL ROCK DEFORMATION: Masaru Sawata (Waseda University), Shigeki Iwata (JOGMEC), Norio Tenma (AIST), Masanori Kurihara (Waseda University)**

10:10 **L EVALUATION OF HORIZONTAL LAYERS BY CROSS-HOLE BOREHOLE RADAR: Tsogtbaatar Amarsaikahn, Motoyuki Sato (Tohoku University)**

10:30-10:45 **Coffee Break**

Reservoir Characterization II

Chairperson: Tetsuzo Fukunari (JOGMEC)

10:45 **M BAYESIAN KRIGING FOR IMPROVED SPATIAL HETEROGENEITY MODELING IN CLASTIC RESERVOIRS: Watheq Al-Mudhafar (University of Texas)**

11:05 **N PRODUCTION EVALUATION FOR GAS CONDENSATE AT EARLY EXPLORATION STAGE BASED ON COMPREHENSIVE WELL LOG ANALYSIS AND DOWNHOLE FLUID ANALYSIS (DFA): CASE STUDY FROM BOHAI BAY: Suogui Shang, Kechao Gao (CNOOC), Zhaoya Fan, Jichao Chen, Jinlong Wu, Bei Gao, Ning Shi (Schlumberger)**

11:25 **O A COMPREHENSIVE WORKFLOW USING NUCLEAR MAGNETIC RESONANCE (NMR) DATA TO EVALUATE AND CHARACTERIZE LOW RESISTIVITY LOW CONTRAST RESERVOIRS: Tianmin Jiang, Michiko Hamada, Yuki Maehara, Samira Ahmad, Aldrick Garcia Mayans, Niranjan Aryal, Hanatu Kadir (Schlumberger)**

11:45-13:15 **Lunch**

Formation Evaluation

Chairperson: Satoru Hada (GSC)

- 13:15 P UNRAVELING COMPLEX RESISTIVITY RESPONSES, A COMPARISON OF LOW FREQUENCY LWD LATEROLOG TO HIGH FREQUENCY PROPAGATION AND WIRELINE DIELECTRIC:** Dong Xiao, Lijun Guan, Xiannan Wang (CNOOC), David Maggs, Yen Han Shim, Carlos Maeso, Fabienne Legendre, Richard Leech, Olivier Moyal, and Rajan. Dua (Schlumberger)
- 13:35 Q GAS EFFECT REVISITED:** Yuhei Aihara, Hideo Komatsu (INPEX)
- 13:55-14:15 Coffee Break**

Geophysics

Chairperson: Yuki Maehara (Schlumberger)

- 14:15 R AUTOMATED SEISMIC FIRST BREAK PICKING USING IMAGE-TO-IMAGE TRANSLATION WITH FULLY CONVOLUTION NEURAL NETWORKS:** Mitsuyuki Ozawa (JAPEx), Shinji Kawasaki, Motonori Higashinaka (JGI Inc.), Hiroshi Sato (University of Tokyo), Susumu Abe (JAPEx)
- 14:35 S MARINE AIRGUN SOURCES: SOUND LEVELS AND MINIMIZING THEIR ENVIRONMENTAL IMPACT:** John Tulett, Takayuki Kanno, Mehul Supawala (Schlumberger)
- 14:55 T FRACTURE EXTENSION BEHAVIOR DOMINATED BY GEOLOGIC FEATURES OF PREEXISTING NATURAL FRACTURES AND STRESS BARRIERS – AN INTERPRETATION OF MICROSEISMICITY AT THE NORTH MONTNEY UNCONVENTIONAL SHALE GAS FIELD, BRITISH COLOMBIA:** Yuto Sasaya, Yusuke Kumano (JAPEx), Isao Kurosawa (JOGMEC)
- 15:15-16:00 Closing**

Symposium Committee 2018

Chairman	Masanori Kurihara, Waseda University
Vice-Chairman/Program	Tetsuya Yamamoto, JAPEX
Finance	Kunihiro Tsuchida/Tetsuzo Fukunari, JOGMEC
IT	Hideo Komatsu, INPEX
Sponsor	Takehiro Minawa, Mitsui Oil Exploration Co., Ltd.
Proceedings	Aiko Takada, JAPEX
Slide Center	Tadahiro Nagano, Schlumberger K.K.
Int'l Coordination	Yuki Maehara, Schlumberger K.K.
Facilities/Poster	Tetsuya Tamagawa, JAPEX
Award/Gift	Tatsuya Sato, Geothermal Energy R & D Co., Ltd.
Award/Count	Chisato Konishi, OYO Corporation
Entertainment	Satoru Hada, Geophysical Surveying Co., Ltd
Review	Shinichi Sakurai, Independent Scientist
Review	Hidekazu Kuraguchi, MCX
Review	Takuya Ishibashi, AIST
Review	Takeo Aoyama, JX Nippon Oil & Gas Exploration
Review	Yoshinori Sanada, JAMSTEC
Registration	Kanako Furuto, JAPEX

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Aiko Takada

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100-0005, Japan
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e-mail: symposium@jfes-spwla.org

General formation

DATE: Thursday, October 11, and Friday, October 12, 2018
VENUE: Technology & Research Center (TRC)
Japan Oil, Gas and Metals National Corporation (JOGMEC)
1-2-2, Hamada, Mihama-ku, Chiba 261-0025, Japan
Tel: +81 (43) 276 9212

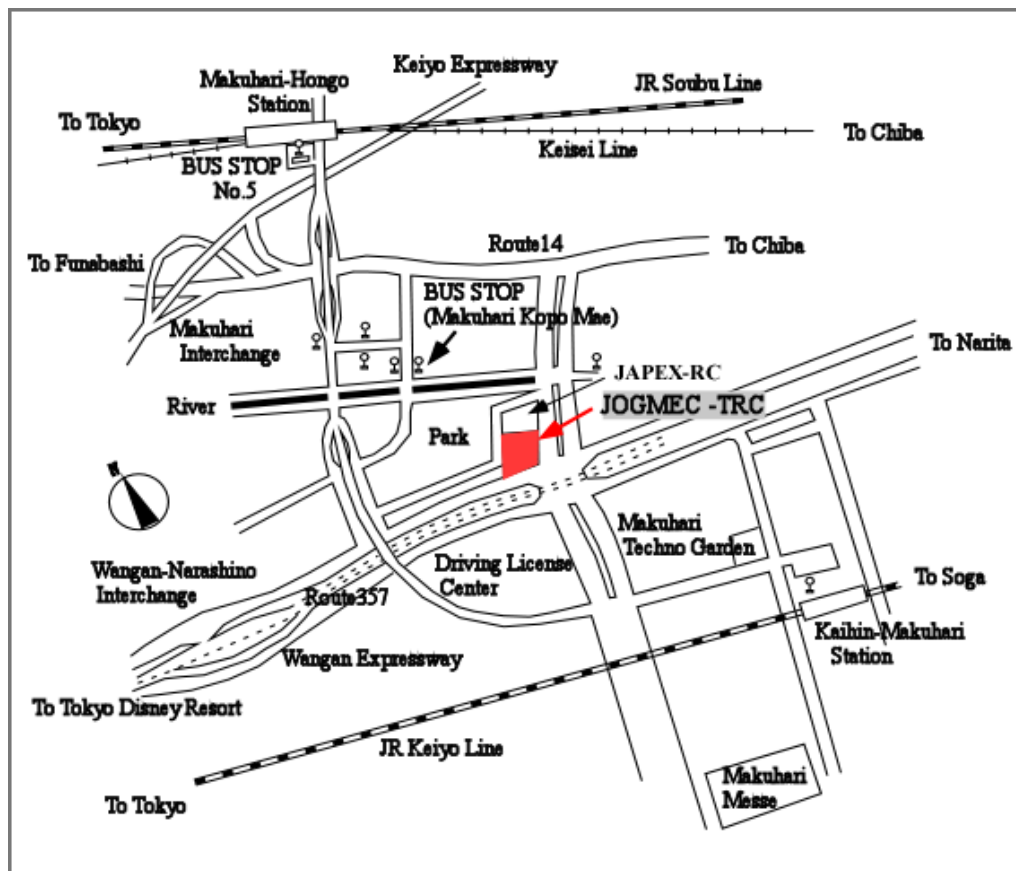
HOW TO GET TO THE JOGMEC-TRC:

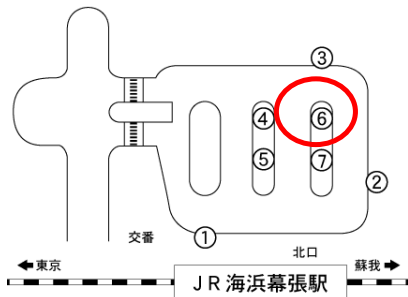
From Makuhari-Hongo Station (JR Sobu Line; 40 min from Tokyo station)
- 10 min. by taxi or 30 min. on foot
- 10 min. by City bus (see below map and bus schedule)

From Kaihin-Makuhari Station (JR Keiyo Line; 30 min. from Tokyo station)
- 10 min. by taxi or 20 min. on foot
- 10 min. by City bus (see below map and bus schedule)

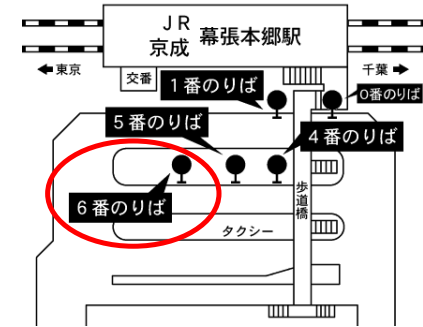
City Bus Service

City bus services are available from Makuhari-Hongo Station and Kaihin Makuhari Station. Please refer to the bus schedule in the next page. Take “Columbus City Line” and get off at “Sekiyu Kaihatsu Gijyutsu Center”. The fare is **170yen**.





Bus Schedule -Columbus City Line-



海浜幕張駅
Kaihinmakuhari-Station

石油開発技術センター
Sekiyukaihatsugijyutu-Center
(JOGMEC-TRC)

幕張本郷駅
Makuharihongo-Station

幕張本郷駅行き (#22) For Makuharihongo-Station	
	平日 (Week days)
6	35 50
7	05 20 36 50
8	05 21 40 55
9	15 35 55
10	15 35 55
11	15 35 55
12	15 35 55
13	15 35 55
14	15 35 55
15	15 35 52
16	11 26 43
17	01 17 36 51
18	07 25 44
19	00 16 33 50
20	07 24 41 58
21	15 30 45
22	

幕張本郷駅行き (#22, #32) For Makuharihongo-Station	
	平日 (Week days)
06	23 43 58
13	21 28 34 44 58
13	29 48
03	23 33 43 53
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13	15 33 33 52 53
08	13 24 33 41 53 58
13	15 32 33 49 53
06	07 23 32 38 53 57

海浜幕張駅行き (#22) For Kaihinmakuhari-Station	
	平日 (Week days)
6	17 47
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8	07 20 34 52
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14	10 30 50
15	10 30 50
16	07 24 43 57
17	14 32 49
18	06 23 37 56
19	14 30 48
20	05 23 37 56
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22	

海浜幕張駅行き (#22) For Kaihinmakuhari-Station	
	平日 (Week days)
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8	00 13 27 45
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16	00 17 36 50
17	07 25 42 59
18	16 30 49
19	07 23 41 58
20	16 30 49
21	06 23
22	

Accommodation and other travel arrangement

Should you require any assistance for visa and other travel arrangement during the Symposium at JOGMEC-TRC Makuhari, do not hesitate to contact one of the JFES directors at the following address by e-mail:

Aiko Takada

Japan Petroleum Exploration Company (JAPEX)
SAPIA Tower, 1-7-12 Marunouchi, Chiyoda-ku, Tokyo
100-0005, Japan
Tel: +81-3-6268-7191
e-mail: symposium@jfes-spwla.org

*We advise you to start preparation of your visa enough early. If invitation letter is required by the embassy at your location, contact with us as soon as possible.

Land Transportation from Narita Airport

For foreign visitors, limousine bus service is the most convenient to the hotel. Ticket is available at the orange colored "Friendly Airport Limousine Bus" booths for the bus heading to your hotel. "Keisei Bus" goes to Makuhari area. The fee is around 2,400 – 3,000 yen depending on the destination.

Taxi to the hotel around Makuhari area is more than 10,000 yen. The taxi to the center of Tokyo is around 30,000 yen.

Accommodation

Some examples of the hotels in Makuhari and Tokyo area are listed below and available at your choice. JFES does not have block booking, so make the reservations by directly contacting with the hotels.

Makuhari Area

20 min. walk to JOGMEC-TRC or 10 min. by taxi

- Hotel the Manhattan
<http://www.the-manhattan.co.jp/english/>
- Hotel Springs Makuhari
<http://springs.co.jp/english/index.html>
- APA Hotel & Resort Tokyo Bay Makuhari
https://apahotel.com/ja_en/hotels/detail.php?id=16673

Tokyo area

40 min. to Makuhari Hongo (via JR Sobu Rapid Train) then bus

- Shinagawa Prince Hotel
<http://www.princehotels.com/shinagawa/>
- Mércure Hotel Ginza Tokyo
<http://www.accorhotels.com/gb/hotel-5701-mercure-tokyo-ginza/index.shtml>

