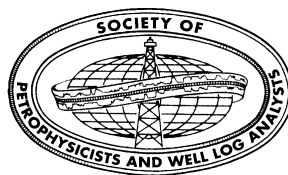


The 23rd Formation Evaluation Symposium of Japan

Special Session: EOR - IOR

PROGRAM

**JOGMEC-TRC, Chiba
October 11 - 12, 2017**



Sponsored by Japan Formation Evaluation Society – A Chapter of SPWLA
Cosponsored by Technology & Research Center, Japan Oil, Gas and Metals
National Corporation
Supported by Japanese Association for Petroleum Technology
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<http://www.jfes-spwla.org/index.htm>

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JX Nippon Oil & Gas Exploration

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Challenging Tomorrow's Changes

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Program

Wednesday, October 11

<i>Registration</i>	Entrance Hall
<i>Slide Center</i>	Entrance Hall
Opening	Lecture Hall
Keynote	Lecture Hall
Invited Talk	Lecture Hall
Special Session: EOR-IOR I	Lecture Hall
<i>Lunch</i>	Cafeteria
Special Session: EOR-IOR II	Lecture Hall
<i>Coffee Break</i>	Lobby
Geophysics/Geomechanics	Lecture Hall
<i>Coffee Break</i>	Lobby
Reservoir Characterization I	Lecture Hall
General meeting	Lecture Hall
<i>Icebreaker</i>	Cafeteria

Thursday, October 12

<i>Slide Center</i>	Entrance Hall
Reservoir Characterization II	Lecture Hall
<i>Coffee Break</i>	Lobby
Methane Hydrate	Lecture Hall
Unconventional Reservoirs I	Lecture Hall
<i>Lunch</i>	Cafeteria
Distinguished Lecture	Lecture Hall
Unconventional Reservoir II	Lecture Hall
<i>Coffee Break</i>	Lobby
General Formation Evaluation I	Lecture Hall
<i>Coffee Break</i>	Lobby
General Formation Evaluation II	Lecture Hall
<i>Closing</i>	Lecture Hall

Technical Session: Wednesday, October 11

Opening

Chairperson: Tetsuya Yamamoto (JAPEX)

9:00 **Opening Address:** Professor Masanori Kurihara (President of JFES, Waseda University)

Keynote

Chairperson: Tetsuya Yamamoto (JAPEX)

9:10 **Keynote Address: US ENERGY AND POLITICS: UNEXPECTED CHANGES**
Mr. Brett Wendt, SPWLA President (ConocoPhillips)

Invited Talk: EOR-IOR

Chairperson: Takayuki Kanno (Schlumberger)

9:50 **Invited Talk 1: R&D ACTIVITIES IN JOGMEC**
Dr. Satoru Takahashi (JOGMEC)

10:20 **Invited Talk 2: CO₂-EOR APPLICATION TO MATURE OIL FIELD BY INJECTING CAPTURED CO₂ FROM COAL-FIRED PLANT**
Mr. Noriaki Shimokata (JX Nippon Oil & Gas Exploration)

10:50-11:00 **Coffee Break**

Special Session: EOR-IOR I

Chairperson: Hideo Komatsu (INPEX)

11:00 **A STUDY OF HETEROGENEOUS RESERVOIR EFFECTS ON SURFACTANT FLOODING IN CONSIDERATION OF SURFACTANT ADSORPTION REVERSIBILITY:** Ichhuy Ngo (Kyushu University), Falan Srisuriyachai (Chulalongkorn University), Yuichi Sugai, Kyuro Sasaki (Kyushu University.)

11:20 **B SODIUM METASILICATE AS BLOCKING PERFORMANCE FOR ENHANCED OIL RECOVERY (EOR):** Chea Samneang, Kyuro Sasaki, Yuichi Sugai, Yuji Yoshiki (Kyushu University)

11:40 **C EFFECT OF MICRO-BUBBLE CO₂ INJECTION ON CO₂-EOR:**
Ryo Ueda, Masanori Nakano (JAPEX), Ziqiu Xue (RITE)

12:00-13:15 **Lunch**

Special Session: EOR-IOR II

Chairperson: Takeo Aoyama (JX Nippon Oil & Gas Exploration)

13:15 **D THE EFFECT OF REACTION HEAT BY ACID INJECTION FOR ENHANCED GAS RECOVERY FROM METHANE HYDRATE RESERVOIR:** Fuyuki Kaneko, Kengo Nakamura (Tohoku University), Yasuhide Sakamoto (Advanced Industrial Science and Technology), Noriaki Watanabe, Takeshi Komai (Tohoku University)

- 13:35 **E WETTABILITY ALTERATION OF SANDSTONE WITH ZINC OXIDE NANO-PARTICLES:** Sreu Tola, Kyuro Sasaki, Yuichi Sugai (Kyushu University)
- 13:55 **F A PRODUCTION SCHEME FOR BITUMEN PRODUCTION FROM OIL SANDS RESERVOIR WITH FORMING EMULSION BY INJECTING HOT SURFACTANT SOLUTION:** Ryo Ohashi, Kyuro Sasaki, Yuichi Sugai, Alade S. Olalekan (Kyushu University)
- 14:15-14:30 **Coffee Break**

Geophysics/Geomechanics

Chairperson: Tetsuya Tamagawa (JAPEx)

- 14:30 **G DELIVERING IMPROVED WELLBORE STABILITY MANAGEMENT IN REAL TIME THROUGH ROCK STRENGTH CHARACTERIZATION WHILE DRILLING:** Allan Reyes, Michiko Hamada, Soazig Leveque, Yuki Maehara (Schlumberger)
- 14:50 **H CHARACTERIZING BOREHOLE STRESS EFFECTS WITH ULTRASONIC SLOWNESS MEASUREMENTS:** Denis Syresin, Evgeniya Deger, Naoki Sakiyama (Schlumberger)
- 15:10 **I HIGH-RESOLUTION TIME-LAPSE CROSS-WELL FULL WAVEFORM INVERSION FOR MONITORING SMALL SUBSURFACE CHANGES DUE TO MICRO-BUBBLE WATER INJECTION:** Masashi Nakatsukasa (JOGMEC), Rie Kamei (University of Western Australia), David Lumley (University of Texas at Dallas), U Geun Jang (Korea Polar Research Institute), Takuji Mouri, Ayato Kato, Mamoru Takanashi (JOGMEC)
- 15:30 **J ELASTIC DEFORMATION OF CORE SAMPLE WITH STRESS RELIEF BY DRILLING AND ITS APPLICATION TO ROCK STRESS ESTIMATION:** Takatoshi Ito (Tohoku University), Akio Funato (Fukada Geological Institute), Tetsuya Tamagawa, Kazuhiko Tezuka JAPEx Research Center)
- 15:50-16:05 **Coffee Break**

Reservoir Characterization I

Chairperson: Tadahiro Nagano (Schlumberger)

- 16:05 **K FEASIBILITY OF RESERVOIR MONITORING USING 4D SEISMIC IN THE ICHTHYS GAS-CONDENSATE FIELD, NW AUSTRALIA: VELOCITY-GEOLOGY-PRESSURE RELATIONSHIPS DEFINED IN CORE:** Levi Knapp, Tetsuzo Fukunari, Keita Yoshimatsu, Masayoshi Suzuki, Tatsuya Hattori (JOGMEC), Keiichi Furuya, Ryoichi Matsui (INPEX)
- 16:25 **L IN SITU WETTABILITY DETERMINATION AND CAPILLARY PRESSURE MODEL RE-CONSTRUCTION: A CASE STUDY OF CARBONATE RESERVOIR:** Falza Izza Wihdany, Muhammad Nur Ali Akbar (Institut Teknologi Bandung)
- 16:45 **M DYNAMICS OF MULTIPHASE FLOW REGIMES IN TOE-UP AND TOE-DOWN HORIZONTAL WELLS:** Luis Quintero, Mehdi Azari, Farrukh Hamza (Halliburton)
- 17:05-17:35 **General Meeting**
- 17:35-19:00 **Icebreaker**

Technical Session: Thursday, October 12

Reservoir Characterization II

Chairperson: *Hidekazu Kuraguchi (Mitsubishi Corporation Exploration)*

- 9:00** **N** **CHARACTERIZATION OF FLUID BEHAVIOR IN 3D DIGITAL FRACTURE BY SHEARING DEFORMATION AND ITS REPRESENTATIVE ELEMENTARY VOLUME USING LATTICE BOLTZMANN METHOD:** Kengo Ikuo (Kyushu University), Fei Jiang (Yamaguchi university), Takeshi Tsuji (Kyushu University)
- 9:20** **O** **DEVELOPMENT OF GEOSTATISTICAL PROGRAM AND INVESTIGATION INTO IMPROVEMENT OF RESERVOIR MODELS BY APPLYING MULTIPLE SOFT DATA OF DIFFERENT SCALE:** Yutaro Takayanagi, Masanori Kurihara (Waseda University)
- 9:40** **P** **HISTORY MATCHING AND QUANTIFICATION OF UNCERTAINTY OF PRODUCTION FORECASTS USING HAMILTONIAN MONTE CARLO ALGORITHM:** Belmiro Claudio de Almeida Narciso, Masanori Kurihara (Waseda University)
- 10:00** **Q** **DEVELOPMENT OF A THREE-DIMENSIONAL, THREE-PHASE, QUADRUPLE-POROSITY/QUADRUPLE-PERMEABILITY WHITE OIL TYPE SIMULATOR WITH EMBEDDED DISCRETE FRACTURE MODEL FOR PREDICTING SHALE GAS/OIL FLOW BEHAVIOR:** Takuto Sakai, Masanori Kurihara (Waseda University)
- 10:20-10:35** **Coffee Break**

Methane Hydrate

Chairperson: *Takehiro Minawa (MOECO)*

- 10:35** **R** **PETROPHYSICAL EVALUATION OF GAS HYDRATE IN SHENHU AREA, CHINA:** Shim Yen Han (Schlumberger), Yang Sheng Xiong, Liang Jin Qiang, Lu Jing An (GMGS), Qu Chang Wei, Cai Hui Min, Liu Bo (Schlumberger)
- 10:55** **S** **GAS HYDRATE AND FREE GAS ACCUMULATIONS IN THE KUMANO FOREARC BASIN: INSIGHTS FROM SEISMIC VELOCITY ANALYSIS VIA AUTOMATIC PICKING ALGORITHM:** Chanmaly Chhun (Kyushu University) Arata Kioka (University of Innsbruck), Jihui Jia, Takeshi Tsuji (Kyushu University)

Unconventional Reservoirs I

Chairperson: *Masato Nakadai (GSC)*

- 11:15** **T** **ROCK TYPING AND SHALE QUALITY INDEX METHOD BASED ON CONVENTIONAL LOG: A CASE STUDY FOR ORGANIC-RICH SHALE IN THE NORTH SUMATRA BASIN:** Muhammad Nur Ali Akbar, Junita Trivianty Musu (LEMIGAS)
- 11:35** **U** **A HYBRID FRACTURING CONCEPT SUITABLE FOR ONNAGAWA SHALE, JAPAN:** Tetsuya Tamagawa (JAPEX)
- 11:55-13:10** **Lunch**

Unconventional Reservoir <Distinguished Lecture>

Chairperson: Yoshinori Sanada (JAMSTEC)

- 13:10 Distinguished lecture: USING NMR TO CHARACTERIZE FLUIDS IN UNCONVENTIONAL TIGHT ROCK AND SHALE:** Dr. Boqin Sun (Chevron)

Unconventional Reservoirs II

Chairperson: Yoshinori Sanada (JAMSTEC)

- 13:55 V SWEET SPOT SURVEY BASED ON MUD GAS AND CUTTINGS ANALYSES – MONTNEY TIGHT GAS RESERVOIR –:** Kunio Akihisa, Levi Knapp, Shinnosuke Uchida, Mai Shimokawara, Yasuyuki Akita (JOGMEC), James M. Wood (Encana), Omid Haeri Ardakani, Hamed Sanei (Geological Survey of Canada)
- 14:15-14:25 Coffee Break**

General Formation Evaluation I

Chairperson: Aiko Takada (JAPEX)

- 14:25 W NATURAL GAMMA RAY LOGGING AT SEA-FLOOR HYDROTHERMAL DEPOSIT IN IZENA HOLE OFF-SHORE OKINAWA:** Yoshinori Sanada, Yasuhiro Yamada, Kazuya Kitada, Tatsuo Nozaki, Hidenori Kumagai (JAMSTEC), Jun-ichiro Ishibashi (Kyushu University), Lena Maeda, CK Cruise member (JAMSTEC)
- 14:45 X LOG INTERPRETATION OF MITI RUMOI:**
Go Morikawa, Junji Maeda (MOECO), Yuki Maehara, Lingdan Xia (Schlumberger)
- 15:05 Y IMPROVED INTERPRETATION OF LAMINATED FORMATIONS IN MATURE FIELDS USING CALCULATED RH AND RV LOGS FROM CONVENTIONAL RESISTIVITY MEASUREMENTS IN MULTIPLE WELLS.:**
Rick Aldred (Consultant Petrophysicist) W.A. Manan (EQ Petroleum Development MalaysiaSdn Bhd), Edwin Wong (Paradigm)
- 15:25-15:35 Coffee Break**

General Formation Evaluation II

Chairperson: Aiko Takada (JAPEX)

- 15:35 Z ANALYSIS of SOURCE ROCK AND HYDROCARBON FILLING VOLCANIC RESERVOIR IN INDONESIA:**
Benyamin (SKKMigas)
- 15:55 AA LINEAR COREGIONALIZATION MODELING: CROSS-VARIOGRAM FOR MULTIVARIATE CORE PERMEABILITY GIVEN CORE POROSITY AND WELL LOG INTERPRETATIONS:** Watheq J Al-Mudhafar (Louisiana State University), Muhammad Nur Ali Akbar (University of Miskolc)
- 16:15-16:35 Closing**

Symposium Committee 2017

Chairman	Masanori Kurihara, Waseda University
Vice-Chairman/Program	Tetsuya Yamamoto, JAPEX
Finance	Kunihiro Tsuchida, JOGMEC
Proceedings	Hideo Komatsu, INPEX
Sponsor	Takehiro Minawa, MOECO
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Int'l Coordination	Takayuki Kanno, Schlumberger K.K.
Int'l Coordination	Shinichi Sakurai, Independent Scientist
Facilities/Poster	Tetsuya Tamagawa, JAPEX
Award/Gift	Tatsuya Sato, GERD Co., Ltd.
Award/Count	Chisato Konishi, OYO Corporation
Entertainment	Masato Nakadai, Geophysical Surveying Co., Ltd
Review	Hiroshi Asanuma, AIST
Review	Tatsuki Endo, Independent Engineer
Review	Yoshinori Sanada, JAMSTEC
Review	Naohiro Yoshino, JAPEX
Review	Tetsuzo Fukunari, JOGMEC
Review	Takeo Aoyama, JX Nippon Oil & Gas Exploration
Review	Hidekazu Kuraguchi, Mitsubishi Corporation Exploration
Registration	Aiko Takada, JAPEX
Registration	Kanako Furuto, JAPEX

Corresponding Address:

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: aiko.takada@japex.co.jp

Password to open the proceedings: a3wTKL3K

Registration Information

REGISTRATION FEE

	Pre-Registration (by Sep. 22)	On Site Registration
Member or Speaker	6,000 yen	7,000 yen
Non-member	9,000 yen	10,000 yen
Student	1,000 yen	1,500 yen

Registration fee entitles a delegate to:

- Proceedings
- Technical program

HOW TO REGISTER

The enclosed Pre-Registration Form must be returned to :

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: aiko.takada@japex.co.jp

The Deadline for the receipt of the **Pre-Registration** Form will be **September 22, 2017**.

No prior proof of payment is necessary. If any change in your registration is necessary, it must be made in writing to the above address no later than October 10. No changes or cancellations can be made by telephone. Any registration after October 10 is requested to be made on site.

HOW TO PAY

All payments should be made on site by cash in Japanese Yen.
No check or credit card will be accepted.

Speaker Information

All speakers are asked to make pre-registration by **September 1, 2017**.

LCD projector is available. All speakers are requested to prepare their Microsoft Power Point files in compatible format with the following specification;

- Windows 7 Professional 32bit
- Microsoft Power Point 2010
- In case of using movie file, adoptable to default codecs (confirm it playable with windows media player)

The Power Point files are carried in CD-ROM or USB memory to be registered at the Slide Center corner at speakers' earliest of convenience.

Each oral presentation is allocated 20 minutes including question and discussion. Presentation should be made in English.

General Information

DATE: Wednesday, October 11, and Thursday, October 12, 2017
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)

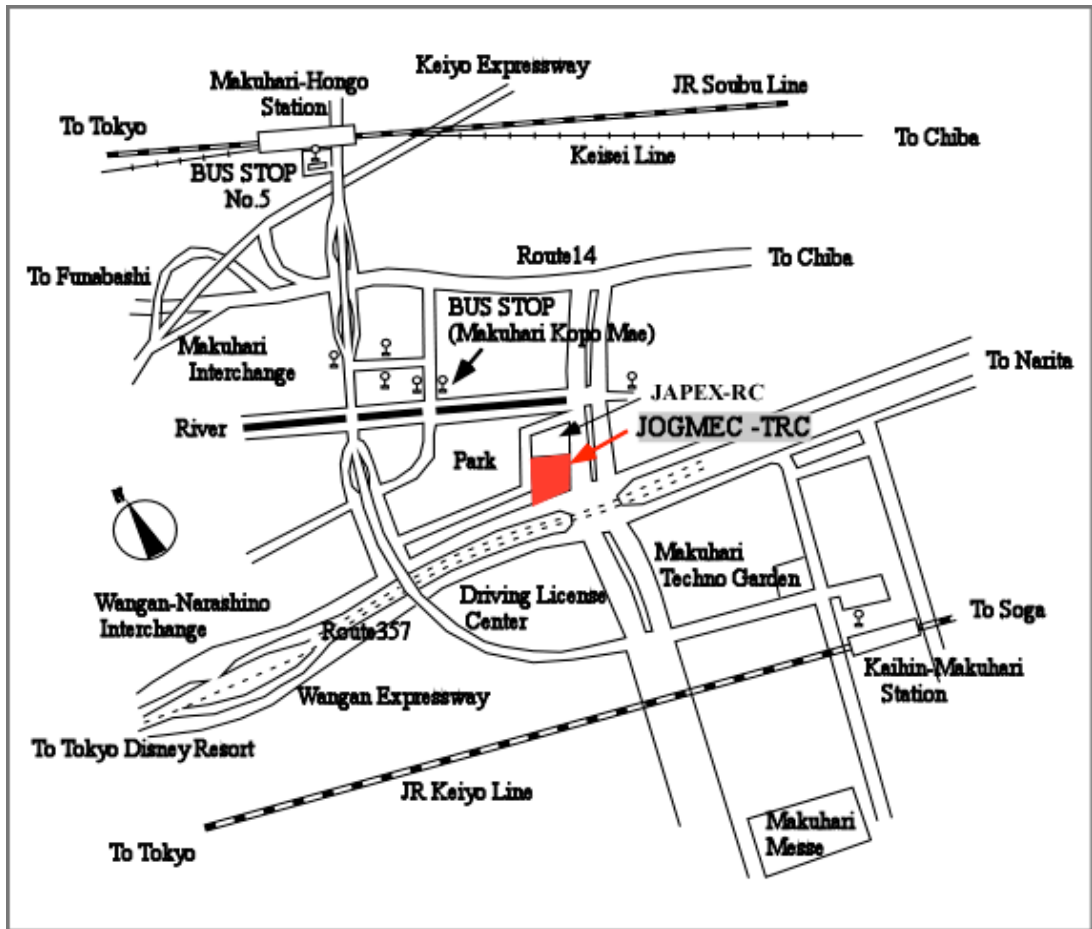
- 10 min. by taxi or 30 min. on foot
- 10 min. by City bus (see below map and bus schedule)

From Kaihin-Makuhari Station (JR Keiyo Line; 30 min. from Tokyo station)

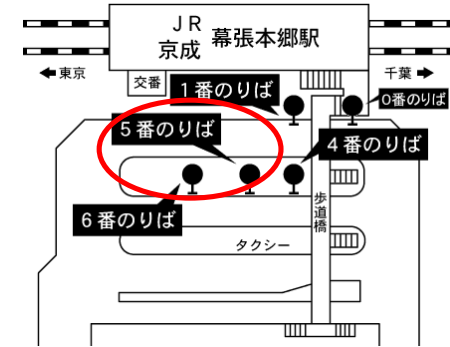
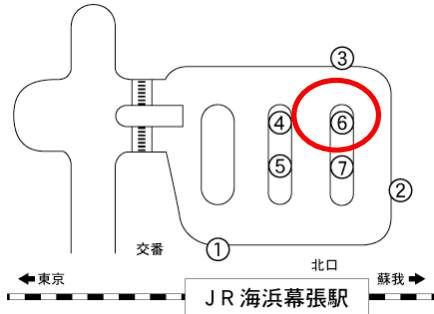
- 10 min. by taxi or 20 min. on foot
- 10 min. by City bus (see below map and bus schedule)

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. The fare is **170yen**. There are several bus lines between Makuhari-Hongo Station and Kaihin Makuhari station. Please take “Columbus City Line” and get off at “Sekiyu Kaihatsu Gijyutsu Center”.



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 day)
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		海浜幕張駅行き (#22) For Kaihinmakuhari-Station	
	平日 (Week day)		平日 (Week day)
06	23 43 58	6	17 47
13	21 28 34 44 58	7	07 22 34 52
13	29 48	8	07 20 34 52
03	23 33 43 53	9	10 30 50
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09	13 25 33 44 53 59	17	14 32 49
13	15 33 33 52 53	18	06 23 37 56
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13	15 32 33 49 53	20	05 23 37 56
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		22	

海浜幕張駅行き (#22) For Kaihinmakuhari-Station	
	平日 (Week day)
6	10 40
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14	03 23 43
15	03 23 43
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, please contact JFES Secretary at the following address by E-mail:

Masato Nakadai

Geophysical Survey Co. Ltd.
2F Ehara Bldg, 1-5-7 Kajimachi, Chiyoda-ku,
Tokyo 101-0044, Japan
Tel: +81-258-36-5021
e-mail: masato.nakadai@gsct.jp

*Please check required days for the visa application to the embassy of your location. In order to make proper arrangement, please send your request no later than **August 14**.

Land Transportation

For foreign visitors, limousine bus service is the most convenient from Narita Airport to the hotel. Please go to the orange colored "Friendly Airport Limousine Bus" booths, and get on the bus that goes to your hotel. "Keisei Bus" goes to Makuhari area. The cost of the bus will be 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 will cost around 30,000 yen.

"Meet & Assist Service" is available on request. The request should be made at least 2 weeks in advance. It will cost about 12,000 yen or more depending on the type of service of your request.

Accommodation

Some examples of the hotels in Makuhari and Tokyo area are listed below and available at your choice. The actual price will be available once the final itinerary is presented and confirmed. To make the reservations, please contact directly to the hotels.

Makuhari Area

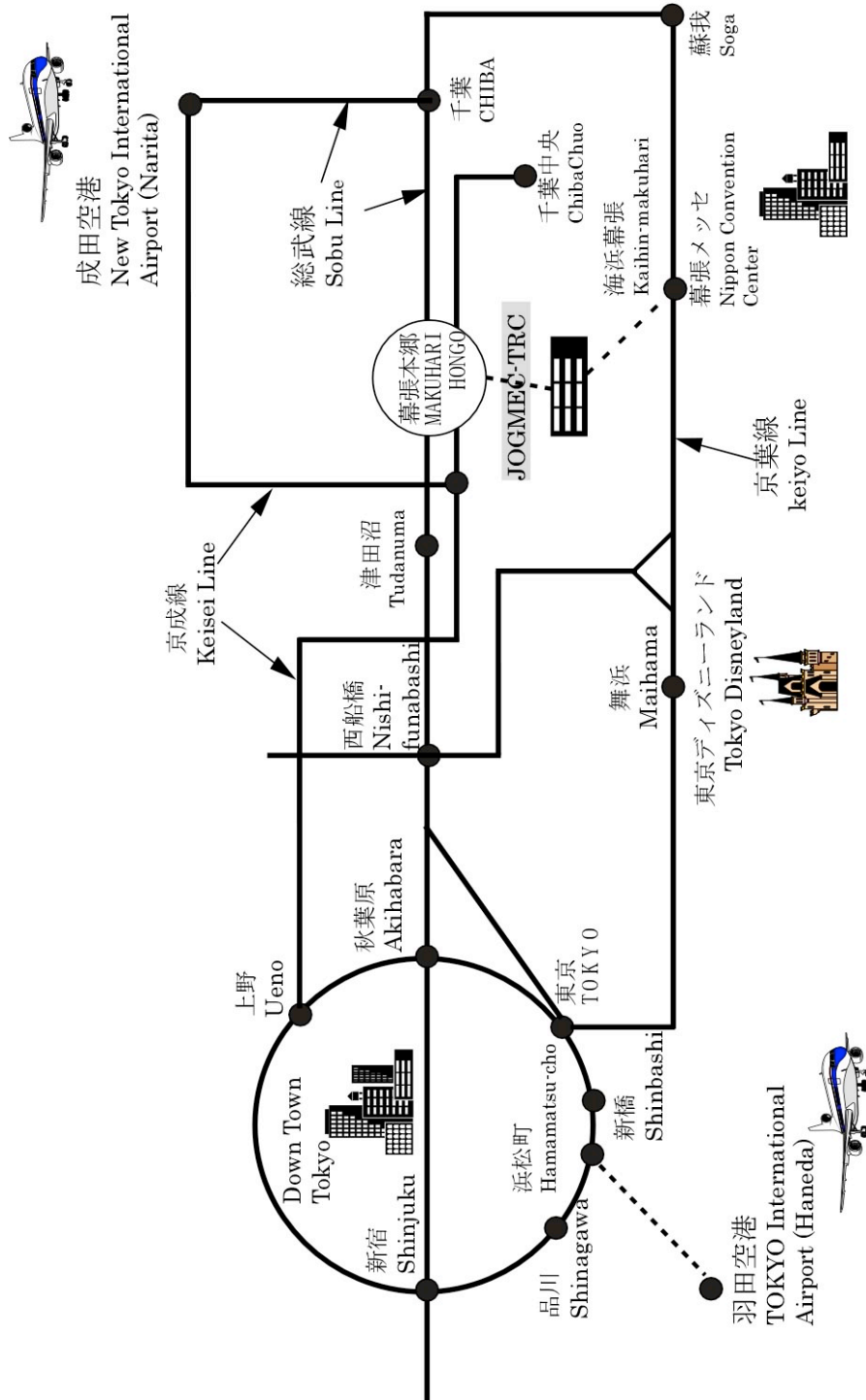
20 min. walk to JOGMEC-TRC or 10 min. by taxi

- 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
<http://www.apahotel.com.e.ju.hp.transer.com/language/shutoken/tokyobay-makuhari/>

Tokyo area

40 min. to Makuhari Hongo (via Sobu Rapid Train Service) then JOGMEC-TRC bus to Symposium

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



The 23rd Formation Evaluation Symposium of Japan

JOGMEC-TRC, Chiba, Japan, October 11 - 12, 2017

Pre-Registration Form

Name: _____ SPWLA Member
 Non-Member
 Speaker
 JOGMEC-TRC / Student

Institute or Company: _____

Mailing address: _____

Tel: _____ Fax: _____

e-mail: _____

Fee

Registration: Member or Speaker 6,000 yen
Non-Member 9,000 yen
Student 1,000 yen

Total _____ yen

Please circle: Oct. 11th / Oct. 12th / Icebreaking party Signature: _____

Note: Registration fee includes icebreaking party fee.

Please return this form complete by **September 22, 2017** to;

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: aiko.takada@japex.co.jp