The 21st Formation Evaluation Symposium of Japan

Special Session: Geomechanics

PROGRAM

JOGMEC-TRC, Chiba October 13 - 14, 2015







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by Japan Formation Evaluation Society – A Chapter of SPWLA

Technology & Research Center, Japan Oil, Gas and Metals

National Corporation

Supported

by Japanese Association for Petroleum Technology Society of Exploration Geophysicist of Japan Geothermal Research Society of Japan Society of Petroleum Engineers, Japan Section

http://www.jfes-spwla.org/index.htm

^{*} This program is subject to change due to the preparation of the symposium.

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Program

Tuesday, October 13

Registration Entrance Hall

Slide Center Entrance Hall

Opening Session Lecture Hall

Special Session: Geomechanics 1 Lecture Hall

Lunch Cafeteria

Special Session: Geomechanics 2 Lecture Hall

Coffee Break Lobby

Reservoir Characterization 1 Lecture Hall

(Coffee Break: 15:35 – 15:55)

General meeting Lecture Hall

Icebreaker Cafeteria

Wednesday, October 14

Slide Center Entrance Hall

Reservoir Characterization 2 Lecture Hall

Coffee Break Lobby

Scientific Drilling / LWD Lecture Hall

Lunch Cafeteria

General Formation Evaluation Lecture Hall

Coffee Break Lobby

Poster Session Lobby

New Tool / New Technology Lecture Hall

Closing Lecture Hall

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Technical Session: Tuesday, October 13

Opening Session

Chairperson: Tatsuki Endo (Schlumberger)

9:45 Opening Address: Kazuhiko Tezuka (President of JFES, JAPEX)

9:55 Keynote Address: Dr. Luis F Quintero, SPWLA President-Elect (Halliburton)

Special Session: Geomechanics I

Chairperson: Tetsuya Yamamoto (JAPEX)

10:40 Invited Talk 1: How the information of rock stress is useful for subsurface development and how it is measured at deep depths: Takatoshi Ito (Professor, Tohoku University)

11:10 Invited Talk 2: Geomechanics Analysis for Well Construction and Completion Design Options: Kenji Furui (Associate Professor, Waseda University)

11:40 A Pore pressure and in-situ stress in the Joetsu Basin, Sea of Japan and implications for Drilling: Nguyen Binh, Naoki Okawa (JX Nippon Oil & Gas Exploration Corporation), Seiichi Imahori (JX Nippon Oil & Gas Exploration Technical Service Corporation), Satoshi Kakizaki (JX Nippon Oil & Gas Consulting Services (Mekong) Ltd)

12:00-13:15 Lunch

Special Session: Geomechanics II

Chairperson: Takayuki Kanno, Schlumberger K.K.

- 13:15 B An Innovative Workflow for Assessing Reservoir Geomechanical Properties in Highly Complex Structural Plays: Luke Van Den Brul (Paradigm)
- 13:35 C The Beginning of a New Era in Geomechanics While Drilling: A Case study using Real-Time-Logging-While-Drilling Quadrupole Shear Measurements:

 Michiko Hamada, Allan Reyes, Chikere Ogbonnaya, Renata Gomes (Schlumberger)
- 13:55 D Simulation study for stimulated reservoir volume in response to stress contrast and natural fracture behaviors: <u>Tetsuya Tamagawa</u> (JAPEX), Kimio Watanabe (Renergies) Kazuhiko Tezuka (JAPEX)

14:15-14:35 Coffee Break

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Reservoir Characterization I

Chairperson: Tadahiro Nagano (Schlumberger K.K.)

- 14:35 M Development of two geostatistical programs: Program-1 for estimating categorical variable distribution by multiple-point statistics; Program-2 for optimizing estimates by Program-1 applying genetic algorithm: Ema Aoi, Tsubasa Onishi, Masanori Kurihara (Waseda University)
- 14:55 F Numerical modeling of emulsion to investigate the SAGD oil production based on viscosity measurements: Junpei Kumasaka, Kyuro Sasaki, Yuichi Sugai (Kyushu University), Masanori Nakano (JAPEX)
- 15:15 G Thought about Constitutive Model of Oil Sands during SAGD Process:

 Koji Kashihara (JAPEX), Naoki Okamoto (Kyoto University)

15:35-15:55 Coffee Break

Reservoir Characterization II

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

- 15:55 H Numerical Simulation Study on Gas Miscibility of an Oil Field Located in Afghanistan: Mohammad Reza Ghulami, Kyuro Sasaki, Yuichi Sugai (Kyushu University)
- 16:15 I Development of Fully Implicit Chemical Flooding Simulator and Its Application to Investigation of Effects of Formation Water Salinity on Application of Chemical Flooding: Masaharu Nakata, Masanori Kurihara (Waseda University)
- 16:35 J The Importance of Borehole Image Logs Analysis in Shale Gas Reservoirs Development: Brian Lee, Wini Rizkiningayu (Paradigm)

17:00-17:20 General Meeting

17:30-19:00 Icebreaker

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Technical Session: Wednesday, October 14

Reservoir Characterization III

Chairperson: Hideo Komatsu (INPEX)

9:20 K In-Situ Wettability Quantification in IRAQi Oil Fields: Case Studies:

Mazin Al-Hilali, Weidong Li, Segun Jebutu (Baker Hughes Inc.),

Mohammed Jawad Zein Al-Abideen

(University of Kirkuk and Tyumen State Oil and Gas University)

9:40 L Wettability Alteration in Berea Sandstone Cores by Contact Angle Measurements:

Ronald Nguele, Kyuro Sasaki, Yuichi Sugai (Kyushu University), Hikmat Said Al-Salim (UCSI University), Masanori Nakano (JAPEX)

10:00 E Permeability-porosity relation and preferential flow in heterogeneous vuggy

carbonates: <u>Hikaru Kusanagi</u>, Noriaki Watanabe (Tohoku University),

Takashi Shimazu, Masahiko Yagi (JAPEX)

10:20 N 3DVSP in the imaging and characterization of shale plays: A seismic simulation

driven analysis using the SEG SEAM model II for unconventionals (Repeat of EAGE talk): Philip Armstrong (Schlumberger), Hermes Malcotti,

Alan Strudley, Greg Ball (Chevron)

10:40-11:00 Coffee Break

LWD / Scientific Drilling

Chairperson: Hiroshi Asanuma (AIST)

11:00 O LWD Sonic Real-Time Leaky Compressional and Quadrupole Measurements:

Nicholas Robinson, Atsushi Oshima, Masahide Tohda, Takeshi Fukushima,
Naoki Sakiyama, Hiroaki Yamamoto (Schlumberger)

11:20 P First exploration with logging while drilling for deep water hydrothermal deposits at Okinawa Trough: Yoshinori Sanada, Saneatsu Saito, Yohhei Hamada, Moe Kyaw Yhu, Yukari Kido, Ken Takai, Hidenori Kumagai, Katsuhiko Suzuki, Masanori Kyo, Tomokazu Saruhashi (JAMSTEC), Shim Yen Han, Takashi Monden, Mark Davis, David Munoz (Schlumberger), CK14-04 Cruise member

11:40 Q The stress heterogeneity in the axis of Nankai Trough observed in the scientific drillings Borehole C0004B and C0010A, NanTroSEIZE: Hung-Yu Wu, Yoshinori Sanada, Moe Kyaw, Masataka Kinoshita, Yasuhiro Yamada (JAMSTEC)

12:00-13:15 Lunch

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General Formation Evaluation

Chairperson: Masato Nakadai, (Geophysical Surveying Co., Ltd)

- 13:15 R Lithological zoning using Vp/Vs Log Curves:
 Pham Huy Giao (Asian Institute of Technology)
- 13:35 S Resistivity measurement affected by saturating fluid concentration and pore geometry: Kei Kawaura, Akira Hanyu, Yasuyuki Mino, Satoru Takahashi (JOGMEC), Takashi Tsuji (JAPEX)
- T Improved Permeability Estimation in Siliciclastic Sands with Geochemical Logs and Formation Pressure Tests: Ting Li, Shim Yen Han, Yan Mei Liu (Schlumberger), Hongxiang Shi, Hui Li, Yuanliang Zhao (Tabei Exploration Project)
- 14:15 U Shallow Hydrocarbons in the Pattani Trough, Gulf of Thailand:

 Masashi Fujiwara, Shinichi Takaoka, Kayo Fukuda (MOECO)
- 14:35-14:45 Coffee Break

Poster Session

Coordinator: Hideki Saito (OYO Corporation)

14:45 Brief introduction by authors in front of their poster at Lobby

New Tool / New Technology

Chairperson: Kunihiro Tsuchida (JOGMEC)

- V Radionuclide Source-Free Formation Evaluation while Drilling: A review of alternative nuclear density, Capture Elemental Spectroscopy and Formation Sigma in Deepwater wells: Ana Peternell, Hanatu Khadir, Charles Fulton (Schlumberger), Iain Whyte (Tullow Oil PLC)
- 16:05 W Current status of technology development for geothermal reservoir evaluation and Management at Okuaizu geothermal field: <u>Takashi Okabe</u>, Tatsuya Sato, Masashi Kato (GERD), Yasuyuki Abe (Okuaizu Geothermal Co., Ltd.), Hiroshi Asanuma (AIST), Tadaaki Shimada (JOGMEC)

16:30-16:50 Closing

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Poster

- AA Facies Analysis and Permeability/ porosity Prediction from well log data using the Non Parametric Regression with Multivariate Analysis and Neural Network in the Reservoirs of the Hassi R'Mel Southern Field (Algeria): Rafik Baouche, Kamel Baddari (University of Bouira)
- BB Improving rock and fluid characterization in complex water flooded reservoirs with LWD resistivity and Sigma logs: Ting Li, Shim Yen Han, Yan Mei Liu (Schlumberger), Hui Li, Bin Qiu, Jun Lei (Tabei Exploration Project)
- CC A Novel Study of Formation Pore Pressure Prediction Using Artificial Neural Network (ANN): Masoud Rashidi (Middle East Technical University), Mahsa Marhamati (University Technology PETORNAS)
- DD Overpressure in Deepwater Thrust-Fold Belt of Sundaland Continental Margin, South East Asia: Geovani Christopher Kaeng, Sarah Sausan, Bayu Adiat Natadafani Jatuphat Natepracha (Halliburton)

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Symposium Committee 2015

Chairman Kazuhiko Tezuka, JAPEX

Vice-Chairman/Program Tatsuki Endo, Schlumberger K.K. Finance Kunihiro Tsuchida, JOGMEC

Printing/Proceedings Hideo Komatsu, INPEX

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Convention Facilities Tetsuya Yamamoto, JAPEX

Award/Gift Tatsuya Sato, Geothermal Energy R & D Co., Ltd. Entertainment Masato Nakadai, Geophysical Surveying Co., Ltd

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Review Nobuhiro Fujiki, Chiyoda Corporation

Review Hiroshi Asanuma, AIST

Review Masanori Kurihara, Waseda University

Review Takeo Aoyama, JX Nippon Oil & Gas Exploration

Registration Yumi Harada, Schlumberger K.K.

Registration Kanako Furuto, JAPEX

Corresponding Address:

Yumi Harada

Schlumberger K.K.

2-2-1 Fuchinobe, Chuo, Sagamihara, Kanagawa 252-0206, Japan

Tel: +81 (42) 759 2113 e-mail: <u>YHarada@slb.com</u>

Registration Information

REGISTRATION FEE

	Pre-Registration (by Sep. 25)	On Site Registration
Member or Speaker	6,000 yen	7,000 yen
Non-member	7,000 yen	8,000 yen
Student	free	1,000 yen

Registration fee entitles a delegate to:

- Proceedings
- Technical program

HOW TO REGISTER

The enclosed Pre-Registration Form must be returned to:

Yumi Harada

Schlumberger K.K.

2-2-1 Fuchinobe, Chuo, Sagamihara, Kanagawa 252-0206, Japan

Tel: +81 (42) 759 2113 e-mail: YHarada@slb.com

The Deadline for the receipt of the **Pre-Registration** Form will be <u>September 25, 2015</u>. 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 September 28. No changes or cancellations can be made by telephone. Any registration after September 28 is requested to be made on site.

HOW TO PAY

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

Speaker Information

All speakers are asked to make pre-registration by **August 28, 2015.**

LCD projector is available. All speakers who use LCD are asked to carry their Power Point files by CD ROM or USB memory and register them in the Slide Center corner at their earliest of convenience.

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

General Information

DATE: Tuesday, October 13, and Wednesday, October 14, 2015

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)

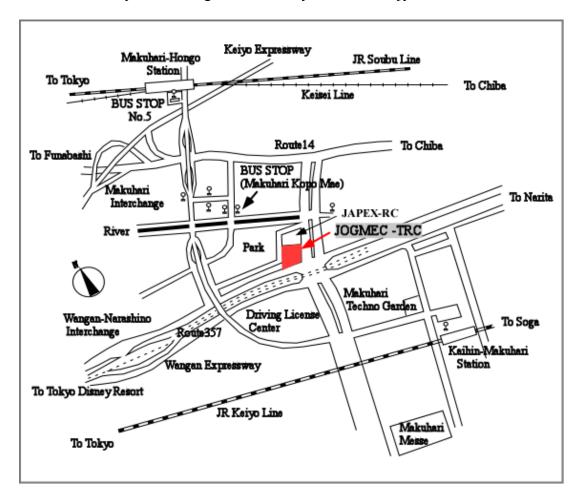
From Kaihin-Makuhari Station (JR Keiyo Line; 30 min. from Tokyo station)

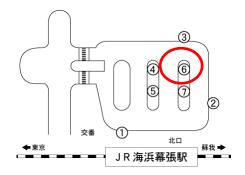
- 10 min. by taxi or 20 min. on foot

- 10 min. by City bus (see below map and bus schedule)

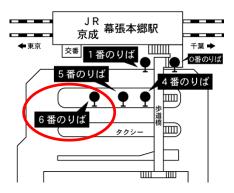
City Bus Service

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





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 35 50				
8	05 20 38 55				
9	08 29 48				
10	08 28 48				
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12	08 28 48				
13	08 28 48				
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18	05 18 38 55				
19	07 28 45 58				
20	17 33 45				
21	00 18 30 45				
22					

幕張本郷駅行き(#22,#32)		海浜幕張駅行き(#22)		
For Makuharihongo-Station		For Kaihinmakuhari-Station		
平日(Week day)		平日(Week day)		
06 23 43 58	6	17 47		
13 28 34 43 58	7	07 22 34 52		
13 28 46	8	07 22 37 52		
03 16 37 56	9	09 25 45		
16 33 36 56	10	05 25 45		
02 16 33 36 56	11	05 25 45		
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02 16 32 36 56	13	05 25 45		
02 16 32 36 56	14	05 25 45		
02 16 32 36 56	15	05 25 45		
02 16 32 36 56	16	05 25 45		
02 16 32 36 56	17	05 25 45		
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海浜幕張駅行き(#22)					
For Kaihinmakuhari-Station					
	平日(Week day)				
6	10 40				
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9	02 18 38 58				
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15	18 38 58				
16	18 38 58				
17	18 38 53				
18	13 30 43				
19	03 20 33 52				
20	08 22 39 56				
21	08 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:

Kinuko Yanagi

Schlumberger K.K.

2-2-1 Fuchinobe, Chuo, Sagamihara, Kanagawa 252-0206, Japan

Tel: +81 (42) 759 5703 e-mail: KYanagi@slb.com

*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 28**.

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

JFES Room Rates are available at Hotel the Manhattan.

Please visit to the following URL for making the reservations. https://asp.hotel-story.ne.jp/ver3d/plan.asp?p=A1ZRG&c1=05372&c2=001

• Hotel the Manhattan US\$120 ~ (http://www.the-manhattan.co.jp/english/)

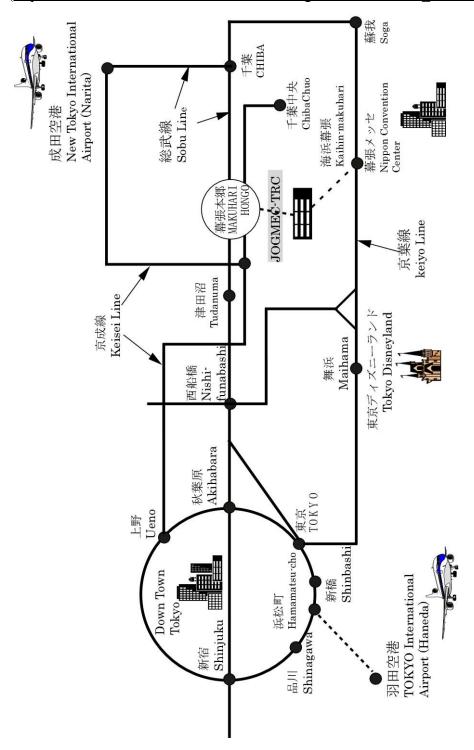
• Hotel Springs Makuhari US\$100 ~ (http://springs.co.jp/english/index.html)

• APA Hotel & Resort Tokyo Bay Makuhari US\$140 ~ (http://www.tokyobay-makuhari.com/english/index.html)

Tokyo area

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

- Shinagawa Prince Hotel US\$ 127 ~ (http://www.princehotelsjapan.com/shinagawaprincehotel/)
- Mércure Hotel Ginza Tokyo US\$ 170 ~
 (http://www.mercure.com/mercure/fichehotel/gb/mer/5701/fiche_hotel.shtml)



The 21st Formation Evaluation Symposium of Japan

JOGMEC-TRC, Chiba, Japan, October 13 - 14, 2015

Pre-Registration Form

Name:			SPWLA Member Non-Member Speaker JOGMEC-TRC	
Institute or Comp	oany:			
		Fax:		
e-mail:				
Fee				
Registration:	Member or Speaker Non-Member Student	☐ 6,000 yen ☐ 7,000 yen ☐ free		
		Total		_ yen
Please circle: Oct 13 th / Oct 14 th / Icebreaking party Signature:				
Note: Registratio	n fee includes icebreakin	g party fee.		
Please return this	form complete by Septe	mber 25, 2015 to);	

Yumi Harada

Schlumberger K.K.

2-2-1 Fuchinobe, Chuo, Sagamihara, Kanagawa 252-0206, Japan

Tel: +81 (42) 759 2113 e-mail: YHarada@slb.com