<u>9th KIFEE (Kyoto International Forum for Environment and Energy)</u> <u>Symposium</u>

Period: March 7 (Tue.)-10(Fri.), 2017

Place: Kambaikan, Doshisha University, Kyoto

Subject:

- [1] Process Engineering
- [2] Electrolysis Systems and Advanced Inorganic Materials
- [3] Advanced Biological Materials
- [4] Education in Energy and Environment

Special Session:

"Energy and Environment Issues"

"Strategic Session - I. Hydrogen Society, II. Industrial Platform-"

"Sustainability Session: Smart Use of Energy and Materials"

"International Higher Education Program"

Program:

<u>7th (Tue.)</u>:

Evening: Registration and General Reception

8th (Wed.):

<u>9:30~10:10</u>	<u>Opening Session (10 min. each)</u>	
Mr. Tom Knappskog, Counsellor, Royal Norwegian Embassy		
Prof. Takashi Matsuoka, President, Doshisha University		
Prof. Anne Borg, Dean of the Faculty of Natural Science, NTNU		
Chairman's address		
<u>10:10~10:40</u>	Break	
10:40~11:40	Energy and Environment Issues	
10:40~11:00		
"Renewable Energy R&D in FREA"		
Dr. Yoshiro Owadano, Director, Fukushima Renewable Energy Institute, AIST		
11:00~11:20		
"Vibrant Change - on the Road to the Low Emission Society"		
Dr. Nils Kristian Nakstad, Enova		
11:20~11:40		
"Concept and Technology for Energy and Environment of Mayekawa Mfg."		
Dr. Kuniaki Kawamura, Chairman, Japan Frozen Food Association		

$11:40 \sim 11:50$	Break	
$11:50 \sim 12:50$	Overview for Target Session	
11:50~12:05 Process Engineering		
12:05~12:20 Electrolysis Systems and Advanced Inorganic Materials		
12:20~12:35 Advanced Biological Materials		
12:35~12:50 Education in Energy and Environment		
12:50~13:30	Lunch	
13:30~18:00	<u>4 Parallel Sessions</u>	
18:30~20:30	Banquet (General Participants)	
	Student Get Together (Registered Student Participants)	

<u>9th (Thu.)</u>:

<u>9:00~10:30</u> <u>Strategic Session I. –Hydrogen Society–</u>

9:00~9:30

"Introduction of Hydrogen Power Generation and Smart Energy Grid Community in Doshisha Univ. and Kyoto-Keihanna Area"

Prof. Jiro Senda, Director of Energy Conversion Research Center, Doshisha University 9:30~10:00

"Market Developments for Hydrogen in Norway - in a European Context"

Dr. Steffen Møller Holst, SINTEF

10:00~10:30

"Investigation of Ammonia as a Hydrogen Carrier and Application to Fuel Cells" Prof. Koichi Eguchi, Kyoto University

<u>10:30~10:40</u> Break

<u>10:40~12:10</u> <u>Strategic Session II. –Industrial Platform–</u>

 $10:40 \sim 11:10$

"Production of Functional Materials for Health and Nutrition from Renewable Resources"

Dr. Takeshi Takaha, Ezaki Glico Co., Ltd.

 $11:10 \sim 11:40$

"New Technologies for Sustainable Production of Metals"

Prof. Geir Martin Haarberg, NTNU

11:40~12:10

"Challenge of Osaka Gas towards the realization of a low-carbon society"

Dr. Yukiyoshi Fukano, Osaka Gas Co., Ltd.

12:10~13:00	Lunch
13:00~18:00	<u>4 Parallel Sessions</u>
18:30~20:30	<u>The NorAlumni Japan Event (Invited participants only)</u>

<u>10th (Fri.)</u>:

<u>9:30~11:30</u> Sustainability Session – Smart Use of Energy and Materials–

9:30~10:00

"Strategic Research Area NTNU Energy"

Prof. Peter Neksa, NTNU/SINTEF

 $10:00 \sim 10:30$

"Separation and Micronization of Natural Materials by Supercritical Fluid Technology"

Prof. Motonobu Goto, Nagoya University

 $10:30 \sim 11:00$

"The Icelandic energy system and the role of geothermal energy"

Prof. Gudrun Saevarsdottir, Iceland

 $11:00 \sim 11:30$

"Development of seafloor REY-rich mud deposit toward a sustainable future" Prof. Yasuhiro Kato, University of Tokyo

Prof. fasuniro Kato, University of lok

<u>11:30~11:40</u> Break

<u>11:40~12:40</u> International Higher Education Program

11:40~11:44 Introduction

 $11:44 \sim 11:56$

"Experience in Double Degree Program – Doshisha University and NTNU-"

Prof. Hiroyuki Miyamoto and Mr. Yoshiyuki Azekawa, Doshisha University

 $11:56 \sim 12:08$

"Integration of Industry into Education"

Prof. Trygve M Eikevik, NTNU

 $12:08 \sim 12:20$

"Creative Engineering Program of Nagoya Institute of Technology"

Prof. Yasushi Ido, Vice President, Nagoya Institute of Technology

 $12:20 \sim 12:32$

"Collaboration "Summer School on Sustainable Energy in Cities (SEniC)" Based on Experts in Team Work as the pedagogic principle"

Prof. Vojislav Novakovic, NTNU

12:32~12:40 Conclusion

<u>12:40~13:30</u> Lunch

<u>13:30~14:30</u> Workshop Presentation and Closing