IERE WORKSHOP

08:30 – 09:10 Registration

Room Alpsee

Opening Session

09:10 – 09:20 Opening Address
O-1 Dr. Sung Hwan Bae (Vice Chair of IERE, President of KEPCO Research Institute, Korea)

09:15 – 09:30 Welcome Address
O-2 Mr. Ingo Birnkraut (CEO & MD, RWE Technology International GmbH, Germany)

Keynote Addresses

09:30 – 10:00 Oxyfuel combustion of solid fuels - groundbreaking scientific results from detailed research
K-1 Prof. Dr. Reinhold Kneer (Institute of Heat and Mass Transfer, Aachen University, Germany)

Session 1: Penetration of Renewable Energies

Chair person: Dr.-Ing. Christoph Pellinger (FfE, Germany)

10:00 – 10:30 Fuel Flexibility and Fuel Change in Coal Power Plants
S1-1 Mr. Axel Meschgbiz (Senior Thermal Engineer, TOE-M/Mechanical Engineering, RWE Technology International GmbH, Germany)

10:30 – 11:00 Technologies to use carbon free ammonia in power plant
S1-2 Dr. Yoshiyuki Suda (Manager, Business Development Dept., Resources, Energy & Environment Business Area, IHI Corporation, Japan)

11:00 – 11:30 Vibropliling – a cost efficient and environmentally friendly method to install offshore wind turbine foundations
S1-3 Dr. Felix Cebulla (Corporate Technology, innogy SE, Germany)

11:30 – 12:00 Development of Hybrid Geothermal Power Plants in Japan
S1-4 Dr. Yoshinobu Nakao (Senior Research Engineer, Energy Engineering Research Laboratory, Central Research Institute of Electric Power Industry, Japan)

12:00 – 12:30 An assessment of the flexibility of combined heat and power plants in power systems with high shares of intermittent power sources
S1-5 Ms. Johanna Beiron (PhD student, Energy Technology, Chalmers University of Technology, Sweden)

12:30 – 14:00 Break in the exhibition

Session 2: The Greener Side of Generation

Chair person: Mr. Kyoungil Park (KEPCO Research Institute, Korea)

14:00 – 14:30 Eemshaven Biomass co-combustion
S2-1 Mr. Michael Schütz (Manager, TOE Engineering, RWE Technology International GmbH, Netherlands)

14:30 – 15:00 Technology status of biomass power generation in Korea
S2-2 Mr. Kyoungil Park (Principal Researcher, Clean Power Generation Laboratory, KEPCO Research Institute, Korea)

15:00 – 15:30 Utilization of CO2 from Waste Incineration Plants for Power-to-Fuel Technology
S2-3 Prof. Dr. Emmanouil Kakaras (Senior Vice President Energy Solution, Mitsubishi Hitachi Power Systems Europe GmbH, Germany)

15:30 – 16:00 Progress of Osaki CoolGen Oxygen-blown IGCC and CO2 Capture Demonstration
S2-4 Mr. Kyohori Nakamura (Manager, Engineering Dept. Carbon Capture Group, Osaki CoolGen Corporation, Japan)

16:00 – 16:30 Break in the exhibition

16:30 – 17:00 Advanced KM CDR Process Using New Solvent
S2-5 Mr. Takashi Nojo (Senior Research Engineer, R&D Center, The Kansai Electric Power Co., Inc., Japan)

17:00 – 17:30 Study of the concentration of mercury in coal used in combustion, in an area of Boyacá, Colombia, South America
S2-6 Ms. Sonia Guerra Lemoine (Dirección de Laboratorios, Grupo de Caracterización y Procesamiento de Minerales y Carbones, Servicio Geológico Colombiano, Colombia)
IERE WORKSHOP

THURSDAY, 13 SEPTEMBER 2018

08:30 – 09:00 Registration

Room Alpsee

Keynote Addresses

09:00 – 09:30 Make or buy – foster innovation and the role of Venture Capital
K-2 Dr. Max Voss (Manager of Innovation, Business Development & New Technologies, RWE Generation SE, Germany)

Session 3 : Showcasing Innovations for Power Generation
Chair person: Dr. Max Voss (RWE Generation SE, Germany)

09:30 – 10:00 RWE’s former, current and possible future energy storage applications
S3-1 Mr. Jan Josef Bernholz (Project Engineer, TOE Engineering, RWE Technology International GmbH, Germany)

10:00 – 10:30 Battery Energy Storage Solution - Enhancing the operational flexibility of flexible combined cycle industrial gas turbines
S3-2 Mr. Uwe Fuchs (Energy Management Division, Medium Voltage & Systems, Projects & Applications, Siemens AG, Germany)

10:30 – 11:15 Break in the exhibition

11:15 – 11:45 Recent trends on installation batteries in real systems of each country to realize low carbon society
S3-3 Dr. Joji Kawano (Senior Research Associate, Research Department, Japan Electric Power Information Center, Japan)

11:45 – 12:15 Digital solutions for optimization of asset operation and maintenance:
S3-4 MHPS TOMONI® for power plant operators and MHI ENERGY CLOUD® Service for large energy users
Dr. Christian Bergins (Product Manager, Lead Engineering, Mitsubishi Hitachi Power Systems Europe GmbH, Germany)

12:15 – 12:45 Research and Practice of Machine Learning Technology in Grid Dispatching Automation
S3-5 Mr. Xin Shan (Manager, R & D Section, NARI Group Corporation, China)

12:45 – 14:00 Break in the exhibition

Session 4 : Generating More Efficiently
Chair person: Dr. Fumihiko Yoshiba (CRIEPI, Japan)

14:00 – 14:30 Efficiency and Energy Transition
S4-1 Dr. Martin Heinen (Senior Process Engineer, TOE Engineering, RWE Technology International GmbH, Germany)

14:30 – 15:00 The future of thermal power plants under the expansion of renewable energy in Japan
S4-2 Mr. Kojiro Hemmi (Research Associate, Research Department, Japan Electric Power Information Center, Japan)

15:00 – 15:45 Break in the exhibition

15:45 – 16:15 Evaluation of a Contribution of Thermal Power Plants Flexibility on a Stability of Power System
S4-3 Dr. Fumihiko Yoshiba (Senior Research Scientist, Energy Engineering Research Laboratory, Central Research Institute of Electric Power Industry, Japan)

16:15 – 16:45 Improving Performance and Flexibility of Thermal Power Plants Combined with Advanced Digital Technologies
S4-4 Dr. Christian Bergins (Product Manager, Lead Engineering, Mitsubishi Hitachi Power Systems Europe GmbH, Germany)

16:45 – 17:15 Development on The Optimal Operational Power-Plant’s Supporting-System
S4-5 Dr. Hideyuki Ishigami (General Manager, Thermal Power Business Department, CHUBU Electric Power Co., Inc., Japan)

17:15 – 17:45 Development of Abnormality Detection System for Power Plant Facility
S4-6 Dr. Jong-Duk Son (Clean Power Generation Laboratory, KEPCO Research Institute, Korea)

Closing Remarks

17:45 – 17:55 Mr. Ingo Birnkraut (CEO & Managing Director, RWE Technology International GmbH, Germany)
17:55 – 18:00 Dr. Takao Watanabe (Secretary General, IERE Central Office)