



Korea-Austria Energy & Environment Forum - Bioenergy, Air Quality, and Machine Learning -

November 23-24, 2017, Vienna, Austria

Hotel Kaiserhof Wien, Frankenberggasse 10, 1040 Vienna

Organizers

- Korean Scientists and Engineers Association in Austria (KOSEAA)

Sponsors

- Embassy of the Republic of Korea in the Republic of Austria
- The Korean Federation of Science and Technology Societies (KOFST)

Supporter

- Korea
 - Incheon National University
 - Inha University
 - Korea Institute of Energy Research (KIER)
 - National Institute of Environmental Research
 - The Global Network of Korean Scientists & Engineers (KOSEN)
 - City of Seoul
 - Metariver Technology, Co., Ltd
 - Infoshare
 - Korean Energy & Environment Expert Forum in Europe (K4EF)
- Austria
 - City of Vienna
 - TU Wien



Bioenergy, 23rd Nov. 2017	
08:30~09:00	Registration
09:00~09:30	Opening Ceremony <ul style="list-style-type: none"> • Opening & Welcome Speech: Dr. Jong Mun Park, President, Korean Scientists and Engineers Association in Austria • Congratulatory Remarks H.E. Ambassador Dongik Shin, Ambassador of the Republic of Korea to Austria • Congratulatory Remarks Jong Wook Kim, Vice Mayor for Political Affairs of Seoul Metropolitan Government, South Korea • Congratulatory Remarks TU Wien
09:30~11:00	Trends in Bioenergy <ul style="list-style-type: none"> • KIER Fischer-Tropsch Technology for BTL Application PhD. Heon Jung, Vice president of Korea Institute of Energy Research • Synergies and tradeoffs between modern energy access, clean air and climate mitigation goals Dr. Shonali Pachauri, Senior Research Scholar, Energy Program, International Institute for Applied Systems Analysis (IIASA) • Acting on the Promise of Seoul Kwon Sun Jow, Citizen Energy Cooperation Division, City of Seoul
11:00~11:30	Coffee Break & Networking
11:30~13:00	Technology Trends in Biogas <ul style="list-style-type: none"> • Biohydrogen and Biogas Research in Korea Prof. DongHun Kim Inha University, Korea • Biogas, Biomethane and Hydrogen - Development of Upgrading and Recovery Technologies @ TU Wien DI Dr. Martin Miltner, Institute of Chemical Engineering, TU Wien, Austria • Biogas as an interdisciplinary solution for a future bio-based society in Denmark Prof. Jin Mi Park, SYDDANSK University, Denmark
12:30~13:30	Lunch Break

13:30~15:30	Technology Trends Biogas 2 <ul style="list-style-type: none"> • Current Status and Improvement Plan of Biogasification in South Korea Dr. Dong Jin Lee, National Institute of Environmental Research, Korea • EU and German Bioenergy policy and strategy Dr. Hyung Sik CHOI, Swedish University of Agricultural Sciences (SLU), Sweden • Dual Fluidized Bed Steam Gasification of Alternative Fuel Types Enabling Fuel Production DI Dr. Stefan Müller, Institute of Chemical Engineering, TU Wien, Austria • Biogas production from organic wastes in Korea: waste characteristics, applicability of anaerobic co-digestion and underlying microbial populations Prof. Seung Gu Shin, Gyeongnam National University of Science and Technology (GNTECH), Korea
15:30~16:00	Coffee Break
16:00~17:00	Panel discussion – Future cooperation <ul style="list-style-type: none"> • Experience about the cooperation between Austrian and Korean Companies DI Richard Park, Richi Park Consulting
Air Quality, Clean Fuel, and Machine Learning, 24th Nov. 2017	
09:00~10:40	Clean Fuel / CFD Simulation <ul style="list-style-type: none"> • Fuel flexibility and emission-control in future combustion systems Prof. Alessandro PARANTE, Université Libre de Bruxelles, Belgium • Operational flexibility in distributed power generation: Micro gas turbines Prof. Ward DE PAEPE, University of Mons, Belgium • Liquid splash modeling with neural networks Dr. Kiwon UM, TUM, Germany • What we can do with particles? Dr. Seong Weon JEONG, CEO, Metariver Technology, Co., Ltd, Korea
10:40~11:00	Coffee Break
11:00~13:00	Air Quality / Measurement / Policy (Part I) <ul style="list-style-type: none"> • Climate Protection Program of City of Seoul Kwon Sun Jow, Citizen Energy Cooperation Division, City of Seoul

	<ul style="list-style-type: none"> • Air quality & machine learning: An opportunity for highly scalable environmental intelligence Robert HEINECKE, CEO, Breeze Technologies, Germany • A service platform based on a low-cost, dense air quality monitoring network and the fusion of environmental information Mr. Lasse JOHANSSON, Research Scientist, Air quality modelling group, The Finnish Meteorological Institute, Finland • Improving indoor environmental quality for human health and wellbeing So Young HYUN, Senior Consultant, Mitie, London, United Kingdom • About indoor air quality assessment Prof. Taghi KARIMIPANAH, University of Gävle, Sweden
13:00~14:00	Lunch Break
14:00~15:40	Air Quality / Measurement / Policy (Part II) <ul style="list-style-type: none"> • The City of Vienna's strategies for better air quality DI Dr. Heinz TIZEK, Air Quality Management Group, City of Vienna • Industrial and regional particulate matter (PM) footprint and human respiratory impact in South Korea Prof. Junbeum KIM, CREIDD Research Centre on Environmental Studies & Sustainability, University of Technology of Troyes, France • Experience sharing of indoor air quality practice in public facilities Prof. Heekwan LEE, IIASA, Austria & School of Urban Environmental Engineering, Incheon National University, Korea • Wood smoke identification in ambient air Prof. Hans PUXBAUM, TU Wien, Austria
15:40~16:00	Coffee Break
16:00~17:40	Crucial Applications in Machine Learning <ul style="list-style-type: none"> • Machine learning approaches to multi-scale and reduced order modeling of subsurface reservoirs Prof. Ahmed H. ElSheikh, School of Energy, Geoscience, Infrastructure and Society, Heriot-Watt University, Edinburgh, United Kingdom • Deep variational Bayes filters: Unsupervised learning of state space models from raw data Maximilian KARL, AI Research, Data Lab, Volkswagen Group, Germany • Machine learning in speech technology Dr. Hyong Sil CHO, SiLnD, Netherlands • Machine learning in cancer drug discovery Dr. Yongsoo KIM, The Netherlands Cancer Institute (NKI-avl), Netherlands