

Program of Kyoto-Zhejiang-Ajou Joint Symposium on Energy Science

(Japan, 2019)

December 6th, 2019

09:00 – 09:10 Registration		
09:10 – 09:20 Opening Speech by Prof. Ishihara Keiichi (Kyoto University)		
09:20 – 12:10 Oral Presentation (O01-O08) Venue: Room 102, Faculty of Engineering Integrated Research Bldg.		
09:20 – 09:40	O01 Lin Guoxin (Zhejiang University) Relationship between pore structure and thermal kinetics of coal-based activated carbon calculated using two different models	Chair Prof. Park Ji Yong
09:40 – 10:00	O02 Zhao Yuanyuan (Kyoto University) Side Reactions and Their Influence in Hydrogenation of Aqueous Acetic Acid into Bioethanol in Flow-type Reactor Using Ni-Sn/ TiO ₂ Catalyst	
10:00 – 10:20	O03 Kang Hyunwoo (Ajou University) Multi-level switching of vanadium dioxide by using graphene as separation layer	
10:20 – 10:40	O04 Kim Hye Ju (Ajou University) Low-power Electronic Devices Using Two-dimensional Electron Gas in Thin Film Oxide Heterostructure via Atomic Layer Deposition	
10:40 – 10:50 Group Photo and Coffee Break		

10:50 – 11:10	O05 Song Jiawen (Zhejiang University) Temperature dependence of the contact angle of water on metallic surfaces at elevated temperatures and pressures: In situ characterization and thermodynamics analysis	Chair Prof. Wu Xuecheng
11:10 – 11:30	O06 Lin Zhiming (Zhejiang University) Dual-beam interferometric particle imaging for size measurement of opaque metal droplet	
11:30 – 11:50	O07 Kong Junhyuk (Ajou University) Optimal bidding strategy of load reduction to participate in demand response market in South Korea	
11:50 – 12:10	O08 Xu Chenxuan (Zhejiang University) Super capacitor using room temperature ionic liquid mixture with fast frequency response and high energy density	
12:10 – 13:00 Lunch Venue: Room 302, Faculty of Engineering Integrated Research Blog.		
13:00 – 13:10 Poster Preparation		

13:10 – 14:00 Poster Session Venue: Room 302, Faculty of Engineering Integrated Research Blog.
Details on pages 5 – 7

14:00 – 17:30 Oral Presentation (O09-O18)		
Room 102, Faculty of Engineering Integrated Research Blog.		
14:00 – 14:20	O9 Choi Yeong-Ho (Ajou University) Structural inhomogeneity-driven spectral broadening and remedy for color-pure InP/ZnSeS colloidal quantum dots	Chair Prof. Lee Sang Woon
14:20 – 14:40	O10 Chen Tao (Zhejiang University) Effects of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Particle Size on the Rheo-electrical Performance of a Semi-solid Flow Battery	
14:40 – 15:00	O11 Khaled Ali (Kyoto University) Image Reconstruction of the Enriched Isotope 208Pb Using Nuclear Resonance Fluorescence Absorption Method in UVSOR-III BL1U	
15:00 – 15:10 Coffee break		
15:10 – 15:30	O12 Nadya Noorfatima (Ajou University) Day-Ahead Peer-to-Peer and Community-based Energy Trading in South Korea	Chair Prof. Huang Qunxing
15:30 – 15:50	O13 Chen Jiaying (Zhejiang University) Network Flexibility Study of Urban Centralized Heating System: Concept, Modeling and Evaluation	
15:50 – 16:10	O14 Esmaeil Ahmadi (Kyoto University) Modelling the Water Energy Nexus to Assist the Evaluation and Improvement of Transition Plans Towards Sustainability	
16:10 – 16:30	O15 Zhao Yanyun (Zhejiang University) Atmospheric ozone chemistry and control strategies in Hangzhou, China: Application of a 0-D box model	
16:30 – 16:50	O16 Sung Kihyuk (Ajou University) Transfer Hydrogenation with Glycerol to Lactate	Chair Prof. Sagawa Takashi
16:50 – 17:10	O17 Song Qi (Zhejiang University) Studies on natural gas liquefaction processes using mixed refrigerants	
17:10 – 17:30	O18 Samuel Matthew G. Dumlao (Kyoto University) Reproducing Solar Curtailment with Fourier Analysis using Japan Dataset	

17:30 – 17:40	Thanks Speech by Prof. Kim Ki Hong (Ajou University)
17:40 – 17:50	Closing Remarks by Prof. Gao Xiang (Zhejiang University)

Poster Presentations

13:10 – 14:00 (P01-P33)	
P01	Ha Seongju (Ajou University) Study of third-order nonlinear optical response in twisted bilayer graphene
P02	Lee Seulchan (Ajou University) Metal-Free Formylation of Amines via TBD-CO Adducts
P03	Hyun Sanghwa (Ajou University) Growth and characterization of Graphene/h-BN in-plane heterostructure on semiconductor germanium surface
P04	Chen Xiaofeng (Zhejiang University) Real-time reconstruction of particle field hologram with multi-thread and multi-GPU processing
P05	Sun Yifu (Zhejiang University) Carbonation curing of porous concretes based on industrial solid waste materials
P06	Liu Ke (Zhejiang University) Study on the effect of pretreatment methods of electrode materials on mass transfer coefficient of vanadium redox flow battery
P07	Huang Wei (Zhejiang University) Research on data-driven identification and prediction of heat response time of urban centralized heating system
P08	Wang Shulin (Zhejiang University) Research and Development of Stirling Engines in China and Zhejiang University
P09	Fang Yibo (Zhejiang University) Vapor-liquid equilibrium for the binary systems (R1216 + R1234yf and R1216 + R1234ze(E))
P10	Wu Yuhao (Zhejiang University) Laboratory measurement of thermal conductivity of backfill soil for direct buried cable
P11	Li Pei (Zhejiang University) Experimental investigation of the scaling-off location and the slag mass in pulverized coal-fired boiler with water-cooled slag removal
P12	Xiang Duo (Zhejiang University) Reaction Characteristic of Iron-doped Manganese Oxides for Solar Thermochemical Energy Storage

P13	Bao Kangli (Zhejiang University) Visual experiment on the start-up and heat transfer characteristics of pulsating heat pipes charged with SiO ₂ /water and CuO/water nanofluids
P14	Bao Zhier (Zhejiang University) Effects of humidity and NH ₃ on secondary aerosol formation
P15	Yu Jiayao (Zhejiang University) Detection of polycyclic aromatic hydrocarbon in a diffusion flame of propane by laser-induced fluorescence
P16	Wang Linglong (Zhejiang University) A high-speed holographic microscopy for measuring transient characteristics of a microbubble formation around a heated nanoparticle in-situ
P17	Chen Yucheng (Zhejiang University) Understanding the intercalation capacitance of MXene
P18	Pan Yuhan (Zhejiang University) Study on catalytic reforming of tar at low temperature to produce hydrogen-rich gas by tire pyrolysis char
P19	Yang Yuxuan (Zhejiang University) Surface Modification and Activation of Waste Bovine Bone Derived Materials for Gaseous Toluene Removal
P20	Hu Nan (Zhejiang University) Thermochromic liquid crystal (TLC) thermography as a novel tool to study solid-liquid phase change heat transfer of opaque PCMs for latent heat storage: Validation and Applications
P21	Yi Ningtong (Zhejiang University) Emission and Control of Flue Gas Pollutants in CO ₂ Chemical Absorption System
P22	Li Zheng (Zhejiang University) Experimental and theoretical research on photothermal synergetic solar fuels production by H ₂ O and CO ₂ reduction
P23	Xue Zhiliang (Zhejiang University) Experimental investigation of fuel slinger atomization with pulsed digital inline holography
P24	Zhang Menglei (Zhejiang University) Highly efficient recovery of valuable metal from spent catalyst
P25	GCOE Group A (Kyoto University) Characterization of household energy services in China, Egypt and Iran
P26	GCOE Group B (Kyoto University) Technology Options Towards a Green Island in Tsushima Japan by 2030
P27	GCOE Group C (Kyoto University) Primary energy supply and demand analysis of Japan

P28	Zhou Boyang (Kyoto University) Nanostructured Sb ₂ S ₃ for hybrid solar cells
P29	Afaf Eladl (Kyoto University) Evaluation of the potency of some antibiotic formulations in the Egyptian market
P30	Wang Jiaqi (Kyoto University) Stable oligomer obtained from cedar wood pyrolysis in aprotic solvent and hydrogen donor
P31	Nakaya Masahiro (Kyoto University) Evaluation of chirality from gold nanoparticles synthesized in chiral nanospace configured by molecular assembled nanohelices
P32	Mohamed O. Mohamed (Kyoto University) Developing lignocellulose degrading <i>Saccharomyces cerviciae</i> via Lytic Polysaccharide Monooxygenase (LPMO)
P33	Kimura Takaki (Kyoto University) Nb-doped TiO ₂ Thin Films Prepared through TiCl ₄ Treatment for Improvement of Their Carrier Transport Property