

Oral Program November 27 (Fri) 2015

Plenary Session

Noyori Conference Hall

Time	Presentation No.	Title, Author(s)
14:30-14:40		Opening Ceremony
		<i>Chair: A. Katayama</i>
14:40-15:40	27-0-1 (Invited)	<p>Opportunities from Systems and Synthetic Science for Biotechnology in Environmental Protection and Health</p> <p>Gary S. Saylor Univ. of Tennessee</p>
15:40-16:00		Break
		<i>Chair: M. Katayama</i>
16:00-17:00	27-0-2 (Invited)	<p>How the Smart Society will be won?</p> <p>Satoshi Morozumi New Energy and Industrial Technology Development Organization</p> <p>It is possible to understand that “Smart Society” is final goal of “Smart Community”. Also, NEDO understands that “Smart Community” is involving “Smart Suppliers” and “Smart Customers”. An important concept of “Smart Society” is allocating intelligences among public service suppliers and customers. “Smart Grid” in Electric utility business is one of the “Smart Suppliers”. In this concept, supplier side intelligences are SCADA-EMS or Distributed EMS or DMS owned by Transmission network operator or distribution network operators. Customer side intelligences are Home Energy Management System (HEMS), Building Energy Management System (BEMS) or Factory Energy Management System (FEMS). In the complete “Smart Society” both side intelligences are communicating with and finding best solution for each side. NEDO is promoting “Smart Community” system through several international demonstrations. In this paper, author introduces history of smart community and purpose, contents and results of current NEDO demonstration projects.</p>
17:00-17:15		Break
17:15-19:15		Welcome Reception

Oral Program November 29 (Sun) 2015

Session 1 Room013

Minor Metal Cycles and Resource Management

Time	Presentation No.	Title, Author(s)
		<i>Chair: R. Ichino</i>
10:00-10:30	29-1-1 (1229) (Invited)	Current trends and issues of phosphorus management in Korea Y. -J. Jung (Catholic Univ. of Pusan)
10:30-10:45	29-1-2 (1187)	Simple Synthesis of Magnetic MOR Zeolite using Seed Assisted Method T. Hagio (Hokkaido Univ.), K. Yamaoka, K. Iwai, Y. Kamimoto, R. Ichino (Nagoya Univ.)
10:45-11:00	29-1-3 (1190)	Separation and condensation of zinc by artificial biofilm formed by ambient germs H. Kanematsu, A. Ogawa, N. Hirai, H. Ikegai (Nagoya Institute of Technology)

Oral Program November 28 (Sat) 2015

Session 2 Room081

Biomaterials

Time	Presentation No.	Title, Author(s)
		<i>Chair: S. Yagi</i>
9:00-9:30	28-2-1 (1216) (Invited)	Multimodal Soft X-ray Spectromicroscopy in Biomaterials Research T. Araki (Diamond Light Source)
9:30-10:00	28-2-2 (1221) (Invited)	New developments of the protein structural analysis by synchrotron-radiation circular-dichroism spectroscopy K. Matsuo (Hiroshima Univ.)
10:00-10:15	28-2-3 (1202)	Study on aggregation mechanism of gold nanoparticles covered with phosphatidylcholine by means of infrared spectroscopy C. Tsukada, T. Yoshida, S. Ogawa (Nagoya Univ.) T. Yagi, T. Ohta (Ritsumeikan Univ.), K. Matsuo (Hiroshima Univ.), H. Nameki (Aichi Center for Industry and Science Technology, Aichi Prefecture), S. Yagi (Nagoya Univ.)
10:15-10:30		Break
		<i>Chair: T. Araki</i>
10:30-10:45	28-2-4 (1006)	Formation of Multi-Biofunctional Surface Layer on Titanium by Simple Electrochemical Treatment Y. Tsutsumi, M. Ashida, P. Chen, H. Doi, T. Hanawa (Tokyo Medical and Dental Univ.)
10:45-11:00	28-2-5 (1025)	Young's modulus of single crystalline β-type Ti-Zr-8Nb alloy for orthopedic implants Y. Yokoyama, E. Kobayashi, Y. Kimura, T. Sato (Tokyo Institute of Technology)
11:00-11:15	28-2-6 (1063)	Visible Light Photocatalytic Activities of TiO₂ Layers Formed on Ti-Ag and Ti-Au Alloys by Thermal Oxidation T. Ueda, S. Sado, K. Ueda, T. Narushima (Tohoku Univ.)
11:15-11:30	28-2-7 (1209)	Improvement of Mechanical Properties of Biomedical Co-Cr-Mo Alloys by High-pressure Torsion and Short-time Solution Treatment M. Isik, M. Niinomi, H. Liu, M. Nakai (Tohoku Univ.), K. Cho (Osaka Univ.), Z. Horita (Kyushu Univ.)
11:30-11:45	28-2-8 (1211)	Design, microstructures and mechanical properties of novel beta-type Mo-added Ti-Mn alloys for use in biomedical applications P. F. Santos, M. Niinomi, H. Liu, M. Nakai (Tohoku Univ.), K. Cho (Osaka Univ.)
11:45-13:00		Break

Oral Program November 28 (Sat) 2015

Session 2 Room081

Biomaterials

Time	Presentation No.	Title, Author(s)
		<i>Chair: K. Matsuo</i>
13:00-13:15	28-2-9 (1195)	Fluorescent tracing of siRNA in living cell Hiroyuki Asanuma, Anna Ito, Yukiko Kamiya (Nagoya Univ.)
13:15-13:30	28-2-10 (1115)	Development of photoresponsive microcapsule made by DNA Y. Kamiya, Y. Yamada, T. Muro (Nagoya Univ.), K. Matsuura (Tottori Univ.), H. Asanuma (Nagoya Univ.)
13:30-13:45	28-2-11 (1186)	Assessment of Cascade Recycling of Paper by the Calculation of Number of Use Profiles K. Watanabe, (Teikyo Univ.)

Oral Program November 28 (Sat) 2015

Session 3 Room015

Functional Materials for Environment

Time	Presentation No.	Title, Author(s)
		<i>Chair: M. Kurosawa</i>
9:30-9:45	28-3-1 (1044)	Diffractive imaging of a two-fold astigmatism of a magnetic lens using forked grating masks H. Nambu, K. Saitoh, N. Tanaka (Nagoya Univ.), M. Uchida (Saitama Institute of Technology)
9:45-10:00	28-3-2 (1064)	Spin-polarized electron holography using a semiconductor photocathode K. Sameshima, M. Kuwahara, Y. Nambo, K. Saitoh, T. Ujihara, T. Asaka (Nagoya Univ.), M. Okabe (Nagoya Institute of Technology), N. Tanaka (Nagoya Univ.)
10:00-10:15	28-3-3 (1057)	Space charge effect of a high - charge pulsed electron beam in pico - second pulse beam emission K. Aoki, Y. Nambo, M. Kuwahara, K. Saitoh, T. Ujihara, H. Asano, N. Tanaka (Nagoya Univ.)
10:15-10:30	28-3-4 (1004)	Strain measurement of heteroepitaxial GeSn/Ge with a finFET structure K. Saitoh, K. Doi, N. Tanaka (Nagoya Univ.), S. Ike (Nagoya Univ., Japan Society for the Promotion of Science), O. Nakatsuka, S. Zaima (Nagoya Univ.)
10:30-10:45		Break
		<i>Chair: K. Saito</i>
10:45-11:00	28-3-5 (1052)	Electrical Characteristics of Ge_pn - junction Diodes Prepared by Using Liquid Immersion Laser Doping K. Takahashi, M. Kurosawa (Nagoya Univ.), H. Ikenoue (Kyushu Univ.), M. Sakashita, W. Takeuchi, O. Nakatsuka, S. Zaima (Nagoya Univ.)
11:00-11:15	28-3-6 (1045)	Control of Schottky Barrier Height at Metal/Ge Interface by Sn_x Ge_{1-x} Interlayer A. Suzuki, O. Nakatsuka (Nagoya Univ.), S. Shibayama (Nagoya Univ., Japan Society for the Promotion of Science), M. Sakashita, W. Takeuchi, M. Kurosawa, S. Zaima (Nagoya Univ.)
11:15-11:30	28-3-7 (1058)	Characterization of Electrically Active Defects in Epitaxial GeSn / n - Ge Junctions W. Takeuchi, Y. Inuzuka (Nagoya Univ.), T. Asano (Nagoya Univ., Japan Society for the Promotion of Science), M. Sakashita, O. Nakatsuka, S. Zaima (Nagoya Univ.)
11:30-11:45	28-3-8 (1090)	Calculation of Si_{1-x}Sn_x Energy Band Structures by using Density Functional Theory Considering Atomic Configuration Y. Nagae, M. Kurosawa (Nagoya University), S. Shibayama (Nagoya University, Japan Society for the Promotion of Science), O. Nakatsuka, S. Zaima (Nagoya University)
11:45-12:00	28-3-9 (1099)	Silicon - Tin Semiconductors for Near - Infrared Optoelectronic Device Applications M. Kurosawa, M. Kato, O. Nakatsuka, S. Zaima (Nagoya Univ.)

Oral Program November 28 (Sat) 2015

Session 3 Room015

Functional Materials for Environment

Time	Presentation No.	Title, Author(s)
		<i>Chair: W. Norimatsu</i>
12:00-13:00		Break
13:00-13:15	28-3-10 (1049)	In - situ TEM Observation and Surface Characterization of Platinum Nanoparticles Supported on Aligned Carbon Nanotube Forests K. Matsuda, W. Norimatsu, M. Kusunoki (Nagoya Univ.)
13:15-13:30	28-3-11 (1071)	Statistical Characterization of Carbon Nanotube Thin - Film Transistors Based on Solution Process J. Hirotsu, S. Kishimoto, Y. Ohno (Nagoya Univ.)
13:30-13:45	28-3-12 (1086)	Residues on Transferred CVD Graphene T. Yasunishi, Y. Takabayashi, S. Kishimoto, R. Kitaura, H. Shinohara, Y. Ohno (Nagoya Univ.)
13:45-14:00		Break
		<i>Chair: T. Yogo</i>
14:00-14:30	28-3-13 (1199)	Organosilica Nanoparticles for Biomedical Applications M. Nakamura (Tokushima Univ.)
14:30-15:00	28-3-14 (1208)	Nanohybrid Materials Formed with Inorganic Nanoparticles for Biomedical Applications K. Katagiri, A. Ikeda, K. Inumaru (Hiroshima Univ.), Y. Sasaki, K. Aikiyoshi (Kyoto Univ.)
15:00-15:15	28-3-15 (1048)	Core - Shell Nanoparticles for the Combination of Magnetic Hyperthermia and Chemotherapy K. Hayashi, Y. Sato, W. Sakamoto, T. Yogo (Nagoya Univ.)
15:15-15:30	28-3-16 (1110)	Synthesis of flexible hybrid particles with dual modality H. Hayashi, K. Hayashi, W. Sakamoto and T. Yogo (Nagoya Univ.)

Oral Program November 28 (Sat) 2015

Session 4 Room014

Ecological Energy Conversion and Storage

Time	Presentation No.	Title, Author(s)
		<i>Chair: S. Kerdsuwan</i>
9:00-9:15	28-4-1 (1128)	Effects of Mechanical Stresses at Tube-Deposit Interface in Shedding of Ash Deposition N. Sato, S. Ueno, D. Priyanto, E. Ohno (IHI Corporation), Y. Ueki, R. Yoshiie, I. Naruse (Nagoya Univ.)
9:15-9:30	28-4-2 (1093)	Development of energy harvesting devices using magnetostrictive thin film T. Nishida, D. Oshima, T. Kato, S. Iwata (Nagoya Univ.)
9:30-9:45	28-4-3 (1076)	The removal of NO by reacting with ferrous chloride combined with absorption L. Huang , C. Wu, X. Xu, Y. Zhu (Zhejiang Univ. of Technology)
9:45-10:15	28-4-4 (1219)	Research and Development of Oxyfuel Combustion in China H. Yao , C. Zheng (State Key Laboratory of Coal Combustion)
10:15-10:30		Break
		<i>Chair: H. Yao</i>
10:30-10:45	28-4-5 (1089)	High Temperature Steam Gasification of ABS, PE and PC in a Batch Reactor I . Nedjalkov, I . Naruse, R . Yoshiie, Y . Ueki (Nagoya Univ.)
10:45-11:00	28-4-6 (1188)	Recycling Waste Products of Reaction of Aluminum, Calcium hydroxide and Water to Transform into Advanced Ceramics to Storage Hydrogen H. Visbal, K. Nagashima, T. Omura, K. Hirao, (Kyoto Univ.)
11:00-11:15	28-4-7 (1215)	Study on PD Properties of Palm Fatty Acids Esters Oil Abdul Rajab, M. Tsuchie, M. Kozako, M. Hikita, (Kyushu Institute of Technology), T. Suzuki (Lion Specialty Chemicals Corporation, Ltd.)
11:15-11:45	28-4-8 (1218)	Steam Gasification for Hydrogen Production from Municipal Solid Waste as a Clean and Alternative fuel in the future K. Laohalidanond, S. Kerdsuwan, N. Sirirermrak, N. Pooklan, T. Thongdee, T. Tiankaew (King Mongkut's University of Technology North Bangkok)
11:45-13:00		Break

Oral Program November 28 (Sat) 2015

Session 4 Room014

Ecological Energy Conversion and Storage

Time	Presentation No.	Title, Author(s)
		<i>Chair: I. Naruse</i>
13:00-13:30	28-4-9 (1223)	Impact of Oxygen Enriched Air on High Intensity Combustion and Emission A. K. Gupta, A. O. Said Univ. of Maryland
13:30-13:45	28-4-10 (1034)	Performance of Orthopter Wind Turbine in Shear Flow T. Sugawara (Kanazawa Univ.), T. K. iwata (Research Center for Sustainable Energy and Technology), M. Wakasa (Tsudakoma Corp.), T. Kono (Research Center for Sustainable Energy and Technology), S. Kim
13:45-14:00	28-4-11 (1056)	Experimental and numerical investigation of the effects of a newly developed wind concentrator on the performance of a cross - flow wind turbine S. Takagi, T. Kono (Kanazawa Univ.) A. Yamagishi (Epson Corporation), T. Kiwata, S. Kimura, N. Komatu (Kanazawa Univ.)
14:00-14:15	28-4-12 (1113)	Development of Toho Gas's SOFC Cell Stack Y. Ogura, S. Masuda, J. Shimano TOHO GAS CO., LTD.
14:15-14:30		Break
		<i>Chair: R. Yoshiie</i>
14:30-15:00	28-4-13 (1226) (Invite)	Protective coating of high carbon steel at elevated temperatures S. Ye, L. Wei, X. Zhang, G. Fu, (Chinese Academy of Sciences)
15:00-15:15	28-4-14 (1075)	A DNS Study on Flame Propagation and Heat Transfer Characteristics in a Constant Volume Vessel B. Yenerdag, Y. Naka, M. Shimura, M. Tanahashi (Tokyo Institute of Technology)
15:15-15:30	28-4-15 (1145)	Study on ignition delay time of premixed ammonia - hydrogen - oxygen - argon mixture J. Li (Nagoya Univ.), H. Huang (Chinese Academy of Sciences), N. Kobayashi (Nagoya Univ.)
15:30-15:45	28-4-16 (1119)	Electrochemical Characteristics of MnO₂/NiOOH Fibrous Cathode for Fuel Cell/Battery (FCB) Systems H. Shimizu, B. Choi, D. Panthi, M. Musil, A. Tsutsumi (The Univ. of Tokyo)

Oral Program November 28 (Sat) 2015

Session 5 Room011

Intelligent Energy Network

Time	Presentation No.	Title, Author(s)
		<i>Chair: T. Kato</i>
9:00-9:15	28-5-1 (1142)	3D Printing of Electrical Insulating Spacer using Alumina/UV - cured - resin Composite M. Kurimoto, H. Ozaki, Y. Yamashita, T. Kato, T. Funabashi, Y. Suzuoki (Nagoya Univ.)
9:15-9:30	28-5-2 (1123)	PD Deterioration Characteristics of Power Capacitor Film Exposed by Closed Void Discharge T. Asai, M. Kurimoto (Nagoya Univ.), F. Komori (National Institute of Technology), Takeyoshi Kato (Nagoya Univ.), T. Funabashi, Yasuo Suzuoki (Nagoya Univ.), Y. Sasatani, H. Nishide, S. Ogura, Y. Sano (NISSIN ELECTRIC Co., Ltd)
9:30-9:45	28-5-3 (1019)	Formation Mechanism of BaMO₃Nanorods within REBa₂Cu₃O_y Superconducting Films Grown by Vapor Phase Epitaxy Y. Ichino, Y. Yoshida (Nagoya Univ.)
9:45-10:00	28-5-4 (1214)	Improvement of critical current density on REBa₂Cu₃O_y superconducting films with BaMO₃ inclusions via nano-technologies S. Miura, Y. Ichino, X. Qianyu (Nagoya Univ.), A. Ichinose (Central Research Institute of Electric Power Industry), S. Awaji (Tohoku Univ.), Y. Yoshida (Nagoya Univ.)
10:00-10:15		Break
		<i>Chair: T. Uchiyama, T. Funabashi</i>
10:15-10:45	28-5-5 (1102)	Discussion on Citizens' Cooperation Rate to Separate Food Waste from Combustible Waste at a Social Experiment in the City of Toyohashi T. Okayama (Taisho Univ.)
10:45-11:00	28-5-6 (1069)	A Study on Property of Position Dependency of Bit Errors on Parallel Transmission Wireless Visible Light Communication R. Akiba, T. Wada, K. Mukumoto (Shizuoka Univ.)
11:00-11:15	28-5-7 (1172)	A Study of Location Model for Electric Vehicle Charging Stations Considering Trip Chain Z. Zuo, T. Wang, X. F. Pan, K. Liu (Dalian Univ. of Technology)
11:15-11:30	28-5-8 (1101)	Study on a Propeller Type Micro-Hydraulic Turbine Excellent in Foreign Matter Passage Performance S. Honda, T. Uchiyama (Nagoya Univ.), Y. Ide (Interface-Labo, Japan), T. Okayama (Taisho Univ.)

Oral Program November 28 (Sat) 2015

Session 5 Room011

Intelligent Energy Network

Time	Presentation No.	Title, Author(s)
11:30-11:45	28-5-9 (1138)	Study on Open Type Cross - flow Turbine utilizing Small Waterfalls (Influence of Relative Position between Dropping Water Flow and a Runner) Y. Katayama, S. Iio (Shinshu Univ.), S. Veerapun (Naresuan Univ.) T. Uchiyama (Nagoya Univ.)
11:45-13:00		Break
		<i>Chair: T. Funabashi</i>
13:00-13:30	28-5-10 (1143) (Invite)	Resilient Interconnected Micro Energy Grids with GasPower and Renewable Technologies H. A. Gabbar (Univ.of Ontario Institute of Technology)
13:30-13:45	28-5-11 (1178)	Power System Stability with Mass Penetration of Wind Generation Technology S. Khoete, Y. Manabe, M. Kurimoto, Y. Suzuoki, T. Funabashi, T. Kato (Nagoya Univ.)

Oral Program November 28 (Sat) 2015

Session 6 Room011

Smart Energy Community

Time	Presentation No.	Title, Author(s)
		<i>Chair: M. Katayama</i>
14:00-14:30	28-6-1 (1225) (Invite)	Communication Technologies for Smart Grids – More than just Data L. Lampe (Univ. of British Columbia)
14:30-14:45	28-6-2 (1125)	Performance of a Wireless Optical CDMA System with a Hard Limiter in the Base Station Receiver Considering Photo Detector Noise Y. Yamamoto, H. Okada, K. Kobayashi, M. Katayama (Nagoya Univ.)
14:45-15:00	28-6-3 (1041)	A note on the performance of wireless feedback control with Huffman coding under a data - rate constraint A. Nagata, K. Kobayashi, H. Okada, M. Katayama (Nagoya Univ.)
15:00-15:15		Break
		<i>Chair: K. Saito</i>
15:15-15:30	28-6-4 (1040)	Enhancement of Active Phosphorus Concentration in Ge CVD layers in View of Group-IV Optical Interconnections using Low Temperature in-situ Doping and High Order Ge Precursors Y. Shimura (Imec, Instituut voor Kern- en Stralingsfysica, KU Leuven), S. A. Srinivasan (Imec, Ghent Univ.), D. Van Thourhout, R. Van Deun (Ghent Univ.), M. Pantouvaki, J. Van Campenhout, R. Loo (Imec)
15:30-15:45	28-6-5 (1017)	X-ray Microdiffraction Characterization of Local Strain Distribution in GeSn/Ge Nanostructures S. Ike (Nagoya Univ., SPS Research Fellow), O. Nakatsuka (Nagoya Univ.), Y. Moriyama (AIST-GNC), M. Kurosawa (Nagoya Univ., SPS Research Fellow), N. Taoka (Nagoya Univ.), Y. Imai, S. Kimura (JASRI/SPring-8), T. Tezuka (AIST-GNC), S. Zaima (Nagoya Univ.)
15:45-16:00	28-6-6 (1043)	Schottky Barrier Engineering by Epitaxial Metal Germanide / Germanium Contacts O. Nakatsuka, Y. Deng, A. Suzuki, M. Sakashita, S. Zaima (Nagoya Univ.)

Oral Program November 29 (Sun) 2015

Session 6 Room011

Smart Energy Community

Time	Presentation No.	Title, Author(s)
		<i>Chair: T. Yamamoto</i>
9:30-10:00	29-6-1 (Invite)	Mechanisms for Demand Response Service of Electric Vehicle Charging Considering Strategic Behaviours of Customers T. Shiga, K. Hayakawa (Toyota Central R&D Labs., Inc.)
10:00-10:15	29-6-2 (1098)	Charge Timing Choice Behavior of Plug - in Hybrid Vehicle Users under Dynamic Electricity Pricing Scheme X. Sun, T. Yamamoto, K. Takahashi, T. Morikawa (Nagoya Univ.)
10:15-10:30	29-6-3 (1141)	Study on the influence factors of the required time for electric vehicle s (EVs) fast charging K. Liu, J. Pang (Dalian Univ.of Technology), T. Yamamoto (Nagoya Univ.)
10:30-10:45		Break
		<i>Chair: T. Miwa</i>
10:45-11:00	29-6-4 (1140)	Improving the estimation of Electric vehicles' energy consumption based on multilevel mixed effects models K. Liu, J. B. Wang (Dalian Univ.of Technology), T. Yamamoto (Nagoya Univ.)
11:00-11:15	29-6-5 (1163)	Evaluation of Energy Consumption and Traffic Emissions under Speed Guidance Strategy at Signalized Intersection D. L. Wang, K. Liu, S. C. Zhao (Dalian Univ.of Technology)
11:15-11:30	29-6-6 (1096)	Inferring Household Attributes Based on Electricity Consumption Data R. Kanamori, K. Yamamichi, T. Yamamoto (Nagoya Univ.), T. Noda, K. Shimura (Chubu Electric Power Co., Inc.)
11:30-11:45	29-6-7 (1068)	Analysis The Effect of Refrigerant Charge at different Expansion Valve Coefficient to The Heat Pump Performance S. Rais, M. Takeuchi, T. Hasegawa (Nagoya Univ.)

Oral Program November 28 (Sat) 2015

Session 7 Room013

Environmental Biological Remediation and Conservation

Time	Presentation No.	Title, Author(s)
		<i>Chair: K. Hayashi, T. Machimura</i>
9:00-9:30	28-7-1 (Invite)	Modeling and managing socio - environmental systems on the semantic web F. Villa, (IKERBASQUE)
9:30-9:45	28-7-2 (1042)	Impact Assessment by Land Use Change in Khon Kaen City, Thailand H. Ito(Nihon Univ.), K. Watanabe (Ministry of Economy, Trade and Industry), T. Fujii (Nihon Univ.), K. Hayashi (Nagoya Univ.)
9:45-10:00	28-7-3 (1105)	Ecosystem Services Mapping in Japan A. Dhakal, K. Hayashi (Nagoya Univ.), M. Ooba (National Institute for Environmental Studies)
10:00-10:15	28-7-4 (1182)	Gap Analysis between Scientific Evaluation and Practical Use Activities of Forest Ecosystem Services in China T. Machimura, Dan A (Osaka Univ.)
10:15-10:30		Break
		<i>Chair: F. Villa</i>
10:30-10:45	28-7-5 (1162)	Conservation both of biomass energy and ecosystem services by geospatial analysis M. Ooba, M. Fujii (National Institutes for Environmental Studies, Japan), K. Hayashi (Nagoya Univ.), H. Ito (Nihon Univ.)
10:45-11:00	28-7-6 (1021)	Material Flow Analysis and Anthropogenic Disturbance from Mining Developments in Caraga Region, Philippines M. Castillon, K. Yoshida, H. Tanikawa (Nagoya Univ.)
11:00-11:15	28-7-7 (1029)	Material and Energy Flow Analysis of Electricity Generation in Cambodia C. Cheak, T. Fishman, K. Okuoka, H. Tanikawa (Nagoya Univ.)
11:15-11:30	28-7-8 (1173)	The Resource Occupancy to Capacity Ratio Indicator - Application to Energy Saving System M. Fujii (National Institute for Environmental Studies), K. Hayashi (Nagoya Univ.), M. Ooba (National Institute for Environmental Studies), H. Ito (Nihon Univ.)
11:30-11:45	28-7-9 (1001)	Resource Occupancy to Capacity Ratio Assessment of Forest Management — Case in Aichi, Japan K. Hayashi (Nagoya Univ.), M. Ooba, M. Fujii (National Institute for Environmental Studies)
11:45-13:00		Break

Oral Program November 28 (Sat) 2015

Session 7 Room013

Environmental Biological Remediation and Conservation

Time	Presentation No.	Title, Author(s)
		<i>Chair: A. Katayama, B. Zhao</i>
13:00-13:30	28-7-10 (1118)	Advances in Understanding the Mechanism of Dioxin Neurotoxicity B. Zhao, H. Q. Xie, S. L. Xu (Research Center for Eco - Environmental Sciences, Academy of Sciences)
13:30-13:45	28-7-11 (1111)	Comparative metabolism of αBHC enantiomers in houseflies K. Tanaka, Z. Xue, A. Katayama (Nagoya Univ.), K. Matsuda (Kinki Univ.), N. Kurihara (Kyoto Univ.)
13:45-14:00	28-7-12 (1116)	An autotrophic co - culture system for enhanced nitrate reduction Z. Xiao, T. Awata, D. Zhang, A. Katayama (Nagoya Univ.)
14:00-14:15	28-7-13 (1046)	Construction of single - stage partial nitrification - marine anammox process by affinity for nitrite T. Awata (Nagoya Univ.), Y Goto, T. Kindaichi, N. Ozaki, A Ohashi (Hiroshima Univ.)
14:15-14:30		Break
		<i>Chair: A. Katayama, K. Watanabe</i>
14:30-15:00	28-7-14 (1135)	Emerging eco-technologies using electricity-generating bacteria K. Watanabe (Tokyo Univ. of Pharmacy and Life Sciences)
15:00-15:15	28-7-15 (1129)	Microbial electricity production by using graphene oxide as an anode N. Yoshida (Nagoya Institute of Technology), Y. Miyata (Nagoya Municipal Industrial Research Institute), K. Doi (Nagoya Institute of Technology), Y. Goto (Nagoya Institute of Technology, Chubu Univ.), Y. Nagao (Nagoya Institute of Technology, Chubu Univ.), R. Tero (Nagoya Institute of Technology, Toyohashi Univ. of Technology), A. Hiraishi (Nagoya Institute of Technology, Toyohashi Univ. of Technology)
15:15-15:30	28-7-16 (1146)	Enhancement of Different Microbial Reduction Reactions by Humic as a Versatile Electron Donor D. Zhang, C. Zhang, Z. Xiao, D. Suzuki, A. Katayama (Nagoya Univ.)
15:30-15:45	28-7-17 (1139)	Characteristics of humin as solid-phase electron mediator Arata Katayama (Nagoya Univ.), C. Zhang (Nagoya Univ., Zhejiang Univ.)

Oral Program November 28 (Sat) 2015

Session 8 Room081

Utilization of Biomass for Low-Carbon Society

Time	Presentation No.	Title, Author(s)
		<i>Chair: T. Hasegawa</i>
14:15-14:45	28-8-1 (1092) (Invite)	Marine biomass utilization for biorefinery Y. Matsumura, T. Aki, Y. Nakashimada, Y. Okamura, T. Tajima (Hiroshima Univ.)
14:45-15:00	28-8-3 (1103)	Biofuel Production Routes for Seaweed Biomass G. P. B. Marquez (Nagoya Univ.) , W.J.E. Santiañez (Hokkaido Univ., Univ. of the Philippines), G. C. Trono Jr. (Univ. of the Philippines), S. R. B. de la Rama, H. Takeuchi, T. Hasegawa (Nagoya Univ.)
15:00-15:15	28-8-4 (1160)	Conversion of by-product lignin generated in pulping process into flame retardant Y. Matsushita, A. Miyagawa, Y. Kimura, D. Hirano, D. Aoki, K. Fukushima (Nagoya Univ.)
15:15-15:30	28-8-5 (1018)	Sustainable and economic utilization of biomass Khajuria Anupam (United Nations Centre For Regional Development, Nagoya)
15:30-15:45	28-8-6 (1170)	Life Cycle Analysis on Macroalgae Procurement for Sustainable Feedstock of Biofuel K. Koido (Tokyo Univ. of Science), H. Takeuchi, T. Hasegawa (Nagoya Univ.), K. Dowaki (Tokyo Univ. of Science)
15:45-16:00	28-8-7 (1206)	Sludge Treatment System Combined with Bio-Drying and Carbonization N. Kobayashi (Gifu Univ.), H. Hamabe (Obu Unity Co., Ltd.), S. Yamaji, Y. Itaya (Gifu Univ.)

Oral Program November 28 (Sat) 2015

Session 9 Main Hall

Radioactive Materials Recovery and Restoration

Time	Presentation No.	Title, Author(s)
9:05-9:30	28-9-1	Result of OPERA Experiment N. Kitagawa, (Nagoya Univ.)
9:30-9:55	28-9-2	Δm^2_{23} Measurement in OPERA (tentative title) T. Hayakawa, (Nagoya Univ.)
9:55-10:20	28-9-3	Latest Experimental Project for Study of Neutrinos with Nuclear Emulsion at J-PARC T. Fukuda, (Toho Univ.)
10:20-10:30		Break
10:30-10:55	28-9-4	Neutrino physics in SHiP Experiment at CERN M. Komatsu, (Nagoya Univ.)
10:55-11:20	28-9-5	R&D for Observation of Neutrino Nucleus Coherent Scattering O. Sato, (Nagoya Univ.)
11:20-11:40	28-9-6	Muography (tentative title) H. K. M. Tanaka, ERI, (The Univ. of Tokyo)
11:40-12:00	28-9-7	Cosmic-ray radiography with nuclear emulsion K. Morishima, (IAR, Nagoya Univ.)
12:00-13:00		Break

Oral Program November 28 (Sat) 2015

Session 9 Main Hall

Radioactive Materials Recovery and Restoration

Time	Presentation No.	Title, Author(s)
13:00-13:20	28-9-8	Muon radiography with Scintillation detector (tentative title) F. Takasaki, (KEK)
13:20-13:40	28-9-9	Three dimensional geophysical tomography using multichannel muon telescope (tentative title) K. Suzuki, (Kawasaki Geological Engineering Co., Ltd.)
13:40-14:00	28-9-10	Active Glacier 3D Morphology Study with High Energy Particle Detectors A. Ariga, (Univ. of Bern)
14:00-14:15		Break
14:15-14:40	28-9-11	Slow Neutron and Detectors K. Hirota, (Nagoya Univ.)
14:40-15:05	28-9-12	Development of High Position Resolution Ultra-cold Neutron Detector N. Naganawa, (Nagoya Univ.)
15:05-15:30	28-9-13	Development of neutron diagnostics for LHD and KSTAR Fusion experiments H. Tomita, (Nagoya Univ.)
15:30-15:55	28-9-14	Development of nuclear emulsion for fast neutron measurement (S. Machii, Nagoya Univ.)

Oral Program November 29 (Sun) 2015

Session 9 Main Hall

Radioactive Materials Recovery and Restoration

Time	Presentation No.	Title, Author(s)
9:00-9:25	29-9-1	T. Toshito, (Nagoya Proton Therapy Center)
9:25-9:50	29-9-2	Radiation bystander effects on mutation induction in mammalian cells by long-lived radicals J. Kumagai, (Nagoya Univ.), G. Kashino, (Oita Univ.)
9:50-10:00		Break
10:00-10:25	29-9-3	Regional partnership for nuclear emergency response (tentative title) N. Yasuda, (Fukui Univ.)
10:25-10:50	29-9-4	Development of teaching materials of radiation education T. Nakamura, (Gifu Univ.)

Poster Program November 28 (Sat) 2015

Session 1 ES Hall 16:00-17:30

Minor Metal Cycles and Resource Management

Presentation No.	Title, Author(s)
P-1-1 (1011)	Recyclable Ultrafine-grained Al-Al₃Ti Multi-Phase Material Fabricated by Multi Directional Forging F. Teshima, H. Sato, Y. Watanabe (Nagoya Institute of Technology)
P-1-2 (1012)	Use of Spherical or Granular Shaped Al₃Ti Nucleation Site to Reduce the Consumed Quantity of Titanium and Boron T. Hirako, Y. Watanabe, H. Sato (Nagoya Institute of Technology)
P-1-3 (1039)	The development of low-temperature process in the electrolytic recycling of hardmetal R. Kasuga, Y. Kamimoto, R. Ichino (Nagoya Univ.)
P-1-4 (1148)	Immobilization of calcium compounds in steelmaking slag by pressurized carbonation T. Shinooka, M. Kubota, H. Matsuda (Nagoya Univ.)
P-1-5 (1151)	Effects of Fe on the Rate of CaO Dissolution into CaO-FeO-SiO₂-Al₂O₃ Molten Slag D. Sato, M. Kubota, H. Matsuda (Nagoya Univ.)
P-1-6 (1168)	Recovery and Mutual Separation of Nd and Dy in Nd₂Fe₁₄B (Neodymium Magnet) by Chelation-Controlled Precipitation and Subsequent Solvent Extraction H. Matsumiya, H. Niinomi (Nagoya Univ.)
P-1-7 (1169)	Selective recovery of precious metals by continuous counter-current foam separation using solvent extractants K. Takehiko (Nagoya Municipal Industrial Research Institute, Nagoya Univ.), S. Nobuyuki, I. Yuzo (Nagoya Univ.)
P-1-8 (1212)	Separation of Dy and Nd via solvent extraction incorporating ion exchange resin N. Shibata (Nagoya Municipal Industrial Research Institute), R. Ichino (Nagoya Univ.)
P-1-9 (1228)	Environmental application with Micro-bubble Generating Apparatus A. -M. Lee, T. -H. Kim, J. -H. Lee, J. -O. Jung, Y. -J. Kim, Y. -J. Jung (Catholic Univ. of Pusan)

Poster Program November 28 (Sat) 2015

Session 2 IB Building Entrance

16:00-17:30

Biomaterials

Presentation No.	Title, Author(s)
P-2-1 (1022)	Formation and Osteoconductive Evaluation of Titanate Coating with Smooth Surface on Ti Substrates Y. Saitou, K. Kuroda, M. Okido (Nagoya Univ.)
P-2-2 (1023)	Protein Adsorption and Osteoconductivity of Surface Modified Hydrophilic Titanium Y. Yamaguchi, K. Kuroda, M. Okido (Nagoya Univ.)
P-2-3 (1027)	Surface modification of PLGA and PEEK polymer biomaterials using hydroprocessing K. Igarashi, K. Kuroda, M. Okido (Nagoya Univ.)
P-2-4 (1061)	Application of Surface Treated Stainless Steel for Long Term Implantation T. Isawa, K. Kuroda, M. Okido (Nagoya Univ.)
P-2-5 (1065)	Real - time Electrochemical Detection of Biotin Immobilization on Fluorine - doped Tin Oxide Electrodes M. Yamamoto (Tokyo Institute of Technology), Y. Katayanagi (Gunma Univ.), T. Ikoma (Tokyo Institute of Technology), K. - T. Lee, S. - Y. Lu (National Tsing Hua Univ.) N. Matsushita (Tokyo Institute of Technology)
P-2-6 (1073)	SPT Measurement of Diffusion Process in a PDMS layer R. Iwao, Y. Matsuda, H. Yamaguchi, T. Niimi (Nagoya Univ.)
P-2-7 (1084)	Synthesis of TiO₂ Film on Ti and Application to Photo - Responsive Cell Culture Vessels C. Fujita, Y. Yoshida, M. Ueda, M. Ikeda (Kansai Univ.)
P-2-8 (1106)	Adhesion and Spreading of MC3T3 - E1 Osteoblast - like Cells on Various Metals and Their Oxides Y. Yamauchi, S. Kobayashi, S. Okano (Ehime Univ.), K. Kuroda (Nagoya Univ.), T. Okamoto, T. Sakamoto (Ehime Univ.)
P-2-9 (1126)	Microstructures and Mechanical Properties of Bi - modal Ti-6Al-7Nb Alloy Processed by High-Pressure Torsion M. Hanai, M. Ashida, P. Chen, H. Doi, Y. Tsutsumi, T. Hanawa (Tokyo Medical and Dental Univ.) Zenji Horita (Tokyo Medical and Dental Univ., Kyushu Univ.)

Poster Program November 28 (Sat) 2015

Session 2 IB Building Entrance

16:00-17:30

Biomaterials

Presentation No.	Title, Author(s)
P-2-10 (1147)	Design of novel acyclic artificial nucleic acid for improvement of affinity for natural nucleic acids K. Murayama, Y. Kamiya (Nagoya Univ.), H. Kashida (Nagoya Univ., JST - PRESTO), H. Asanuma (Nagoya Univ.)
P-2-11 (1149)	Influence of microstructures formed by femtosecond laser ablation under vacuum and air on cell spreading M. Miyake, M. Tsukamoto, Y. Sato, T. Kawa, T. Nakaaze (Osaka Univ.), A. Nagai, P. Chen, T. Hanawa (Tokyo Medical and Dental Univ.)
P-2-12 (1174)	Evaluation of Adhesive Strength between TNTZ Alloy and Bioactive Titanium Oxide Layer Fabricated by Solution Processes K. Takahashi, E. Takematsu (Tokyo Institute of Technology), M. Niinomi (Tohoku Univ.), N. matsushita (Tokyo Institute of Technology)
P-2-13 (1177)	The cell spreading on Ti plate surface with microstructures formed by femtosecond and nanosecond laser T. Nakaaze, M. Tsukamoto, Y. Sato, T. Kawa, M. Miyake (Osaka Univ.), P. Chen, A. Nagai, T. Hanawa (Tokyo Medical and Dental Univ.)

Poster Program November 28 (Sat) 2015

Session 3 IB Building Entrance 16:00-17:30

Functional Materials for Environment

Presentation No.	Title, Author(s)
P-3-1 (1005)	Catalysis effect of zeolites for hydrogen release from borohydride complex S. Kanehira (Nagoya Univ.), K. Minami, K. Hirao (Kyoto Univ.), K. Kikuta (Nagoya Univ.)
P-3-2 (1007)	Theoretical Analysis of the Electron Injection Rate in the Dye-Sensitized Solar Cells K. Yasuda (Nagoya Univ.), D. Sulzer (Institute for Molecular Science), S. Iuchi (Nagoya Univ.)
P-3-3 (1010)	Environmental TEM Analysis of Gold Nanoparticulate Catalyst supported on TiO₂ T. Kawasaki (Japan Fine Ceramics Center, Nagoya Univ., Global Research Center for Environment and Energy based on Nanomaterials Science), K. Yoshida, T. Ishida, T. Tanji (Nagoya Univ., Global Research Center for Environment and Energy based on Nanomaterials Science)
P-3-4 (1026)	Synthesis of Zirconoxane - Based Inorganic - Organic Hybrid Membranes Y. Tamiya, K. Hayashi, W. Sakamoto (Nagoya Univ.), S. Yamaura, W. Zhang (Tohoku Univ.), T. Yogo (Nagoya Univ.)
P-3-5 (1030)	Three-way Catalytic Performance of Ir-Promoted Rh/CeO₂-ZrO₂ Catalysts T. Kaneko, M. Hattori (Nagoya Institute of Technology), M. Ozawa (Nagoya Univ.), M. Haneda (Nagoya Institute of Technology)
P-3-6 (1031)	Direct NO Decomposition over Ba Catalyst Supported on Rare Earth Oxides Y. Doi (Nagoya Institute of Technology), M. Ozawa (Nagoya Univ.), M. Haneda (Nagoya Institute of Technology)
P-3-7 (1032)	Selective Reduction of NO with Propene over Supported SnO₂ Nanoparticle Catalyst Y. Ota, Y. Doi, M. Hattori, M. Haneda (Nagoya Institute of Technology)
P-3-8 (1037)	CO oxidation over Cu catalyst supported on ceria - zirconia M. Hattori, M. Haneda (Nagoya Institute of Technology)
P-3-9 (1054)	Diameter Control of Carbon Nanotubes Formed by SiC Surface Decomposition T. Ogawa, W. Norimatsu, M. Kusunoki (Nagoya Univ.)
P-3-10 (1059)	Synthesis of Sodium - Vanadium Oxide Nano - sheets as Cathode Material for Lithium Ion Battery J. Umeda (Aichi Center for Industry and Science Technology), S. Nabeno, K. Hayashi, W. Sakamoto, T. Yogo (Nagoya Univ.)

Poster Program November 28 (Sat) 2015

Session 3 IB Building Entrance 16:00-17:30

Functional Materials for Environment

Presentation No.	Title, Author(s)
P-3-11 (1070)	Surface structures of LSAT (001) single crystal substrates N. Nishikawa, K. Ohashi, K. Sasaki, T. Tokunaga (Nagoya Univ.), S. Kobayashi (Japan Fine Ceramic Center), T. Yamamoto (Nagoya Univ., Japan Fine Ceramic Center)
P-3-12 (1074)	Preparation and properties of nanoporous Pd derived from metallic glass alloy Y. Ohara, K. Hayashi, W. Sakamoto (Nagoya Univ.), S. Yamaura, W. Zhang (Tohoku Univ.), T. Yogo (Nagoya Univ.)
P-3-13 (1082)	Synthesis of inorganic-organic hybrid membranes with phosphonic acid and titanium oxide Naoya. Ozawa, Koichiro Hayashi, Wataru Sakamoto (Nagoya Univ.), Shinichi Yamaura, Wei Zhang (Tohoku Univ.), Toshinobu Yogo (Nagoya Univ.)
P-3-14 (1083)	Flux Growth of Titanate - Based Ion Exchanger and Its Application to Selective Uptake of Li(I) Ion from Aqueous Solution K. Ogawa, F. Hayashi, S. Oishi, K. Teshima (Shinshu Univ.)
P-3-15 (1088)	Controlling Shape and Size of Ba₅Nb₄O₁₅C₂ Crystals by Flux Growth Processes and Their Nitridation to BaNbO₂N₂C₂ Crystals Y. Murata, T. Yamada, H. Wagata, S. Oishi, K. Teshima (Shinshu Univ.)
P-3-16 (1097)	Electric field effect on magnetic hysteresis in ultrathin Co films R. Tanaka, D. Oshima, T. Kato, S. Iwata (Nagoya Univ.), S. Tsunashima (Nagoya Industrial Science Research Institute)
P-3-17 (1100)	Fabrication and Properties of Lead - Free Piezoelectric (Ba,Ca)(Ti,Sn)O₃ Ceramics K. Noritake, K. Hayashi, W. Sakamoto, T. Yogo (Nagoya Univ.)
P-3-18 (1110)	Synthesis of flexible hybrid particles with dual modality H. Hayashi, K. Hayashi, W. Sakamoto, T. Yogo (Nagoya Univ.)
P-3-19 (1112)	Magnetic strain sensor using GMR films with magnetostrictive free layer N. Yamamoto, T. Kato, S. Iwata (Nagoya Univ.)
P-3-20 (1136)	Oxidation Behavior of Ce Thin Layer Deposited on HOPG Yuki Koda (Mazda Motor Company, Hiroshima Univ.), Galif Kutluk (Hiroshima Univ.), Hirosuke Sumida (Mazda Motor Company), Shinya Yagi (Hiroshima Univ., Nagoya Univ.), Hirofumi Namatame (Hiroshima Univ.)

Poster Program November 28 (Sat) 2015

Session 3 IB Building Entrance 16:00-17:30

Functional Materials for Environment

Presentation No.	Title, Author(s)
P-3-21 (1164)	An Admicellar Sorbent Impregnated with Fe/Ni-Particles for the Degradation of Perchloroethylene Hiroaki Matsumiya, Yuki Akahoshi (Nagoya Univ.)
P-3-22 (1181)	Preparation and Photocatalytic Activity of Chlorine - Free Gold Nanoparticles on Titanium Oxide by Solution Plasma Method T. Mizutani, S. Ogawa, M. Yamamoto (Nagoya Univ.), H. Nameki (Aichi Center for Tokoname Ceramic Research Center), T. Yoshida (Osaka City Univ.)
P-3-23 (1185)	Hydrothermal Synthesis and Shape Control of Ceria Nanocrystals Katsutoshi Kobayashi (Nagoya Univ.), Masaaki Haneda (Nagoya Institute of Technology), Masakuni Ozawa (Nagoya Univ.)
P-3-24 (1193)	Local crystal structure and oxygen storage capacity of Eu - doped CeZrO_x nanoparticles Y. Yoshimura, K. Kobayashi, M. Ozawa (Nagoya Univ.)
P-3-25 (1194)	Production and evaluation of monodispersion zirconia nanoparticles by hydrothermal method A. Fukaya, K. Kobayashi, M. Ozawa (Nagoya Univ.)
P-3-26 (1196)	Controlled synthesis and catalytic properties of Pd - based nanocomposite H. Kato, K. Kobayashi, M. Ozawa (Nagoya Univ.)
P-3-27 (1197)	Oxygen evolution behavior by temperature programmed reduction profile of ceria based catalysts T. Hirose, T. Hattori, K. Kobayashi, M. Ozawa (Nagoya Univ.)
P-3-28 (1198)	Oxygen storage capacity and catalytic oxidation activity of CeZrO_x nanoparticles with low content of platinum M. Iwakawa, K. Kobayashi, M. Ozawa (Nagoya Univ.)
P-3-29 (1200)	Surface Morphology and Arrangement of Nanoparticles on Several Substrates T. Hattori, T. Karai, K. Kobayashi, M. Ozawa (Nagoya Univ.)
P-3-30 (1201)	Microstructural development and catalytic properties of oxidized Zr-Pd-Ce glassy alloys N.Katsuragawa, S. Kato (Nagoya Univ.), S.Yamura (Tohoku Univ.), K. Kobayashi, T.Yogo, M. Ozawa (Nagoya Univ.)

Poster Program November 28 (Sat) 2015

Session 3 IB Building Entrance 16:00-17:30

Functional Materials for Environment

Presentation No.	Title, Author(s)
P-3-31 (1204)	Controlled synthesis and hydrogen storage properties of Pd based alloy nanoparticles Y. Iinuma, K. Kobayashi, M. Ozawa (Nagoya Univ.)
P-3-32 (1205)	Thermal stability, catalytic behavior and sintering of CeO₂ nanoparticles T. Karai, T. Hattori, K. Kobayashi, M. Ozawa (Nagoya Univ.)
P-3-33 (1207)	Grain growth behavior of CeO₂ nanoparticles during modified hydrothermal treatment R. Hashimoto, K. Kobayashi, M. Ozawa (Nagoya Univ.)
P-3-34 (1210)	Fabrication and electrochemical characterization of carbon nanotube microelectrode for biosensors T. Ushiyama, N. X. Viet, S. Kishimoto, Y. Ohno (Nagoya Univ.)
P-3-35 (1213)	Nanoparticles for Hydrogen Storage Application : Pd, Ni and Mg Nanoparticles S. Ogawa, H. Suzuki, C. Tsukada (Nagoya Univ.), T. Yoshida (Osaka City University), S. Yagi (Nagoya Univ., Osaka City Univ.)
P-3-36 (1014)	Spinor interference in transmission electron microscope M. Kuwahara, K. Sameshima, K. Aoki, H. Asano, T. Ujihara, K. Saitoh, N. Tanaka (Nagoya Univ.)
P-3-37 (1067)	Measurement of partial electron energy - loss spectra of hexagonal boron nitride by the inner - shell excitation of inelastic scattering of fast electron K. Ishioka, K. Saitoh (Nagoya Univ.)
P-3-38 (1087)	Examination of Background processing of strain measurement of rocking curves with Convergent - Beam Electron Diffraction in iterative phase retrieval M. Miura, S. Fujinami, K. Saitoh, N. Tanaka (Nagoya Univ.)

Poster Program November 28 (Sat) 2015

Session 4 ES Hall 16:00-17:30

Ecological Energy Conversion and Storage

Presentation No.	Title, Author(s)
PI-4-1 (1227) (Invite)	Preparation and Performance of Protective Coating for Fe-Cr-Mn-Ni Alloy Steel at Elevated Temperature X. Zhang, S. Ye, L. Wei (Institute of Process Engineering, Chinese Academy of Sciences), X. Shan, G. Fu (Institute of Process Engineering, Chinese Academy of Sciences, Univ. of Chinese Academy of Sciences)
P-4-1 (1013)	DFT Calculation - based Computational Studies for Phase Stabilities of Metal - doped Oxygen - deficient $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_{4-\delta}$ H. Shiiba, N. Zettsu (Shinshu Univ., Japan Science and Technology Agency), M. Nakayama (Nagoya Institute of Technology), K. Teshima (Shinshu Univ., Japan Science and Technology Agency)
P-4-2 (1015)	Enhanced direct steam reforming of hydrocarbon fuel in SOFCs at low operation temperature M. Suzuki, N. Konagai, S. Kanehira, K. Kikuta (Nagoya Univ.)
P-4-3 (1020)	Catalytic effect of LDH with Ag nanoparticles for hydrogen generation from ammonia borane T. Nagasaki, S. Kanehira, K. Kikuta (Nagoya Univ.)
P-4-4 (1055)	Microstructural analysis of the interface between Sn and lithiated Sn K. Hayasaka, K. Sasaki, T. Tokunaga, T. Yamamoto (Nagoya Univ.)
P-4-5 (1062)	For developing of an alternative model on temperature dependence of soil thermal conductivity I. Sakaguchi (Saitama Univ., JST-CREST), H. Mochizuki (NARO Western Region Agricultural Research Center), A. Katayama (Nagoya Univ.), T. Kasubuchi (Yamagata Univ.), T. Saito, K. Kawamoto, T. Komatsu (Saitama Univ., JST-CREST)
P-4-6 (1077)	Preparation of Water - in - Fuel Emulsion by Ultrasonic Irradiation under Surfactant - Free Condition and Evaluation of its Stability M. Ueda, Y. Kojima (Nagoya Univ.)
P-4-7 (1078)	Measurement of atomic temperature in detached recombining plasma by laser absorption spectroscopy T. Tsujihara (Nagoya Univ.), M. Aramaki (Nihon Univ.), S. Kajita, N. Ohno (Nagoya Univ.)
P-4-8 (1079)	Steam Reforming of Butanol on Chemically Recuperated Gas Turbine (CRGT) using Ni/Al Catalysts Modified with Cerium Y. Yamashita, Y. Noiri, Y. Kojima (Nagoya Univ.)

Poster Program November 28 (Sat) 2015

Session 4 ES Hall 16:00-17:30

Ecological Energy Conversion and Storage

Presentation No.	Title, Author(s)
P-4-9 (1080)	<p>Proposal of Liquid Turbine Power Generator Driven by Fluid Flow Induced by Phase Changes of Low-Boiling-Point Medium with Water H. Kato, B. Kariya, M. Kawakami, H. Taguchi, Y. Ishihara (Nagoya Univ.), N. Isu (LIXIL Corporation), Y. Nakai (Nakai Electrical Construction Corporation), S. Deguchi (Nagoya Univ.)</p>
P-4-10 (1085)	<p>Preparation of Porous Metal Particles with Surfactants by Ultrasonic Method Y. Yamashita, T. Maruyama, Y. Kojima (Nagoya Univ.)</p>
P-4-11 (1093)	<p>Development of energy harvesting devices using magnetostrictive thin film T. Nishida, D. Oshima, T. Kato, S. Iwata (Nagoya Univ.)</p>
P-4-12 (1104)	<p>Effect of Addition of Mixed Gas Including Hydrogen on Combustibility of Pulverized Coal G. Yada, I. Naruse, R. Yoshiie, Y. Ueki (Nagoya Univ.), S. Matsuzaki (NIPPON STEEL & SUMITOMO METAL CORPORATION)</p>
P-4-13 (1107)	<p>Ash Deposition Reduction and Ash Corrosion Control in Waste Combustion Boiler T. Shimizu, Y. Ueki, R. Yoshiie, I. Naruse (Nagoya Univ.) Hiroshi Naganuma (Tohoku Electric Power Eng. & Construction Co.,Inc .)</p>
P-4-14 (1108)	<p>Study on Technique for Promoting Oxidation of Low Concentration Hydrocarbon K. Watabe, R. Yoshiie, Y. Ueki, I. Naruse (Nagoya Univ.)</p>
P-4-15 (1109)	<p>Gasification Behavior of Woody Biomass and Tar Reduction in Packed-bed Gasifier A. Yamada, Y. Ueki, R. Yoshiie, I. Naruse (Nagoya Univ.)</p>
P-4-16 (1114)	<p>Ash Particle Behaviors during Combustion or Gasification of Coke Lump Y. Ueki, S. Wakata, R. Yoshiie, I. Naruse (Nagoya Univ.)</p>
P-4-17 (1120)	<p>Study for Sorbents of Trace Elements in Coal Gasification Y. Mizuno, I. Naruse, R. Yoshiie, Y. Ueki (Nagoya Univ.)</p>

Poster Program November 28 (Sat) 2015

Session 4 ES Hall 16:00-17:30

Ecological Energy Conversion and Storage

Presentation No.	Title, Author(s)
P-4-18 (1131)	<p align="center">Investigation of Fragmentation and Coalescence Behaviors of Ash Particles in Simulated Coal Combustion</p> <p align="center">R. Yoshiie, H. Nishimura, Y. Ueki, I. Naruse (Nagoya Univ.)</p>
P-4-19 (1144)	<p align="center">Pyrolysis of Discarded Bamboo</p> <p align="center">N. Zhu, H. Chen, Y. Cai (Shizuoka Institute of Science and Technology)</p>
P-4-20 (1153)	<p align="center">BDF Synthesis by Ultrasonic Irradiation Based on Solid Catalysis</p> <p align="center">N. Zhu, W. Li, T. Tsuchiya (Shizuoka Institute of Science and Technology)</p>
P-4-21 (1150)	<p align="center">Dehumidification Behaviors of Cross-flow Heat Exchanger Type Desiccant System</p> <p align="center">N. Hanaoka, M. Kubota, H. Matsuda (Nagoya Univ.), A. Kodama (Kanazawa Univ.)</p>
P-4-22 (1154)	<p align="center">Absorption Behavior of Liquid-/Vapor-phase H₂O on Thermosensitive gels for Evaluating Novel Water Recovery System</p> <p align="center">T. Mochizuki, M. Kubota, H. Matsuda (Nagoya Univ.)</p>
P-4-23 (1155)	<p align="center">Preparation of a New LiOH-MPC Composite for Low-temperature Chemical Heat Storage</p> <p align="center">S. Matsumoto, M. Kubota, H. Matsuda (Nagoya Univ.)</p>
P-4-24 (1156)	<p align="center">Kinetic Studies on Ammonia Absorption on Nickel Chloride under Pressurized Condition for Ammonia Storage</p> <p align="center">K. Matsuo, M. Kubota, H. Matsuda (Nagoya Univ.), T. Fuse (DENSO Corporation)</p>
P-4-25 (1159)	<p align="center">Development of hydrogen generating agent based on Al foil - Ca(OH)₂ system</p> <p align="center">K. Nagashima, H. Visbal, R. Chinzaka, M. Shimizu, M. Nishi, K. Hirao (Kyoto Univ.)</p>
P-4-26 (1192)	<p align="center">Charge / discharge control of EV in small - scale system</p> <p align="center">M. Koyama, T. Takeda, K. Yukita, Y. Goto, K. Ichiyanagi (Aichi Institute of Technology)</p>
P-4-27 (1203)	<p align="center">Flux Growth of Truncated Octahedral Shaped LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Crystals by Sulfide Flux and characterization of their Electrochemical Properties</p> <p align="center">K. Yoshino, T. Kimijima, N. Zettsu, K. Teshima (Shinshu Univ.)</p>

Poster Program November 28 (Sat) 2015

Session 5 ES Hall 16:00-17:30

Intelligent Energy Network

Presentation No.	Title, Author(s)
P-5-1 (1028)	Study on Pitch Motion Optimization of Wing-Stroke Wind Turbine H. Nakano, Y. Hasegawa (Nagoya Institute of Technology), H. Suzuki (Yamaguchi Univ.), T. Ushijima (Nagoya Institute of Technology)
P-5-2 (1035)	Research of Electric Power Regeneration using Automotive Cooling Fan (Improvement of Fan Efficiency by Diffuser) Y. Wagayama, S. Oda, Y. Hasegawa (Nagoya Univ.), H. Suzuki (Yamaguchi Univ.), T. Ushijima (Nagoya Univ.)
P-5-3 (1050)	Improvement of Flux Pinning Force in Magnetic Fields at Low Temperatures of BaHfO₃ - Doped SmBa₂Cu₃O_y Superconducting Tapes Prepared Using the LTG Technique Y. Doki, S. Miura, Y. Ichino, Y. Yoshida (Nagoya Univ.) A. Ibi, T. Izumi (ISTEC), T. Kato (JFCC)
P-5-4 (1051)	Superconducting properties in the force free state of multilayered SmBa₂Cu₃O_y films doped with BaHfO₃ on IBAD - MgO tapes N. Shimazaki, K. Sugihara, Y. Ichino, Y. Yoshida (Nagoya Univ.)
P-5-5 (1053)	Investigation of the Longitudinal Magnetic Field Effects in Superconductors by the Computer Simulation Using the TDGLE equations K. Adachi, Y. Ichino, Y. Yoshida (Nagoya Univ.)
P-5-6 (1121)	Nowcasting of Irradiance Distribution based on Kriging Interpolation Method using All - sky Image Information K. Takashima, M. Kurimoto, Y. Suzuoki, Y. Manabe, T. Funabashi, T. Kato (Nagoya Univ.)
P-5-7 (1122)	A Study on Stability of Microgrid with Inverter - based DG at Fault - Triggered Islanding Events S. Igarashi, M. Kurimoto, Y. Suzuoki, Y. Manabe, T. Kato, T. Funabashi (Nagoya Univ.)
P-5-8 (1124)	Design of Ceramic Volume Fraction in Epoxy Composite for Achieving Graded Permittivity and Constant Thermal Expansion Coefficient H. Ozaki, M. Kurimoto, T. Kato, T. Funabashi, Y. Suzuoki (Nagoya Univ.)
P-5-9 (1132)	A Study on Infrared Satellite Image Processing for Several hours - ahead Forecasting of Early Morning Irradiance K. Yoshiura, Y. Manabe, M. kurimoto, T. Kato, T. Funabashi, Y. Suzuoki (Nagoya Univ.)
P-5-10 (1133)	Lower Permittivity Insulator using Mesoporous - Silica/Epoxy Composite Y. Yamashita, M. Kurimoto, T. Kato, T. Funabashi, Y. Suzuoki (Nagoya Univ.)

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Intelligent Energy Network

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P-5-11 (1175)	A Study on Influence of Large Forecast Error of Aggregated Power Output of Photovoltaic Power Generation on System Frequency K. Matsumoto, M. Kurimoto, Y. Suzuki, Y. Manabe, T. Funabashi, T. Kato (Nagoya Univ.)
P-5-12 (1184)	A Study on Unit Commitment Rescheduling in Accordance with Forecast Updates of Photovoltaic Electricity Generation Y. Hatanaka, Y. Manabe, M. Kurimoto, T. Kato, T. Funabashi, Y. Suzuki (Nagoya Univ.)
P-5-13 (1191)	Load frequency control using flywheel considering reactive power in small power system Y. Tanaka, T. Hosoe, K. Yukita, K. Ichiyanagi, Y. Goto (Aichi Institute of Technology)

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Smart Energy Community

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P-6-1 (1008)	<p>Blue Color Difference Modulation for Digital Signage Visible Light Image Sensor Communication System S. Sato, H. Okada, K. Kobayashi, T. Yamazato, M. Katayama (Nagoya Univ.)</p>
P-6-2 (1009)	<p>Performance Analysis of Wireless Mesh Networks Using Forward/Reverse - Link Multi - User MIMO C. Fuwa, H. Okada, K. Kobayashi, M. Katayama (Nagoya Univ.)</p>
P-6-3 (1016)	<p>Prototype implementation of a field monitoring and control system T. Wada, T. Ogaw, K. Naito (Aichi Institute of Technology)</p>
P-6-4 (1036)	<p>A Note on the Effectiveness of Acknowledgement of Packet Loss in Wireless Control System with H - infinity Control T. Ogura, K. Kobayashi, H. Okada, M. Katayama (Nagoya Univ.)</p>
P-6-5 (1047)	<p>Low Temperature Generation of High Pressure Hydrogen from Urea Aqueous Solution with Aluminum Additive B. Kariya, H. Kato, Y. Ishihara, H. Taguchi, H. Sekii (Nagoya Univ.), Y. Niihara (Alphasystem Corporation), N. Isu (LIXIL Corporation), S. Deguchi (Nagoya Univ.)</p>
P-6-6 (1066)	<p>Construction of an Indoor Wireless Control System using an Image Sensor for Multiple Mobile Cars S. Kimura, K. Kobayashi, H. Okada, M. Katayama (Nagoya Univ.)</p>
P-6-7 (1165)	<p>U - tube Snow Melting System using a heat pump water heater T. Ooyama, K. Ooe, H. Takeuchi, T. Hasegawa (Nagoya Univ.)</p>
P-6-8 (1167)	<p>Measurement of Narrowband Power Line Communication Performance in a Large Scale Building K. Endo, K. Kobayashi, H. Okada, M. Katayama (Nagoya Univ.)</p>

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Session 7 ES Hall 16:00-17:30

Environmental Biological Remediation and Conse

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P-7-1 (1072)	Synergistic Effects of Ultrasound and Ultraviolet Light on Oxidation Reaction Using Photocatalyst T. Ito, Y. Kojima (Nagoya Univ.)
P-7-2 (1081)	Predicting Habitat Expansion of <i>Latrodectus hasseltii</i> Using a Migration Kernel Function Including Anthropogenic Transportation Y. Maegawa, T. Machimura, T. Matsui (Osaka Univ.)
P-7-3 (1127)	Direct Monitoring of Gaseous Trace Antimony by LIBS R. Ishikawa, R. Yoshiie, I. Naruse, Y. Ueki (Nagoya Univ.)
P-7-4 (1134)	Assessment of decontamination technologies for radioactive caesium - affected farmland with unified index, disability - adjusted life years A. Kuno, I. Sakaguchi, A. Katayama (Nagoya Univ.)
P-7-5 (1152)	The Development of the Environmental Depollution Electrochemical Device using a Microbial Electrode Y. Miyata (Nagoya Municipal Industrial Research Institute), K. Kanda, T. Awata, A. Katayama (Nagoya Univ.)
P-7-6 (1157)	Development of a biological volume reduction process of contaminated biomass by radioactive compounds K. Kimbara, H. Harakawa, K. Kimura, M. Shintani (Shizuoka Univ.), M. Nakamura, Y. Otsuka (FFPRI), K. Sasaki, K. Sasaki (Hiroshima Kokusai Gakuin Univ.), Y. Nakashimada, J. Kato (Hiroshima Univ.)
P-7-7 (1161)	In situ Observation of Spatial pH Distribution Generated by Pulsed Discharge Plasma over Aqueous Solution S. Takahashi, K. Mano, Y. Hayashi, N. Takada, H. Kanda, M. Goto (Nagoya Univ.)
P-7-8 (1179)	In - situ bio remediation in a groundwater contaminated with chlorinated volatile organic compounds (VOCs) X. Jin, T. Awata, X. Zhou, T. Demachi (Nagoya Univ.), K. Asahi, Y. Okamura (Nagoya City Institute for Environmental Sciences), T. Simomura, K. Yokoyama, M. Kamada, Y. Mase (DOWA Eco - System Co.,Ltd), N. Yoshida (Nagoya Institute of Technology), T. Horibe (City of Nagoya), A. Katayama (Nagoya Univ.)
P-7-9 (1183)	Decomposition of Chemical Compounds by using Discharge Plasma in Gas - Liquid Slug Flow K. Mano, Y. Hayashi, Wahyudiono, N. Takada, H. Kanda, M. Goto (Nagoya Univ.)

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Presentation No.	Title, Author(s)
P-7-10 (1217)	<p>Optimizing the Timber Production and Utilization System for Low Carbon Regions K. Tatebayashi, T. Matsui (Osaka Univ.), M. Ooba (National Institute for Environmental Studies), T. Machimura (Osaka Univ.), Y. Tani, A. Nakao, Y. Yamamoto (Wakayama Univ.)</p>

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Session 8 IB Building Entrance 16:00-17:30

Utilization of Biomass for Low-Carbo

Presentation No.	Title, Author(s)
P-8-1 (1117)	Performance of semi-continuous fixed-bed digester for thalassic biogas production of Ecklonia species (Arame) T. Noboribayashi, G. Powell B. Marquez, T. Hasegawa, H. Takeuchi (Nagoya Univ.)
P-8-2 (1166)	Choline-Based Molten Salts for the Conversion of Sugars into 5-Hydroxymethylfurfural H. Matsumiya, T. Hara (Nagoya Univ.)
P-8-3 (1171)	Study for the Deactivation and Regeneration of the Carbon - Based Solid Acid Catalyst for Saccharification K. Oba, H. Machida, H. Horizoe (Nagoya Univ.)
P-8-4 (1176)	Study for the saccharification pretreatment of biomass by the new hot water explosion Y. Honda, H. Machida, H. Horizoe (Nagoya Univ.)
P-8-5 (1189)	Study for the Behavior of Organic Impurities in Bioethanol from the Extractive Distillation using LPG Solvent N. Nakata, H. Machida, H. Horizoe (Nagoya Univ.)

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Radioactive Materials Recovery and Restoration

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P-9-1 (1033)	<p>Effects of pH and temperature on the precipitate of uranyl hydroxide formed by neutralization of uranyl solution with sodium hydroxide K. Hirayama, K. Sawada, T. Sugiyama, Y. Enokida (Nagoya Univ.)</p>
P-9-2 (1091)	<p>Selective Removal of Sr(II) Ion from Aqueous Solution by Flux-Grown KTiNbO₅ Crystals with Zig-Zag Layered Nano-Structure F Hayashi, X. Xiao(Shinshu Univ.), K. Ishihara, K. Namiki (Futamura Chemical Company), S. Oishi, K. Teshima (Shinshu Univ.)</p>
P-9-3 (1130)	<p>Measurement of Viscosity of Molten Borosilicate Glass Containing Ruthenium Dioxide R. Yoshida, K. Sawada, Y. Enokida (Nagoya Univ.)</p>
P-9-4 (1137)	<p>Influence of Structure of the Ternary Borosilicate Glass on Its Leachability S. Kawamura, Y. Ota, K. Fuji, K. Sawada, T. Sugiyama, Y. Enokida (Nagoya Univ.)</p>
P-9-5	<p>Study of neutrino-nucleus interactions with nuclear emulsion at J-PARC H. Oshima</p>
P-9-6	<p>J-PARC neutrino experiment T60: the application of time resolved multi-stage shifter K. Yamada</p>
P-9-7	<p>Multiplicity Distributions of OPERA Experiment C. Kamiscioglu</p>
P-9-8	<p>Neutrino Induced Charm Production in the OPERA Experiment M. Kamiscioglu</p>
P-9-9	<p>Charm to electron decay event in OPERA T. Matsushita</p>
P-9-10	<p>Exploration of volcanic internal structure by cosmic ray radiography using nuclear emulsion A. Nishio</p>

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Radioactive Materials Recovery and Restoration

Presentation No.	Title, Author(s)
P-9-11	Improvement of Sensitivity of Nuclear Emulsion M. Moto
P-9-12	Improvement of angular accuracy of nuclear emulsion by using thick type plastic base Y. Manabe
P-9-13	Improvement of imaging performance with Emulsion Cloud Chamber for muon radiography M. Kuno
P-9-14	Muography of the shallow part of Stromboli (Italy) by using nuclear emulsion detector (tentative title) S. Miyamoto
P-9-15	Imaging of volcanic eruptions by noise reduction in a muographic image (tentative title) T. Kusagaya
P-9-16	Study of Tumulus by the Method of Muon Radiography K. Ishiguro
P-9-17	Description of the Life in the Hospital by the Word of Physics M. Nakamura
P-9-18	HTS - Ultrafast Nuclear Emulsion Readout System R. Komatani
P-9-19	GRAINE2015 balloon borne experiment in Australia: Thermal design and analysis of the pressure vessel and the gondola E. Shibayama
P-9-20	Balloon borne experiment GRAINE: swelling process of nuclear emulsion for readout Y. Tateishi
P-9-21	Dark Matter Search with Cryogenic Nuclear Emulsion M. Kimura
P-9-22	Analysis of hadron interactions detected in balloon-borne emulsion chamber by automated emulsion read-out system M. Morishita