

ISETS05

International Symposium on EcoTopia Science 2005

August 8 (Mon) - 9 (Tue), 2005

Integrated Building (IB), Nagoya University, Japan

Organized by EcoTopia Science Institute, Nagoya University

Monday, August 8, 2005

Conference Hall

9:00 - 9:20

Opening Ceremony

9:20 - 10:20

Plenary Lecture 1

Chair : K. Kitagawa (Nagoya University)

" Thermal Destruction of Wastes for Clean Energy Production "
Prof. A. K. Gupta
University of Maryland, USA

10:30 - 12:30

OS2 Advanced Energy System (1)

Chair : K. Kitagawa (Nagoya University)

OS2-1-1 Keynote Lecture

" Alternate Fuels and Combustion Processes for Propulsion "
G. D. Roy
Office of Naval Research, Mechanics and Energy Conversion Division, USA

Chair : K. Hanamura (Tokyo Institute of Technology)

OS2-1-2

" Study on Thermal Efficiencies and Emissions of Cooking Stoves Firing Wood and Charcoal "
S. Kittilapanon⁽¹⁾, W. Permchart⁽²⁾, S. Tanatvanit⁽³⁾
(1) Ramkhamhaeng University, Thailand
(2) King Mongkut's Institute of Technology, Thailand
(3) Ramkhamhaeng University, Thailand

OS2-1-3

" Study on Effect of Steam Addition on Spray Combustion Characteristics "
T. Tsujimura, T. Furuhashi, M. Arai
Gunma University, Japan

OS2-1-4

" Development of an Advanced Structure of Natural-Gas-Combustion-Radiant-Tube-Burner for NOx Reduction "
C. Takami, Y. Umeda
Toho Gas Co., Ltd., Japan

OS2-1-5

" Enhancement of Volumetric Ignitions in Lean Hydrogen-Air Mixtures by Injection of Hot Turbulent Jets "
H. Saitoh, N. Yoshikawa
Nagoya University, Japan

14:00 - 15:40

OS2 Advanced Energy System (2)

Chair : S. Stendardo (ENEA – Italian Agency for New Technologies)

OS2-2-1

" Minimizing Fuel and Environmental Costs for a 1330-MW Power Plant Firing Fuel Oil/Gas. Part 1: Modeling Emissions for the Utility Boilers. "
V. I. Kuprianov, W. Kaewboonsong
Thammasat University, Thailand

OS2-2-2

" Minimizing Fuel and Environmental Costs for a 1330-MW Power Plant Firing Fuel Oil/Gas. Part 2: Optimization of Load Dispatching. "
W. Kaewboonsong, V. I. Kuprianov
Thammasat University, Thailand

OS2-2-3

" An Investigation of Active-Flow Control on Diesel Engine After-treatment "
M. Zheng, G. T. Reader, M. Wang
University of Windsor, Canada

Chair : Y. Umeda (Toho Gas Co., Ltd.)

OS2-2-4

" Effect of BDF on DI Diesel Engine Performance "
T. Saito, T. Furuhashi, M. Arai
Gunma University, Japan

OS2-2-5

" Performance of Air-Conditioning Machine with an Additional Condenser Using HCFC22 and HFC134a "
M. Goto, K. Tanifuji, M. Fujita, T. Yamauchi, K. Nagata, I. Ueno, T. Hasegawa
Nagoya University, Japan

16:20 - 17:40

OS2 Advanced Energy System (3)

Chair : M. Zheng (University of Windsor)

OS2-3-1

" Energy Saving Potential of Home Co-generation System, - Effect of Reverse Power Flow - "

A. Minagata, T. Kato, Y. Suzuki
Nagoya University, Japan

OS2-3-2

" Proton-Conducting In³⁺-doped SnP₂O₇ for Intermediate-Temperature Fuel Cells "

P. Heo⁽¹⁾, M. Nagao⁽¹⁾, A. Takeuchi⁽¹⁾, T. Hibino⁽¹⁾,
M. Sano⁽¹⁾, D. Hirabayashi⁽¹⁾, A. Tomita⁽²⁾

(1) Nagoya University, Japan

(2) National Institute of Advanced Industrial Science and Technology, Japan

OS2-3-3

" Modeling and Numerical Analysis of Planar Type SOFC with Uneven Structure Active Layer "

H. Aiki, T. Houra, Y. Nagano

Nagoya Institute of Technology, Japan

OS2-3-4

" Heat Pump Water Heater by Adsorption Cycle Combined with Gas-fired Boiler "

N. Kobayashi, Y. Suzuki, M. Hasatani
Nagoya University, Japan

Room B (IB015)

10:30 - 12:30

OS1 Renewable Energy (1)
- Biomass Energy 1 -

Chair : T. Hasegawa (Nagoya University)

OS1-1-1 **Keynote Lecture**

" Biodiesel Research in Korea "

Youn-Woo Lee

Seoul National University, Korea

Chair : Y. Ishida (Nagoya University)

OS1-1-2

" Fuelization of Wet Biomass by Hydrothermal Reforming with Mixing Rice Husk "

T. Namioka⁽¹⁾, J. Zhang⁽¹⁾, S. J. Ha⁽¹⁾, K. Sato⁽¹⁾,
K. Yamamoto⁽¹⁾, Y. Morohashi⁽¹⁾, K. Yoshikawa⁽¹⁾,
M. Nozaki⁽²⁾, J. Takase⁽³⁾

(1) Tokyo Institute of Technology, Japan

(2) Tsukishima Kikai Co., Ltd., Japan

(3) Nishimuragumi Co., Ltd., Japan

OS1-1-3

" Production of Biodiesel Fuels from Animal Fat and Vegetable Oil in Supercritical Fluids "

M. Sasaki, S. Okazaki, K. Fukuyama, M. Goto
Kumamoto University, Japan

OS1-1-4

" Development of Liquefaction Technique of Pulverized Ligneous Biomass Powder "

N. Kobayashi, T. Sato, Y. Itaya, S. Hatano,
J. Kobayashi, S. Mori
Nagoya University, Japan

OS1-1-5

" Chemical Conversion of Acid Hydrolysis Lignin, One of the By-products in Saccharification of Woody Materials to Functional Materials "

Y. Matsushita, M. Imai, K. Fukushima
Nagoya University, Japan

14:00 - 15:40

OS1 Renewable Energy (2)
- Biomass Energy 2 -

Chair : M. Goto (Kumamoto University)

OS1-2-1

" Thermal Energy Production by Hydrothermal Oxidation "

M. Fukayama, K. Wakamatsu, K. Ouryoji,
T. Hasegawa

Nagoya University, Japan

OS1-2-2

" Supercritical Water Gasification of Biomass: Lumped Kinetics "

H. Tang, Y. Ishida, T. Hasegawa, K. Kitagawa
Nagoya University, Japan

OS1-2-3

" Effect of Catalyst on Hydrothermal Treatment of Lignocellulose "

T. Yoshida, Y. Matsumura
Hiroshima University, Japan

Chair : Y. Itaya (Nagoya University)

OS1-2-4

" Effects of Fuel Moisture on Combustion Efficiency and Emission Performance of a Fluidized-Bed Combustor Firing Rice Husk "

R. Kaewklum⁽¹⁾, V. I. Kuprianov⁽¹⁾, W. Permchart⁽²⁾

(1) Thammasat University, Thailand

(2) King Mongkut's Institute of Technology,
Thailand

OS1-2-5

" Statistical Evaluation of Efficient and Economical Utilization of Woody Biomass for Electricity Production "

Y. Makino, T. Kato, Y. Suzuki
Nagoya University, Japan

16:20 - 17:20

OS1 Renewable Energy (3)
- Waste Gasification -

Chair : T. Yoshida (Hiroshima University)

OS1-3-1

" Regeneration of Chlorinated Organic Solvent by Hydrothermal Treatment in a Room of Automobile Engine "

T. Tsuda⁽¹⁾, K. Nakamura⁽¹⁾, M. Aoki⁽¹⁾, M. Uehara⁽²⁾

(1) Nagoya Institute of Technology, Japan

(2) Toenec Corporation, Japan

OS1-3-2

" Hydrogen Production from Waste Plastics Employing a High Temperature Steam Reforming Process "

D. Meng , T. Namioka , K. Yoshikawa

Tokyo Institute of Technology, Japan

OS1-3-3

" Basic Research on Hydrogen Production from Solid Wastes Using a High Temperature Steam Gasification Process "

S. Yao⁽¹⁾, K. Yoshikawa⁽¹⁾, Y. Son⁽¹⁾, T. Namioka⁽¹⁾,

Y. Oka⁽²⁾, T. Nakamura⁽²⁾

(1) Tokyo Institute of Technology, Japan

(2) Chugoku Electric Power Co., Inc., Japan

Room C (IB014)

10:30 - 12:30

OS9 Innovative Production System by Nanotechnology (1)

Chair : O. Takai (Nagoya University)

OS9-1-1

" Environment-Friendly Manufacturing Using Nano-Technology "

O. Takenaka, S. Noda, T. Soma

Aichi Science and Technology Foundation;

Aichi/Nagoya Knowledge Cluster Headquarters, Japan

OS9-1-2 **Keynote Lecture**

" Novel Biomimetic Bonelike Composites "

A. P. Tomsia, E. Saiz, J. Song, C. Bertozzi

University of California, Berkeley, USA

OS9-2-1 **Keynote Lecture**

" Engineering Emergent Functionality Using Biomimetic Polymers "

H. Choi, D. Wendell, C. D. Montemagno

University of California, Los Angeles, USA

OS9-1-5

" Room Temperature Synthesis of Silicon Nanoparticles Using Pulse-Modulated UHF SiH₄/H₂ Plasma "

M. Takahata, M. Hori, T. Chikyo

Nagoya University, Japan

14:00 - 16:00

OS9 Innovative Production System by

Nanotechnology (2)

Chair : D. Fujita (National Institute for Materials Science)

OS9-1-3

" Development of Nano-Process Control Technology Using Smart Sensors and Application to Automic Nano Production Equipment "

M. Hori⁽¹⁾, S. Takahashi⁽²⁾, S. Takashima⁽¹⁾,

M. Hiramatsu⁽³⁾, H. Kano⁽⁴⁾, S. Den⁽²⁾

(1) Nagoya University, Japan

(2) Katagiri Engineering Co., Ltd, Japan

(3) Meijo University, Japan

(4) NU Eco Engineering Co., Ltd, Japan

OS9-1-4

" Production of Size-Controlled Si Nano- Crystallites Using SiH₄+H₂ Discharges and Its Application to Optoelectronic Films "

M. Shiratani⁽¹⁾, K. Koga⁽¹⁾, Y. Watanabe⁽¹⁾,

S. Nunomura⁽²⁾, M. Kondo⁽²⁾

(1) Kyushu University , Japan

(2) National Institute of Advanced Industrial Science and Technology, Japan

OS9-2-2

" Supramolecular Assembly of Helical Polymers for Nanomaterials "

E. Yashima

Nagoya University and ERATO, JST, Japan

OS9-2-3

" Photocontrol of Nanostructures in Organic and Inorganic Thin Films "

T. Seki

Nagoya University, Japan

OS9-2-4

" In Situ Observation of Adsorption States of Heptyl Viologen Cation Radicals on the Indium-Tin-Oxide Electrode by Slab Optical Waveguide Spectroscopy "

Y. Ayato, N. Matsuda

National Institute of Advanced Industrial Science and Technology, Japan

OS9-2-5

" Covalent Immobilization of Gold Nanoparticles onto an Atomically Flat Semiconductor Surface "

T. Yonezawa, Y. Yamanoi, H. Nishihara

The University of Tokyo, Japan

16:20 - 18:00

OS9 Innovative Production System by Nanotechnology (3)

Chair : M. Shiratani (Kyushu University)

OS9-3-1

" Preparation Pt Particles on Carbon Nanowalls in Supercritical Carbon Dioxide "

M. Nakamura⁽¹⁾, M. Hiramatsu⁽¹⁾, H. Amano⁽¹⁾,

H. Kano⁽²⁾, T. Machino⁽³⁾, S. Takashima⁽³⁾, M. Hori⁽³⁾
(1) Meijo University, Japan
(2) NU-Eco Engineering, Japan
(3) Nagoya University, Japan

OS9-3-2

" Saccharide Display on the Silicon Surface "
H. Sato⁽¹⁾, Y. Miura⁽²⁾, N. Saito⁽¹⁾, K. Kobayashi⁽¹⁾,
O. Takai⁽¹⁾
(1) Nagoya University, Japan
(2) Japan Advanced Institute of Science and
Technology, Japan

OS9-3-3

" The Growth Mechanism of Nanowalls Growth in
Tandem Type H Radical Injection Plasma Enhanced
Chemical Vapor Deposition "
M. Ebihara⁽¹⁾, S. Takashima⁽²⁾, M. Hori⁽²⁾, S. Den⁽³⁾,
H. Kano⁽⁴⁾, T. Maeda⁽⁵⁾, M. Hiramatsu⁽⁶⁾
(1) Foresight Techno Co., Ltd, Japan
(2) Nagoya University, Japan
(3) Katagiri Engineering Co., Ltd, Japan
(4) NU Eko Engineering Co., Ltd, Japan
(5) Marubun Corporation, Japan
(6) Meijo University, Japan

OS9-3-4

" Novel Carbon Nanostructure Formation by Surface
Precipitation "
D. Fujita
National Institute for Materials Science, Japan

OS9-3-5

" Parameter Extraction Using Impedance Analysis for
Acoustic Wave Sensors Operated at Elevated
Temperatures "
F. A. Nae, N. Saito, O. Takai
Nagoya University, Japan

Room D (IB013)

10:30 - 12:10

OS4 Nanomaterials for Energy and
Environment (1)

Chair : N. Tanaka (Nagoya University)

OS4-1-1 **Keynote Lecture**

" Sustainable Molecular-Scale Materials Science and
Engineering using Biology "
M. Sarikaya
University of Washington, USA

OS4-1-2

" Design of Organic/Inorganic Nanohybrid Materials
for NO₂ Optical-Sensor "
S. Katayama⁽¹⁾, N. Yamada⁽²⁾, M. Awano⁽³⁾
(1) Fine Ceramics Research Association, Japan
(2) Nippon Steel Corporation, Japan
(3) Advanced Manufacturing Research Institute, Japan

OS4-1-3

" Catalytic Nanoparticulate Rare Earth Ceramic and its
Thermal Stabilization for Automobile
Exhaust-treatment "
M. Ozawa
Nagoya Institute of Technology, Japan

OS4-1-4

" Atomic Structural Change of Silver Plating Layers
Leading to the Induction of Selemion Bending "
H. Tamagawa, F. Nogata
Gifu University, Japan

14:00 - 15:20

OS4 Nanomaterials for Energy and
Environment (2)

Chair : O. Takai (Nagoya University)

OS4-2-1

" Chiral Packing Materials for Enantiomer Separation
Prepared by Immobilization of Polysaccharide
Derivatives onto Silica Gel "
X. Chen, T. Kubota, C. Yamamoto, Y. Okamoto
Nagoya University, Japan

OS4-2-2

" Functional Self-Assembled Monolayers on Silicon
Crystalline as Eco-Materials via Hydrosilylation of
Designed Organic Molecules on Hydrogen-terminated
Si(111) Surface "
T. Okano, A. Takeda, H. Inari, K. Hisatsune,
T. Ishizaki, N. Saito, W. Sakamoto, O. Takai
Nagoya University, Japan

OS4-2-3

" White Light Emission of Porous Aluminosilicate
Glasses Under Near-Ultraviolet Excitation "
T. Hayakawa, Y. Fujii, K. Yamada, M. Nogami
Nagoya Institute of Technology, Japan

OS4-2-4

" Efficient Plasma Techniques for Decomposition of
Waste Water "
P. Baroch, V. Anita, M. Oda, N. Saito, O. Takai
Nagoya University, Japan

16:20 - 17:40

OS4 Nanomaterials for Energy and
Environment (3)

Chair : F. Watari (Hokkaido University)

OS4-3-1

" A Dipole/Dipole Electrostatic Approach to
Preparation of Unbundled Single-Walled Carbon
Nanotubes "
B. Fugetsu⁽¹⁾, W. Han⁽²⁾, T. Akasaka⁽¹⁾, F. Watari⁽¹⁾
(1) Hokkaido University, Japan
(2) Molecular Imaging, U.S.A

OS4-3-2
" Preparation of Single-Walled Carbon Nanotube Solids and Their Mechanical Properties "
G. Yamamoto, Y. Sato, T. Takahashi, M. Omori, T. Hashida, A. Okubo, S. Watanabe, K. Tohji
Tohoku University, Japan

OS4-3-3
" Toughening of Hydroxyapatite by Multi-Walled Carbon Nanotube "
M. Omori, T. Watanabe, M. Tanaka, A. Okubo, H. Kimura, T. Hashida
Tohoku University, Japan

OS4-3-4
" Incorporation of Carbon Nanotubes into Spin-Labeled Liposome and its Influence on Electron Spin Resonance Spectra "
K. Suzuki
Hokkaido University, Japan

Room E (IB011)

10:30 - 12:10

OS8 Sustainable Society Management (1)

Chair : K. Tateishi (Nagoya University)

OS8-1-1 **Keynote Lecture**
" Engineering Infrastructure Research and Education for Sustainable Society Management ? The Case of Transportation and Cities "
J. Black
The University of New South Wales, Australia

OS8-1-2
" Lifecycle Analysis of Bridges Considering Longevity of Bridge and Severe Earthquakes "
Y. Itoh, S. Tsubouchi, M. Wada
Nagoya University, Japan

OS8-1-3
" Reuse of By-Products for Concrete Materials "
T. Seaki
Niigata University, Japan

OS8-1-4
" Soil Remediation Using Heated Soil Vapor Extraction Method "
R. S. Amano , P. M. MohanDas, T. Roy, J. Jatkar
University of Wisconsin, USA

14:00 - 15:40

OS8 Sustainable Society Management (2)

Chair : A. Katayama (Nagoya University)

OS8-2-1
" Concept of Space Agriculture Developed for a Testbed of Self-Sustainable Life on the Earth "

N. Katayama, Y. Ishikawa, M. Yamashita
Nagoya Women's University, Japan

OS8-2-2
" Life Cycle Assessment (LCA) of Chinese energy chains for Shandong electricity scenarios "
R. Dones⁽¹⁾, X. Zhou⁽²⁾, C. Tian⁽³⁾
(1) Paul Scherrer Institut (PSI), Switzerland
(2) Nagoya University, Japan
(3) Policy Research Center for Environment & Economy State Environmental Protection Administration, People's Republic of China

OS8-2-3
" Total Factor Productivity in the Presence of Environmental Constraints in China "
D. Xu, Y. Arayama
Nagoya University, Japan

OS8-2-4
" General Microbial Properties of Compost as Detected by Quinone Profile Method "
J.-C. Tang^(1, 2), A. Katayama⁽²⁾
(1) Nankai University, China
(2) Nagoya University, Japan

OS8-2-5
" Sustainable Application of Waste Minimization Systems for Medium Sized Municipalities: Case Study of Diamond Bar, California, USA "
J. Michael Huls⁽¹⁾, J. Perez⁽²⁾
(1) Huls Environmental Management, LLC, USA
(2) Environmental Coordinator of the City of Diamond Bar, USA

Lobby (1st Floor)

10:30 - 18:00

Poster Presentation 1

OS1-P-1
" Feasibility Study on Hydrogen Energy System with PEFC-CHP and FCV at Introductory Stage "
H. Y. Pak⁽¹⁾, N. Iwashima⁽¹⁾, K. Tsuduki⁽¹⁾, N. Kobayashi⁽¹⁾, T. Kato⁽¹⁾, Y. Suzuoki⁽¹⁾, T. Morikawa⁽¹⁾, K. Katsurayama⁽²⁾
(1) Nagoya University, Japan
(2) Toho Gas Co., Ltd., Japan

OS1-P-2
" Extra-Low Head Hydro Power Utilization by Darrieus Turbine "
K. Takenouchi, K. Okuma, A. Furukawa
Kyushu University, Japan

OS1-P-3
" Study on Fresh Water Making System with Moisture Absorption Utilizing Solar and Wind Energies "
T. Hayashi, Y. Hara, K. Tagawa, L. Wei, K. Tanaka, K. Nojima
Tottori University, Japan

- OS1-P-4
" Fuel Gasification by Hydrothermal Reaction "
H. Mishima, Y. Ishida, K. Kitagawa, T. Hasegawa
Nagoya University, Japan
(1) Nagoya University, Japan
(2) Nagoya Industrial Science Research Institute, Japan
- OS2-P-1
" Characteristics of Turbulent Diffusion Combustion of Dimethyl Ether(DME) under Pressurized Conditions "
A. Nitta, S. Nishio, Y. Kojima, Y. Hasegawa, T. Nakagawa, K. Kitagawa
Nagoya University, Japan
- OS2-P-2
" Fundamental Study on Evaporative Cooling System of Centrifugal Compressor for Micro Gas-Turbine System "
Y. Hasegawa, S. Maekawa
Nagoya University, Japan
- OS2-P-3
" Invisible-HiTAC-flame Control for Improving Steam Reformer Heating Performance Using Flame Ionization Monitoring Technique "
S. Mochida⁽¹⁾, T. Araake⁽¹⁾, T. Hasegawa⁽¹⁾, A. K. Gupta⁽²⁾
(1) Nippon Furnace Kogyo Kaisha, Ltd., Japan
(2) University of Maryland, USA
- OS2-P-4
" Theoretical Analysis of the Influence of the Exhaust Gas Temperature on Thermal Efficiencies of the Adsorption Rankine Cycle Driven by Low-Grade Heat"
Y. Hirota, N. Kobayashi
Nagoya University, Japan
- OS2-P-5
" Study on OH Radical in a Methane-Hydrogen Mixture Flame by Isotope Shift/Planar Laser Induced Fluorescence Spectroscopy "
A. Katoh⁽¹⁾, H. Oyama⁽²⁾, K. Kitagawa⁽¹⁾
(1) Nagoya University, Japan
(2) Nagoya Industrial Science Research Institute, Japan
- OS2-P-6
" Two Dimensional Spectrometric Observation of a Methane -Air Premixed Flame "
T. Nishimura, H. Oyama, K. Matsumoto, K. Choi, K. Kitagawa
Nagoya University, Japan
- OS2-P-7
" Visualization of Chemical Species Distribution in Hydrogen-Oxygen Premixed Flame "
Y. Sawa⁽¹⁾, H. Oyama⁽²⁾, K. Matsumoto⁽¹⁾, K. Kitagawa⁽¹⁾
(1) Nagoya University, Japan
(2) Nagoya Industrial Science Research Institute, Japan
- OS2-P-8
" Two Dimensional Spectrometric Observation of Inductively Coupled Plasma "
Z. Cui⁽¹⁾, H. Oyama⁽²⁾, H. Tang⁽¹⁾, K. Matsumoto⁽¹⁾, K. Kitagawa⁽¹⁾
- OS2-P-9
" Effect of Gas Constitution on Output Characteristic of PEFC "
E. Hattori, T. Hosoya, H. Oyama, Y. Muroga, K. Matsumoto, K. Kitagawa
Nagoya University, Japan
- OS2-P-10
" Enhancement of Desorption Rate of Water from Zeolite by Microwave Irradiation for Adsorption type Humidifier "
M. Saitake, M. Kubota, F. Watanabe, H. Matsuda
Nagoya University, Japan
- OS2-P-11
" Environmentally Conscious Design from Operating Co-generation Systems and Power Plants "
N. Maruyama, Y. Sadamichi, A. Widiyanto, S. Kato
Mie University, Japan
- OS2-P-12
" Experimental and Numerical Study on Combustion Characteristics of Dimethyl Ether/Air Mixture under Fuel-Rich Condition "
M. Yasunaga, Y. Kojima, Y. Hasegawa, T. Nakagawa, K. Kitagawa
Nagoya University, Japan
- OS2-P-13
" Preparation of Activated Carbon from Carbonaceous Materials by KOH Chemical Activation for Adsorption Heat Pump "
T. Kawano, M. Kubota, F. Watanabe, H. Matsuda
Nagoya University, Japan
- OS2-P-14
" Thermophotovoltaic Power Generation by Super-Adiabatic Combustion in Porous Quartz Glass "
T. Kumano, K. Hanamura
Tokyo Institute of Technology, Japan
- OS2-P-15
" Numerical Simulation of Turbulent Reactive Jet by PDF Method "
T. Kubo, Y. Sakai, T. Kazama
Nagoya University, Japan
- OS2-P-16
" Combustion Diagnostics with Acetone-OH Simultaneous PLIF "
S. Manome⁽¹⁾, Y. Nakamura⁽²⁾, H. Yamashita⁽¹⁾, N. Hayashi⁽¹⁾
(1) Nagoya University, Japan
(2) Hokkaido University, Japan
- OS2-P-17
" Experimental Study on Combustion Phenomenon Using Mixture of Waste Vegetable Oil and Waste-Water Ground fed to the Fermentation Process"

- S. Torii⁽¹⁾, T. Yano⁽²⁾, N. Iino⁽²⁾
 (1) Kumamoto University, Japan
 (2) Kagoshima University, Japan
- OS2-P-18**
 " Study on PAHs Reduction Mechanism by Using Partial Premixed Flames "
 D. Ishii⁽¹⁾, Y. Nakamura⁽²⁾, S. Satake⁽¹⁾, H. Yamashita⁽¹⁾
 (1) Nagoya University, Japan
 (2) Hokkaido University, Japan
- OS2-P-19**
 " Double Diffusive Convection in Environment "
 H. Kawata, K. Kamakura
 Toyama National College of Technology, Japan
- OS2-P-20**
 " Effect of Perforated Plate in Thermally Layered Storage Tank "
 S. Kishimoto, T. Nakahara
 Aichi Institute of Technology, Japan
- OS2-P-21**
 " Manufacture of a Cross Type Heat Exchanger Manufacture Machine by a Fold-Up Formula System and Research of Its Heating Surface Form "
 Y. Sumihiro, T. Nakahara
 Aichi Institute of Technology, Japan
- OS2-P-22**
 " Steam-Driven Water-Piston Engine "
 T. Hu, Y. Kashiwagi, M. Uchida, Y. Momose, T. Hasegawa, K. Kitagawa
 Nagoya University, Japan
- OS3-P-1**
 " Thermoelectric properties of Cu- or Ni-doped Co_3O_4 "
 T. Takeuchi, K. Iwasaki, T. Matsui, T. Nagasaki, Y. Arita
 Nagoya University, Japan
- OS3-P-2**
 " Electrical Conductivity and Seebeck Coefficient of Sr-Co-O Single Crystal "
 T. Murase, K. Iwasaki, T. Matsui, T. Nagasaki, Y. Arita
 Nagoya University, Japan
- OS3-P-3**
 " Fabrication of Segmented n-type $\text{CoSb}_3/\text{Bi}_2\text{Te}_3$ Thermoelectric Module and Its Performance "
 T. Muto, T. Itoh, N. Kanetake, K. Kitagawa
 Nagoya University, Japan
- OS3-P-4**
 " Effects of Secondary Phases for Thermoelectric Properties of Ru_2Si_3 "
 H. Kawai, Y. Arita, K. Iwasaki, T. Matsui
 Nagoya University, Japan
- OS3-P-5**
 " Power Factor of $\text{La}(\text{Fe},\text{Ni})\text{O}_3$ "
 K. Iwasaki, T. Ito, T. Matsui, T. Nagasaki, Y. Arita
 Nagoya University, Japan
- OS8-P-1**
 " Rescue Number for Soil (RNSOIL), a Useful Risk-Economic Index, for the Evaluation of Remediation Technologies of Contaminated Site in Research and Developments "
 Y. Inoue, A. Katayama
 Nagoya University, Japan
- OS8-P-2**
 " A Study on Perspectives of Waste Disposal Facilities in Seoul for Sustainable Development "
 Da-Mi Moon
 Nagoya University, Japan
- OS8-P-3**
 " Aerobic/Anaerobic Biodegradation of Phenol Derivatives in Various Paddy Soils "
 A. Shibata, Y. Inoue, A. Katayama
 Nagoya University, Japan
- OS8-P-4**
 " Sustenance and Characterization of Anaerobic Biodegradation of Polychlorinated Biphenyls "
 D. Baba, A. Katayama
 Nagoya University, Japan
- OS8-P-5**
 " Evaluation of Eco-Industrial Development Based on Advanced Loop-Closing Technology and Infrastructure in Steel Industry by Using Waste I-O Analysis "
 N. Yoshida⁽¹⁾, Y. Yamamoto⁽²⁾, T. Morioka⁽²⁾
 (1) Wakayama University, Japan
 (2) Osaka University, Japan
- OS9-P-1**
 " Structural, Magnetic and Electrical Characterization of High-Density Fe and Fe-Co alloy Cluster-Assembled Films by Energetic Cluster Deposition "
 D. L. Peng, H. Yamada, K. Sumiyama, T. Hihara, T. Uchida
 Nagoya Institute of Technology, Japan
- OS9-P-2**
 " Chemical Synthesis of Size- and Shape-Controlled Iron Nanoparticles toward Self-Assembly "
 S. Yamamuro, T. Ando, S. Sadamasa, C. Narita, M. Yukioki, K. Sumiyama
 Nagoya Institute of Technology, Japan
- OS9-P-3**
 " Electrical Conductivity Measurement of Carbon Micro-Coil "
 Y. Kajihara⁽¹⁾, T. Hihara⁽¹⁾, K. Sumiyama⁽¹⁾, S. Motojima⁽²⁾
 (1) Nagoya Institute of Technology, Japan
 (2) Gifu University, Japan

- OS9-P-4**
 " Effect of Supports on Micro Catalytic Reactor "
 H. Yamada⁽¹⁾, H. Shimizu⁽¹⁾, A. Kanemoto⁽¹⁾,
 T. Tagawa⁽¹⁾, Y. Wu⁽¹⁾, Y. Miyata⁽²⁾
 (1) Nagoya University, Japan
 (2) Nagoya Municipal Industrial Research Institute,
 Japan
- OS9-P-5**
 " Memorizing Surface potential on an
 Amino-terminated Self-Assembled Monolayer with
 Atomic Force Microscopy "
 S.H. Lee, T. Ishizaki, N. Saito, O. Takai
 Nagoya University, Japan
- OS9-P-6**
 " Surface Potential Imaging of Self-Organized DNAs "
 K. Ishida, T. Ishizaki, N. Saito, O. Takai
 Nagoya University, Japan
- OS9-P-7**
 " Large-scale Micropatterning of Mesostructured Silica
 Films Through a Spatially-defined Surface
 Modification Technique "
 A. Hozumi⁽¹⁾, S. Kojima⁽²⁾, T. Seki⁽²⁾, Y. Yokogawa⁽¹⁾,
 T. Kameyama⁽¹⁾
 (1) National Institute of Advanced Industrial Science
 and Technology, Japan
 (2) Nagoya University, Japan
- OS9-P-8**
 " Immobilization of Bacteria onto the Artificial
 Siderophore-Modified Substrate "
 T. Inomata, K. Matsumoto, Y. Funahashi, T. Ozawa, K.
 Jitsukawa, H. Masuda
 Nagoya Institute of Technology, Japan
- OS9-P-9**
 " Metallophthalocyanine Complex Encapsulated in the
 Faujasite Zeolite "
 N. Ohata, Y. Ito, H. Kitamura, Y. Funahashi, T. Ozawa,
 H. Masuda
 Nagoya Institute of Technology, Japan
- OS9-P-10**
 " Surface Functionalization for Improved Cell
 Adhesion and Proliferation "
 Y. Wu, M. Kariyazaki, N. Saito, A. Ito, H. Honda,
 O. Takai
 Nagoya University, Japan
- OS9-P-11**
 " Fabrication of Au Nano-Line on Organosilane
 Self-Assembled Monolayers Using Scanning Probe
 Nanolithography "
 T. Ishizaki, S.H. Lee, N. Saito, O. Takai
 Nagoya University, Japan
- OS9-P-12**
 " Direct Metal Drawing-Induced Nanostructures Made
 of Gold Using Scanning Probe Microscopy and its
 Application "
 T. Ishizaki, S.H. Lee, N. Saito, O. Takai
 Nagoya University, Japan
- OS9-P-13**
 " The Effect of Surface-Active Agent in Tin Oxide
 Preparation through Electrodposition "
 T. Uehara, T. Ishizaki, N. Saito, O. Takai
 Nagoya University, Japan

Noyori Conference Hall

18:30 - 20:00

Reception