



ICMR 2009 AKITA The Final Circular

The Sixth International Conference on Materials Engineering for Resources

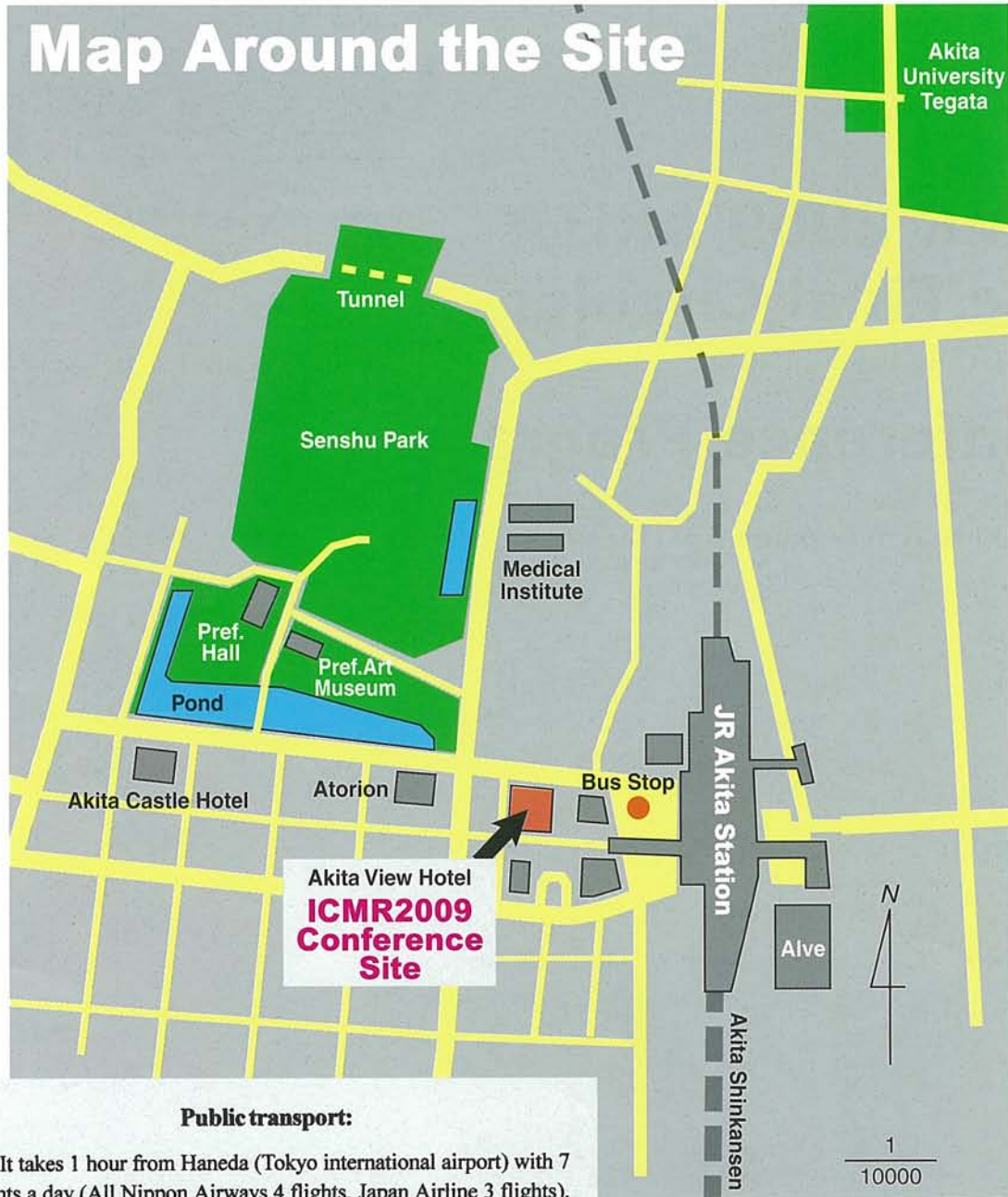
Conference Program

October 21 Wed. - 23 Fri., 2009
Akita View Hotel, Akita City, Japan



Organized by :
The Society of Materials Engineering for Resources of Japan and
Faculty of Engineering and Resource Science, Akita University and
Akita University

ICMR 2009 AKITA



Public transport:

It takes 1 hour from Haneda (Tokyo international airport) with 7 flights a day (All Nippon Airways 4 flights, Japan Airline 3 flights). Flight service is also available from Osaka, Nagoya, and Sapporo. The limousine runs between the Akita airport and the bus terminal in front of the JR Akita station. You can also enjoy a 4 hour bullet train trip from Tokyo (Akita Shinkansen).

Time Schedule of ICMR 2009

October 21 (Wednesday) Plenary Session

Main Room

8:00- Registration (Conference Lobby)

8:45- 9:00 Opening Ceremony

9:00-11:55 Session 1

9:00- 9:35 PL-1. **Brajendra Mishra**, Colorado School of Mines (U.S.A.)

9:35-10:10 PL-2. **Lech Czarnecki**, Warsaw University of Technology (Poland)

10:10-10:45 PL-3. **Kimoon Kim**, Pohang University of Science and Technology (Korea)

10:45-11:20 PL-4. **Jin-Ming Lin**, Tsinghua University (China)

11:20-11:55 PL-5. **Akira Harada**, Osaka University (Japan)

Lunch Break (11:55-12:50)

12:50-15:10 Session 2

12:50-13:25 PL-6. **William H. Smyrl**, University of Minnesota (U.S.A.)

13:25-14:00 PL-7. **Robert M. Corn**, University of California-Irvine (U.S.A.)

14:00-14:35 PL-8. **Tetsuo Osa**, Tohoku University (Japan)

14:35-15:10 PL-9. **Tomokazu Matsue**, Tohoku University (Japan)

Coffee Break (15:10-15:25)

15:25-17:10 Session 3

15:25-16:00 PL-10. **Bruce Terris**, Hitachi Global Storage Technologies (U.S.A.)

16:00-16:35 PL-11. **Antonio Rubio**, Politechnical University of Catalonia (Spain)

16:35-17:10 PL-12. **Akira Tonomura**, Hitachi, Ltd. (Japan)

18:00-20:00 Conference Party

October 22 (Thursday) Keynote Session

Room A

8:00- Registration

8:30-10:10 Session A1

Strategy of Environment, Resource and Energy for Sustainable Development

A1-1, A1-2, A1-3, A1-4

10:20-12:00 Session A2

Construction Materials for Sustainable Development

A2-1, A2-2, A2-3, A2-4

13:00-14:15 Session A3

New Materials for Life Science-I

A3-1, A3-2, A3-3

14:25-16:05 Session A4

New Materials for Life Science-II

A4-1, A4-2, A4-3, A4-4

Room B

8:00- Registration

8:30-9:45 Session B1

New Recycling Systems & Processing and Characterization of Functional Materials-I

B1-1, B1-2, B1-3

9:55-11:35 Session B2

Processing and Characterization of Functional Materials-II

B2-1, B2-2, B2-3, B2-4

13:00-14:40 Session B3

Computer Engineering and Materials Engineering for Resources

B3-1, B3-2, B3-3, B3-4

14:50-16:55 Session B4

New Technology for Industry

B4-1, B4-2, B4-3, B4-4, B4-5

October 23 (Friday) Poster Session

Room A

10:00-12:00 Session A

(3-Minutes Lecture) AP1-AP36

13:00-15:00 Session A

(Poster Site Discussion) AP1-AP36

Room B

10:00-12:00 Session B

(3-Minutes Lecture) BP1-BP33

13:00-15:00 Session B

(Poster Site Discussion) BP1-BP33

Main Room

15:10-15:30 Closing Ceremony

October 22 (Thursday) Joint Symposium with ICMR 2009 AKITA

5F Room Botan

13:00-17:00

Akita University International Symposium on Academic Networks
– Akita University and its Alliance with Partner Institutions –

Organizer : Akita University

Co-Organizer : The Society of Materials Engineering for Resources of Japan (ICMR 2009 AKITA)

Invitation University :

Heilongjiang University (China)

St. Cloud State University (U.S.A.)

Hanoi University of Technology (Vietnam)

University of Transport and Communications Hanoi (Vietnam)

Kemi-Tornio University of Applied Sciences (Finland)

Pohang University of Science and Technology (Korea)

Mongolian University of Science and Technology (Mongolia)

Botswana International University of Science and Technology (Botswana)

Institut Teknologi Bandung (Indonesia)

Chulalongkorn University (Thailand)

Silla University (Korea)

NOTE

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October 21 (Wednesday) Plenary Session

Main Room

- 8:00-8:45-9:00** Registration (Conference Lobby)
8:45-9:00 Opening Ceremony Chairperson ; Shinnichi Nakata
9:00-11:55 Session 1
Chairperson ; Toyohisa Fujita, Makoto Kawakami, Fumio Hamada, Mitsutoshi Jikei, Robert M. Corn
- 9:00-9:35**
PL-1. Materials Recycling for Sustainability.
Brajendra Mishra, Colorado School of Mines (U.S.A.)
- 9:35-10:10**
PL-2. Sustainable Construction as a Research Area
Lech Czarnecki and Marek Kaproń, Warsaw University of Technology (Poland)
- 10:10-10:45**
PL-3. Functionalized Cucurbiturils and Their Biological Applications
Kimoon Kim, Kyeng Min Park, Kyungwon Suh, Hyuntae Jung, Don-Wook Lee, Youngjoo Ahn, Jeeyeon Kim, Kangkyun Baek and Jin Sook Jeong, Pohang University of Science and Technology (Korea)
- 10:45-11:20**
PL-4. Direct Writing of Hydrogel Microarrays in Microchannels Using Field Diaphragm-Assisted Microscope Projection Photolithography
Jin-Ming Lin and Jiangjiang Liu, Tsinghua University (China)
- 11:20-11:55**
PL-5. Artificial Polymerases and Molecular Chaperones
Akira Harada, Osaka University (Japan)

Lunch Break (11:55-12:50)

- 12:50-15:10** Session 2
Chairperson ; Masami Taguchi, Kazuhiko Fujiwara, Fumio Hamada, Toshiaki Otsuka
- 12:50-13:25**
PL-6. Oxide Nanotubes for Fuel Cells and Batteries
William H. Smyrl, University of Minnesota (U.S.A.)
- 13:25-14:00**
PL-7. Diffraction-Based Plasmonic Methods for Chemical Sensing with Nanoparticles and Nanowire Arrays
Robert M. Corn, Aaron R. Halpern, Iuliana Sendroiu and Naoya Nishi, University of California-Irvine (U.S.A.)
- 14:00-14:35**
PL-8. Design and Preparation of Chemically Modified Electrodes for Selective Organic Electro-Preparative Synthesis
Tetsuo Osa, Yoshitomo Kashiwagi and Uichi Akiba, Tohoku University (Japan)
- 14:35-15:10**
PL-9. Integrated Biodevices Based on Microfabrication with Biomaterials
Tomokazu Matsue, Tohoku University (Japan)

Coffee Break (15:10-15:25)

- 15:25-17:10** Session 3
Chairperson ; Shunji Ishio, Hitoshi Saito, Hideo Tamamoto
- 15:25-16:00**
PL-10. From Nanolithography to Energy Assisted Writing - Is There a Limit to Magnetic Recording Density?
B. Terris, T. Thomson, R. Ruiz, B. Stipe, T. Strand, C. Poon, J. Katine, H. Balamane, N. Robertson, H. Nemoto and A. Hirotsune, Hitachi Global Storage Technologies (U.S.A.)
- 16:00-16:35**
PL-11. Electronic Design under New Alternatives to Solid-State Semiconductors.
Antonio Rubio and Carmen Garcia, Politecnical University of Catalonia (Spain)
- 16:35-17:10**
PL-12. Direct Observation of Microscopic Magnetic Structures in Materials by Electron Phase Microscopy
Akira Tonomura, Hitachi, Ltd. (Japan)

- 18:00-20:00** Conference Party

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October 22 (Thursday) Keynote Session

Room A

Session A1 : *Strategy of Environment, Resource and Energy for Sustainable Development*

8:30-10:10

Chairperson : **Fumio Hamada, Nobuaki Ogawa, Toshio Mizuta, Isao Takashima**

- A1-1. Modification of Titania Based Photocatalysts for Solar Chemical Conversion, **Wonyong Choi, Yiseul Park, Jihee Park, Wooyul Kim and Jungwon Kim**, Pohang University of Science and Technology (Korea)
- A1-2. Change of the Influence of Long-distance Transportation of Ionic Pollutants on the Atmospheric Environment of Japan during Past Eight Years - Comparison of the Monitoring Results of Acid Precipitation Carried Out at Wide Areas in (2000-20001), (2004-2005), and (2007-2008) -, **Toru Ozeki, Ryoei Kikuchi and Nobuaki Ogawa**, Hyogo University of Teacher Education, Akita University (Japan)
- A1-3. Introduction to Rare-Earth Metal Resources in Thailand, **P. Charusiri, C. Sutthirat and V. Daorerk**, Chulalongkorn University (Thailand)
- A1-4. Mineralization in Indonesia - An Overview and Rare Metal Deposits -, **Made Emmy Relawati (Emmy Suparka) and Isao Takashima**, Bandung Institute Technology (Indonesia), Akita University (Japan)

Coffee Break (10:10-10:20)

Session A2 : *Construction Materials for Sustainable Development*

10:20-12:00

Chairperson : **Makoto Kagaya, Makoto Kawakami, Hidenobu Tokushige, Hiroshi Oikawa**

- A2-1. Numerical Studies on Concrete Members to Detect the Defects by Impact-Echo Method, **Sanghun Lee**, Tohoku Gakuin University (Japan)
- A2-2. Prospect of Demand for Concrete in Eastern Asian Countries in Terms of Statistics of Consumption of Cement in Europe and Japan, **Masahiro Ouchi**, Kochi University of Technology (Japan)
- A2-3. Trends for Sustainable Construction in Germany, **Thomas A. Bier**, Universität Bergakademie Freiberg (Germany)
- A2-4. Some Applications of Advance Technologies for Solving Transport Means Surveillance Problem in Vietnam, **Le Hung Lan, Nguyen Thanh Hai, Dang Quang Thach and Nguyen Trung Dung**, University of Transport and Communications Hanoi (Vietnam)

Lunch Break (12:00-13:00)

Session A3 : *New Materials for Life Science-I*

13:00-14:15

Chairperson : **Fumio Hamada, Tomokazu Matsue, Hiroshi Kubota, Kazuhiko Fujiwara**

- A3-1. The Hybrids of Cationic Liposomes and Biomaterials for Gene Delivery, **Shubiao Zhang and Shengdi Fan**, Dalian Nationalities University (China)
- A3-2. A Highly Sensitive Probe Detecting Low pH Area of Living Cell Based on Modified β -cyclodextrin, **Yoshihiko Kondo and Fumio Hamada**, Akita University (Japan)
- A3-3. Fluorescently Labeled Proteins as a Tool for Analyzing the Dynamics of Protein Quality Control in Living Cells, **Hiroshi Kubota, Akira Kitamura, Hideaki Itoh, Masataka Kinjo and Kazuhiro Nagata**, Akita University (Japan)

Coffee Break (14:15-14:25)

Session A4 : *New Materials for Life Science-II*

14:25-16:05

Chairperson : **Mitsutoshi Jikei, Fumio Hamada, Hiroshi Katagiri, Robert M. Corn**

- A4-1. Synthesis of Phenol- and Aniline-Based Oligomers as a Flexible Scaffold for Biomimetic Architectures, **Hiroshi Katagiri**, Yamagata University (Japan)
- A4-2. A SELEX (Artificial Evolution) Approach to Light-Up Sensing Materials for Bioimaging, **Yasuhiro Aoyama, Shinsuke Sando, Atsushi Narita and Masayoshi Hayami**, Doshisha University, Kyushu University, Kyoto University (Japan)
- A4-3. Fabrication and Application of 'Plasmonic Ag Nanosheet', **Kaoru Tamada**, Tohoku University (Japan)
- A4-4. Synthesis and Properties of Dendritic-Linear Block Copolymer Having Multiple Interaction Sites, **Mitsutoshi Jikei**, Akita University (Japan)

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October 22 (Thursday) Keynote Session

Room B

Session B1 : *New Recycling Systems & Processing and Characterization of Functional Materials-I*

8:30-9:45

Chairperson: **Atushi Shibayama, Hitoshi Saito, Satoru Yoshimura**

- B1-1. Developing a Recycling System by taking Advantage of using the RFID Technology, **Toyohisa Fujita, Nobuya Nakamura, Seiji Matsuo and Gjergj Dodbiba**, The University of Tokyo (Japan)
- B1-2. Nanomechanics Characterization of Diamond-Like Carbon with Different Substrate Temperature by MPCVD, **Kuen Ting, Hui-Ching Wang, Jung-Sheng Chen and Ching-Hsin Chang**, Lunghwa University of Science and Technology, National Chung Hsing University (Taiwan)
- B1-3. Characteristics of TiN Thin Films on Mechanical Details, **Nguyen Thi Phuong Mai**, Hanoi University of Technology (Vietnam)

Coffee Break (9:45-9:55)

Session B2 : *Processing and Characterization of Functional Materials-II*

9:55-11:35

Chairperson: **Hitoshi Saito, Shunji Ishio, Satoru Yoshimura**

- B2-1. Non-volatile Data Storage beyond 2020, **Leon Abelmann, Niels Tas, Erwin Berenschot and Miko Elwenspoek**, University of Twente (Netherlands)
- B2-2. Recent Study on Pt Containing Nanoparticles and Pt Nanorods Synthesized by Wet Chemical Method and Magnetic Switching Behaviors of CoPt Patterned Films, **W. L. Pei, G. W. Qin, Y. P. Ren and S. Ishio**, Northeastern University (China), Akita University (Japan)
- B2-3. Electrodeposition of Copper for Metallic Interconnects, **Kimin Hong, Youngho Ryu, Wonbae Bang, Byoungju Kang, Seung-Hee Lee and Seung Jin Yeom**, Chungnam National University, K. C. Tech Co., Ltd., Hynix Semiconductor Inc (Korea)
- B2-4. Synthesis and Vacuum Ultraviolet Spectral Properties of Nano-scaled Phosphor, **Yuhua Wang, Zhaofeng Wang, Xue Yu and Qizheng Dong**, Lanzhou University (China)

Lunch Break (11:35-13:00)

Session B3 : *Computer Engineering and Materials Engineering for Resources*

13:00-14:40

Chairperson: **Ryuji Igarashi, Masafumi Suzuki, Osamu Kamiya, Hideo Tamamoto**

- B3-1. Several Algorithms in Computer Graphics, **Yong Kui Liu and Heng-Bo Zhang**, Dalian Nationalities University (China)
- B3-2. Space Charge Effects on Breakdown of Oil-paper Insulation for Ultra-high Voltage Transformer, **Zhou Yuanxing, Li Guang-fan, Sun Qing-hua, Wang Yun-shan, Li Jin-zhong, Jiang Xin-xin, Qiu Yu-zhou and Wang Ning-hua**, Tsinghua University, China Electric Power Research Institute (China)
- B3-3. Reduction of Excess Activated Sludge by Ferrite Particles: Process and Possibilities, **Mahmudul Kabir, Masafumi Suzuki and Noboru Yoshimura**, Akita University (Japan)
- B3-4. Quasicrystals and Tiling Semigroups, **Akihiro Yamamura**, Akita University (Japan)

Coffee Break (14:40-14:50)

Session B4 : *New Technology for Industry*

14:50-16:55

Chairperson: **Masami Taguchi, Osamu Kamiya, Shoji Goto**

- B4-1. Passive Oxide Films and Their In-situ Detection, **Toshiaki Ohtsuka**, Hokkaido University (Japan)
- B4-2. Application of PVDF Pressure Gauge for Pressure Measurements of Non-ideal Explosives, **Kenji Murata and Yukio Kato**, Nippon-koki.Co.,Ltd. (Japan)
- B4-3. Effect of Temperature and Corrosive Environment on Cyclic Fatigue and Final Fracture Behavior of 2524 Aluminum Alloy, **Danqinga Yi, Mingzhea Zhou, Huiquna Liu, Bin Wang and Shenga Yang**, Central South University (China)
- B4-4. Interface Atomic Structures and Properties of Ceramics, **Yuichi Ikuhara**, The University of Tokyo (Japan)
- B4-5. Dependencies of Shoulder Induced, Pin Induced and Combined Flows on Rotation Speed and Welding Speed During Friction Stir Welding and Processing, **Zhan W. Chen and Song Cui**, AUT University (New Zealand)

October 23 (Friday) Poster Session

Room A

10:00-12:00 (3-Minutes Lecture) Chairperson : **Kazuhiko Imano, Ryuji Igarashi**

13:00-15:00 (Poster Site Discussion)

- AP-1. Pipeline Design of Settling Slurries Containing Mixed Sized Particles by Using the Wasp Method, **Hiroshi Sato, Naoki Kamiyama and Isamu Sato**, Akita University
- AP-2. Research on Utilization of Woody Residues from Bio-Ethanol Production, **Hironori Kobayashi, Takehiko Takahashi, Kazushi Ito, Arata Ito, Yukio Enda and Junichi Kobayashi**, Akita Prefectural University
- AP-3. Metal Recovery from Effluent Water of Metallurgical Refining Process by Cementation and Solvent Extraction, **Kazutoshi Haga, Hisayoshi Umeda, Atsushi Sasaki, Kunihiko Takahashi, Yasushi Takasaki and Atsushi Shibayama**, Akita University, Yokohama Metal Co., Ltd.
- AP-4. Recovery of Pt and Pd from PGM Mine Tailings by Magnetic Separation, **Jan. Pana. Rabatho, William Tongamp, Yasushi Takasaki and Atsushi Shibayama**, Akita University
- AP-5. Spontaneous Traveling Wave of Oil/water System -Transducer of Chemical Potential into Work- , **Akihisa Shioi, Takahiko Ban, Youichi Morimune, Daishi Mori and Katsuhito Oomiya**, Doshisha University
- AP-6. Fabrication of Porous Zinc Oxide Ceramics Having a Sustainable Antibacterial Activity under Dark Conditions, **Ken Hirota, Maiko Sugimoto, Masaki Kato, Kazuhiko Tsukagoshi, Tooru Tanigawa and Hiroshi Sugimoto**, Doshisha University, Meisui Co., Ltd.
- AP-7. Origin and Transportation Course of Heavy Metal Elements in the Particulate Matter (PM) at the Hachimantai Mountain Range at the Northern Japan, **Ryoei Kikuchi, Yuko Sasaki, Asami Oba, Ayako Sato, Makoto Takada, Takashi Kimoto, Toru Ozeki and Nobuaki Ogawa**, Akita University, Kimoto Electric Co. Ltd., Hyogo University of Teacher Education
- AP-8. Observation of the scavenging effect for ionic pollutants in the case of that the air mass brought the precipitation in Japan after precipitating in Korea, **Takanori Tanie, Nobuhisa Tamura, Ryuzi Nakata, Kaoru Fuzinaga, Toru Ozeki, Dong Uk Kim, Heejun Lim and Nobuaki Ogawa**, Akita University, Fukui University, Kanazawa Institute of Technology, Hyogo University of Teacher Education, Daegu National University of Education (Korea), Gyeongin National University (Korea)
- AP-9. Geology, Mineral Resources and Mining Activity of Mongolia, **S. Jargalan and D. Altankhuyag**, Mongolian University of Science and Technology (Mongolia)
- AP-10. Removing Arsenic from Acid Mine Drainage by Microbubble Flotation, **Danni Dai, Gjergj Dodbiba, Kazuya Sunaka, Chiharu Tokoro and Toyohisa Fujita**, The University of Tokyo
- AP-11. Synthesis of a Pb-Fe based Adsorbent and its Application in the Adsorption of Mo in Nitric Acid Solution, **Gjergj Dodbiba, I-Chen Wu, Yu-Chen Lee and Toyohisa Fujita**, The University of Tokyo
- AP-12. Copper Recovery from Printed Circuit Board by Carbonization, **Hiroyuki Ono, Gjergj Dodbiba and Toyohisa Fujita**, The University of Tokyo
- AP-13. The Use of Micro-bubble for Separating Plastic Mixtures, **Cyou Shin, Gjergj Dodbiba and Toyohisa Fujita**, The University of Tokyo
- AP-14. Recovery of Platinum from Cobalt-Rich Crust - Proposal of an In-situ Recovery Method -, **Li Pang Wang, Daisuke Sato, Gjergj Dodbiba, Jun Sadaki, Toyohisa Fujita, Atsushi Shibayama and Hajime Hishita**, The University of Tokyo, Akita University, Japan Oil, Gas and Metals National Corporation
- AP-15. DEM Simulation on Strength and Deformation Characteristics of Fiber-Cement-Stabilized Soil, **Hiroshi Takahashi and Naoki Konda**, Tohoku University
- AP-16. A New Recycling System of Waste Gypsum Board Paper :Application of Waste Gypsum Board Paper for Soil Improvement, **Hiroshi Takahashi and Hirokazu Kanahama**, Tohoku University
- AP-17. Material Conversion from Various Incinerated Ashes Using Alkali Fusion Method, **Takaaki Wajima and Katsuyasu Sugawara**, Akita University

- AP-18. Extractability of PGM from Mixed Metal Solution with New Derivative of Thiocalix[6]arene, **Yoshihiko Kondo, Mitsuhiro Akama, Manabu Yamada, Shinichi Itoh, Chunbin Li, Atsushi Shibayama and Fumio Hamada**, Akita University
- AP-19. Mn-oxides as Adsorbents for Molybdenum in Nitric acidic solution, **Jayappa Manjanna, Gjergj Dodbiba, Takahiro Kikuchi, Seiji Matsuo and Toyohisa Fujita**, The University of Tokyo, Japan Atomic Energy Agency
- AP-20. Method for Displaying False Colors on the Liquid Crystal Display by Switching Two Colors, **Chikako Ishizawa and Makoto Nishida**, Akita University
- AP-21. Reflection Response from a Finite Plane Crack Lying in Elastic Half-Space Subjected to SH Periodic Impact Load, **Kimihisa Miura**, Akita University
- AP-22. Precise Measurement of Air-refractive-index Fluctuation Using Laser Frequency Shift, **Tuan Banh Quoc, Lan Le Hung and Masato Aketagawa**, Nagaoka University of Technology, University of Transport and Communication (Vietnam)
- AP-23. Influence of Interface Anisotropy on Microstructure and Soft Magnetic Properties of Fe₆₅Co₃₅ Thin Films, **Fu-Lin Wei, Yan-Bo Li, Xi Liu, Zheng-Hua Li, Yu Fu, A.S. Kamzin and Zheng Yang**, Lanzhou University (China), Ioffe Physico-Technical Institute of Russian Academy of Sciences (Russia)
- AP-24. Proposal of Command Input Interface Using Lip Motion Features, **Yoshiyuki Sato, Yoichi Kageyama and Makoto Nishida**, Akita University
- AP-25. Extraction Method of Brain Regions with Balloon Models for Imaging Diagnosis Support of Alzheimer-Type Dementia, **Momoyo Ito, Makoto Nishida and Ikuro Namura**, Akita University
- AP-26. Network Anomaly Detection Based on R/S Pox Diagram, **Akinori Takahashi, Ryuji Igarashi, Hiroshi Ueda, Yukio Iwaya and Tetsuo Kinoshita**, Akita University, Gunma University, Tohoku University
- AP-27. A CG Contents Production System for Explaining Human Motions in a Digital Museum, **Takeshi Shibata, Takashi Yukawa, Takaaki Kaiga, Hiroshi Yokoyama and Hideo Tamamoto**, Akita University, North Asia University, Warabi-Za
- AP-28. A Novel Detection System for Second Harmonic Ultrasonic Pulse Waves using Bonded Ring Type Double-Layered Piezoelectric Transducer, **Makoto Fukuda and Kazuhiko Imano**, Akita University
- AP-29. High Resolution MFM Imaging of In-plane Magnetic Field Gradients using Transient Oscillation for Perpendicular Magnetic Recording Media, **Genta Egawa, Satoru Yoshimura, Tasuku Miyazawa, Guoqing Li and Hitoshi Saito**, Akita University, South Western University (China)
- AP-30. Developed a Technique to Find the Finger Joint Angles using Six Dimensional Position Sensors, **Md. Mostafizur Rahman, Kazutaka Mitobe, Masafumi Suzuki and Noboru Yoshimura**, Akita University
- AP-31. Supramolecular Assembly Based on Thiocalix[4]arene Complex with Rubidium ion (Rb⁺), **Manabu Yamada, Yoshifumi Shimakawa, Yoshihiko Kondo and Fumio Hamada**, Akita University
- AP-32. Synthesis and Crystal Structure of Thiocalix[4]arene Complex with Cesium ions (Cs⁺), **Yoshifumi Shimakawa, Manabu Yamada, Yoshihiko Kondo and Fumio Hamada**, Akita University
- AP-33. Double Stranded DNA Discrimination by Novel Di-pyrene Modified γ -cyclodextrins, **Akane Takeda, Noriaki Matsumura, Yoshihiko Kondo, Kazuhiko Akimoto and Fumio Hamada**, Akita University, Nissan Chemical Industries, Ltd.
- AP-34. Extraction Ability of Rare Metals with Diethylphosphatethiocalix[6]arene, **Yusuke Hashitani, Manabu Yamada, Yoshihiko Kondo, Atsushi Shibayama and Fumio Hamada**, Akita University
- AP-35. H₂O₂ Oxidation of 1,4-Dihydropyridines over Mg²⁺ Ion Exchanged Clinoptilolite and Solventless Solid State Acid Decomposition of Ester to 3,5-Pyridinedicarboxylic acid, **Takashi Yamashiro, Kanji Sato, Masayuki Nomura, Masataka Ogasawara, Sumio Kato and Shinichi Nakata**, Akita University, The University of Tokyo
- AP-36. Regulation Mechanisms of Aryl hydrocarbon Receptor by Molecular Chaperone HSP90, **Noriko Tsuji, Fumiaki Ohtake, Shigeaki Kato, Kei Ohtaka, Kazuhiro Sekine, Hiroshi Kubota and Hideaki Itoh**, Akita University, The University of Tokyo

October 23 (Friday) Poster Session

Room B

10:00-12:00 (3-Minutes Lecture) Chairperson : **Motoi Hara, Yotsugi Shibuya, Hiroshi Oikawa**

13:00-15:00 (Poster Site Discussion)

- BP-1. Effect of Preparation Conditions of Ti Ion Species on Structural Properties of TiO₂ Pillared Mica, **Shigeaki Kitabayashi, Yoshitaka Ehara, Takayoshi Shindo and Sentaro Ozawa**, Akita University
- BP-2. Study of Electrical Conduction and Electric Field Distribution in Two-layer Organic Electroluminescence Device by Impedance and Optical Electroabsorption Measurements, **Dai Taguchi, Shio Inoue, Wangcen Qin, Takaaki Manaka and Mitsumasa Iwamoto**, Tokyo Institute of Technology
- BP-3. Effect of Partial Reduction on Methanol Oxidation Activities of Pt Oxide Catalyst, **Masami Taguchi and Junichi Nakayama**, Akita University
- BP-4. Viscoelastic Analysis of Stress Concentration around a Hole in Laminated Composite Plates by Multi-Scale Approach, **Yotsugi Shibuya and Hideki Sekine**, Akita University
- BP-5. Relation of High SO₂ Absorptivity and Pore Structure Changes of Hydrated Lime Depending on Slaking Conditions for Quicklime, **Tetsushi Iwashita, Kyaw Choh, Yoshimi Gotoh, Mituhiro Kubota and Hitoki Matsuda**, Nagoya University, Yabashi Industries Co., Ltd.
- BP-6. Conductive Paper prepared by Electroless Nickel Plating, **Shohta Takemura, Takeshi Ueno, Toshihiro Takamatsu, Mihoko Igarashi, Toshiyuki Tanaki, Masahiro Shimada and Takayuki Okayama**, Tokyo Metropolitan Industrial Technology Research Institute, Tokyo University of Agriculture and Technology
- BP-7. Oxygen Storage Behavior of Delafossite-type CuLnO₂ (Ln=La, Y), **Sumio Kato, Hidenori Sato, Masataka Ogasawara, Shinichi Nakata, Takashi Watanabe and Yuunosuke Nakahara**, Akita University, Mitsui Mining & Smelting Co., Ltd.
- BP-8. Mechanism of Deactivity in Rh Catalysts, **Takashi Wakabayashi, Yuunosuke Nakahara, Masataka Ogasawara, Sumio Kato and Shinichi Nakata**, Akita University, Mitsui Mining and Smelting Co., Ltd.
- BP-9. Synthesis and Characterization of Nb-containing Mesoporous Materials from Layered Perovskite Type Potassium Niobium Oxyfluoride, **Masataka Ogasawara, Yusaku Amamoto, Hiroyuu Horiuchi, Koichi Obara, Sumio Kato and Shinichi Nakatam**, Akita University
- BP-10. The Study of Corrosion Behavior of Trivalent Chromium Coatings with Fe³⁺, **Chung-Ming Liu, Yu-Der Tsai, We-Kun Chen and Ming-Der Ger**, Lunghwa University of Science and Technology, National Defense University (Taiwan)
- BP-11. Influence of Boric Acid on the Corrosion Resistance of Trivalent Chromium Coatings on Galvanized Steel, **Chung-Ming Liu, Yu-Der Tsai, We-Kun Chen, Ming-Der Ger and Ching-Yuan Bai**, Lunghwa University of Science and Technology, National Defense University (Taiwan)
- BP-12. Effect of Resin Impregnation on Mechanical Properties of Rice Hull Silica Carbon, **Jun Asano, Mitsuhiro Kimura, Takeshi Takahashi and Hiroshi Iizuka**, Yamagata University, Sanwa Yushi Co., Ltd.
- BP-13. Diamond Film Growth on the Substrate of Mo-Re Alloy Foil, **Zhiming YU, Xiaobin WU, Jian Wang and Qiuping Wei**, Central South University (China)
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Edited by :

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September, 2009