

ICMR 2017 AKITA The Final Circular

The Eighth International Conference on
Materials Engineering for Resources

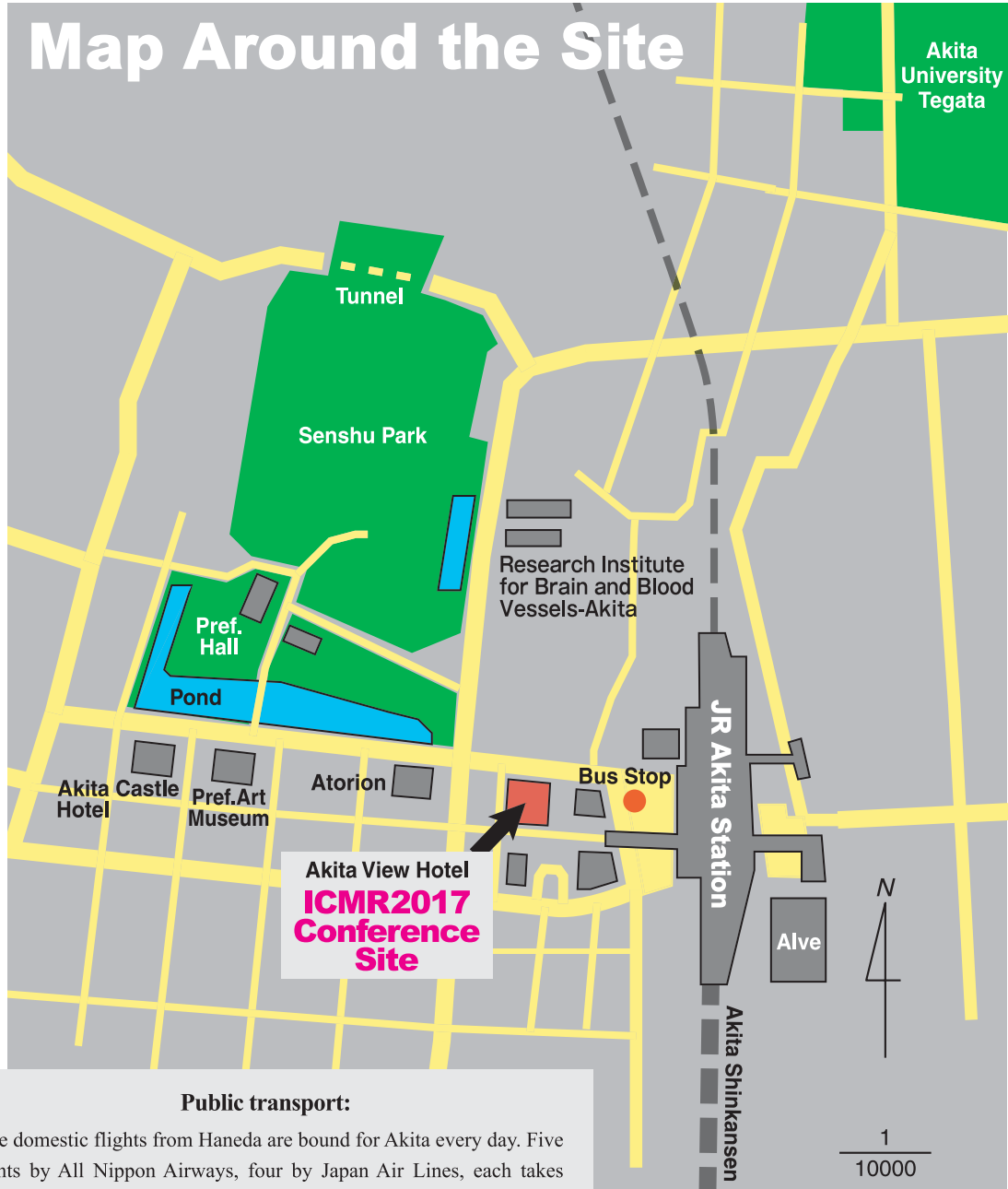


Conference Program

October 25 Wed. - 27 Fri., 2017 Akita View Hotel, Akita City, Japan

Organized by :
The Society of Materials Engineering for Resources of JAPAN and
Graduate School of Engineering Science, Akita University and
Graduate School of International Resource Sciences, Akita University and
Akita University Leading Program, Graduate School of International Resource Sciences and
Akita University International Center for Research and Education on Mineral and Energy Resources and
Akita University

ICMR 2017 AKITA



Public transport:

Nine domestic flights from Haneda are bound for Akita every day. Five flights by All Nippon Airways, four by Japan Air Lines, each takes about an hour to Akita. Airports in Osaka, Nagoya, and Sapporo are also connected to Akita Airport by several flights per day. Ground travel is also enjoyable by taking a four-hour bullet train "Super Komachi" from Tokyo Station.

Time Schedule of ICMR 2017

October 25 (Wednesday) Plenary Session/Keynote Session

Main Room

8:30- Registration (Conference Lobby)

9:30- 9:45 Opening Ceremony

Plenary Session

9:45-14:45

9:45-10:25 PL-1. **Robert M. Corn**, University of California-Irvine (USA)

10:25-11:05 PL-2. **Christopher J. Schofield**, Oxford University (UNITED KINGDOM)

11:05-11:45 PL-3. **Kouhei Tsumoto**, The University of Tokyo (JAPAN)

Lunch Break (11:45-12:45)

12:45-13:25 PL-4. **Hiroyuki Nishide**, Waseda University (JAPAN)

13:25-14:05 PL-5. **Sivaperuman Kalainathan**, VIT University (INDIA)

14:05-14:45 PL-6. **Zhan W. Chen**, Auckland University of Technology (NEW ZEALAND)

Keynote Session

Room A

14:55-17:00

Session A1

Advanced Materials for Sensors and Information Storage, Processing and Characterization of Functional Materials

A1-1, A1-2, A1-3, A1-4, A1-5

17:15-17:45 Attractions – KANTO – (beside the hotel)

18:00-20:00 Conference Party

Room B

14:55-17:00

Session A2

Computer Engineering and Materials Engineering for Resources, Construction Materials for Sustainable Development

A2-1, A2-2, A2-3, A2-4, A2-5

October 26 (Thursday) Keynote Session

Keynote Session

Room A

8:30-

Registration

9:30-10:45

Session A3

Processing and Characterization of Functional Materials

A3-1, A3-2, A3-3

10:55-12:35

Session A4

Advanced Materials for Sensors and Information Storage, Processing and Characterization of Functional Materials

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

Room B

Special Session of Akita University Leading Program

8:30-

Registration

9:15-10:45

Session B1

Earth Science and Resource Development Technology

B1-1, B1-2, B1-3

11:00-12:00

Session B2

Earth Science and Resource Development Technology

B2-1, B2-2

Lunch Break (12:35-13:35)

13:35-15:05

Session A5

Strategy of Life Science for Sustainable Development

A5-1, A5-2, A5-3

15:15-17:10

Session A6

Strategy of Life Science for Sustainable Development

A6-1, A6-2, A6-3, A6-4, A6-5

Lunch Break (12:00-13:00)

13:00-15:00

Session B3

Strategy of Environment, Resource and Energy for Sustainability and Development of New Recycling System for Rare Metals

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

15:15-17:15

Session B4

Development of New Recycling System for Rare Metals

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

October 27 (Friday) Poster Session

Room A

8:00-

Registration

9:30-12:00

Session A

(3-Minutes Lecture) AP1-AP35

13:00-15:00

Session A

(Poster Site Discussion) AP1-AP35

Room B

8:00-

Registration

9:30-12:00

Session B

(3-Minutes Lecture) BP1-BP38

13:00-15:00

Session B

(Poster Site Discussion) BP1-BP38

Main Room

15:10-15:30 Closing Ceremony

ICMR 2017 AKITA

October 25 (Wednesday) Plenary Session/Keynote Session

Main Room

8:30- Registration (Conference Lobby)

9:30-9:45 Opning Ceremony

Plenary Session

- 9:45-14:45 Chairperson ; **Masafumi Odaka, Mitsutoshi Jikei**
9:45-10:25 PL-1. Single Nanoparticle SPR Imaging Biosensing
Robert M. Corn, Adam M. Maley and Brandon M. Matthews, University of California-Irvine (USA)
10:25-11:05 PL-2. From Penicillins to Oxygen Sensing in Hummans
Christopher J. Schofield, Oxford University (UNITED KINGDOM)
11:05-11:45 PL-3. Thermodynamics for drug discovery and antibody engineering
Kouhei Tsumoto, The University of Tokyo (JAPAN)

Lunch Break (11:45-12:45)

- 12:45-13:25 PL-4. Redox Polymers for Energy Devices
Hiroyuki Nishide, Waseda University (JAPAN)
13:25-14:05 PL-5. Growth and Characterization of Scintillator Organic Single Crystal for Fast Neutron Detection
Sivaperuman Kalainathan and N. Durairaj, VIT University (INDIA)
14:05-14:45 PL-6. Solidification of CoCrMo alloy during selective laser melting
Zhan W. Chen, K. Darvish, M.A.L. Phan and T. Pasang, Auckland University of Technology (NEW ZEALAND)

Coffee Break (14:45-14:55)

Room A Keynote Session

Session A1 : *Advanced Materials for Sensors and Information Storage, Processing and Characterization of Functional Materials*

14:55-17:00 Session A1

- Chairperson ; **Kazuya Matsumoto, Yukihiro Inoue**
14:55-15:20 A1-1. Highly aromatic polymer architectures designed for optoelectronic applications
Brigitte Voit, Susanta Banerjee, Robert Pöttsch and Qiang Wei, Leibniz Institute of Polymer Research Dresden(IPF) (GERMANY)
15:20-15:45 A1-2. New Materials for Cell Sheet Recovery using Hyperbranched Polymers
Masa-aki Kakimoto, Yu Sudo and Yuta Nabae, Tokyo Institute of Technology (JAPAN)
15:45-16:10 A1-3. Soluble Polyimides and Polyamides Containing Trifluoromethyl Groups
Sang Youl Kim, Sun Dal Kim and Im Sik Chung, Korea Advanced Institute of Science and Technology (KAIST) (KOREA)
16:10-16:35 A1-4. Cyclosiloxane Materials for Bottom-up Assemblies
Masaya Mitsuishi, Yida Liu, Ali Demirci, Huie Zhu, Shunsuke Yamamoto and Tokuji Miyashita, Tohoku University (JAPAN)
16:35-17:00 A1-5. Synthesis and Properties of Dendritic Aromatic Polyamides
Kazuya Matsumoto, Kunio Nishi, Tadatake Sakurada and Mitsutoshi Jikei, Akita University (JAPAN)

Room B Keynote Session

Session A2 : *Computer Engineering and Materials Engineering for Resources, Construction Materials for Sustainable Development*

14:55-17:00 Session A2

- Chairperson ; **Yoichi Kageyama, Hidenobu Tokushige**
14:55-15:20 A2-1. Review on new eDRAM configurations for next nano-metric electronics era
Esteve Amat, R. Canal, A. Calomarde and A. Rubio, Universitat Politècnica de Catalunya (SPAIN)
15:20-15:45 A2-2. The Application of Fly Ash from Thermal Power Plant on Geopolymer Materials
Anh Tuan Le, Tan Khoa Nguyen and Hiroshi Takahashi, Ho Chi Minh City University of Technology (VIETNAM)
15:45-16:10 A2-3. Use of functionalized building materials for sustainable construction and repair
– Overview and examples for various applications –
Thomas A. Bier, TU Bergakademie Freiberg (GERMANY)
16:10-16:35 A2-4. Compressive strength and iron-supply capacity of porous-type steel-making slag concrete
Kozo Onoue and Seiya Shimon, Kumamoto University (JAPAN)
16:35-17:00 A2-5. Application of Cement-based Sealing Materials for Prevention and Remediation of Environmental Impact of Mining Development of Submarine Deposits
Keisuke Takahashi, UBE Industries, Ltd. (JAPAN)

17:15-17:45 Attractions – KANTO – (beside the hotel)

18:00-20:00 Conference Party

ICMR 2017 AKITA

October 26 (Thursday) Keynote Session

Room A Keynote Session

Session A3 : *Processing and Characterization of Functional Materials*

- 9:30-10:45** Chairperson ; **Osamu Kamiya, Kazutaka Mitobe**
9:30- 9:55 A3-1. Welding characteristics of titanium alloys
Timotius Pasang, Yuan Tao, Mana Azizi, Osamu Kamiya, Masami Mizutani and Wojciech Misiolek, Auckland University of Technology (NEW ZEALAND)
- 9:55-10:20** A3-2. Epoxy Nanocomposites for Power Applications
Ramanujam Sarathi, P. Nagachandrika and K. Sridharan
Indian Institute of Technology Madras (INDIA)
- 10:20-10:45** A3-3. Evaluation of Oxide Melt Crystallization Characterized by Capacitance Measurement
Noritaka Saito, Kyushu University (JAPAN)

Coffee Break (10:45-10:55)

Session A4 : *Advanced Materials for Sensors and Information Storage, Processing and Characterization of Functional Materials*

- 10:55-12:35** Chairperson ; **Hitoshi Saito, Satoru Yoshimura**
10:55-11:20 A4-1. A paradigm shift in solid structure ~Quasicrystal~
An-Pang Tsai, Tohoku University (JAPAN)
- 11:20-11:45** A4-2. Fused Pyrrole Core: A New Class of Quadrupolar Organic Moieties as Potential Resistive Memory Elements
Pratyay Basak, Ram Kumar Canjeevaram Balasubramanyam, Selvakannan R. Periasamy, Ramanuj Narayan and Samuel J. Ippolito, CSIR-Indian Institute of Chemical Technology (INDIA)
- 11:45-12:10** A4-3. Nanofabrication and Application of Magnetic Tunnel Junctions
Jong-Ching Wu, Guo-Hao Lai, Po-Joi Su, Chien-Tu Chao, Lance Horng and Teho Wu
National Changhua University of Education (TAIWAN)
- 12:10-12:35** A4-4. Synthesis of One-dimensional FePt Nanomaterials Induced by High Magnetic Field
Wenli Pei, Chun Wu, Xiaoyang Wang, Kai Wang and Qiang Wang,
Northeastern University (CHINA)

Lunch Break (12:35-13:35)

Session A5 : *Strategy of Life Science for Sustainable Development*

- 13:35-15:05** Chairperson ; **Takeshi Gotoh, Masafumi Odaka**
13:35-14:15 A5-1. Enabling Molecular Communication by Integrating Nature's Materials and Synthetic Biology
William E. Bentley, David N. Quan, Narendranath Bhokisham, Chen-Yu Tsao and Gregory F. Payne, University of Maryland College Park (USA)
- 14:15-14:40** A5-2. Mussel glue proteins for innovative biomedical applications
Hyung Joon Cha, Pohang University of Science and Technology (KOREA)
- 14:40-15:05** A5-3. Bioproduction of iron oxide minerals by acidophilic iron oxidizer
Naoyuki Miyata, Ayato Takahashi, Tatsuo Fujii, Hideki Hashimoto and Jun Takada
Akita Prefectural University (JAPAN)

Coffee Break (15:05-15:15)

Session A6 : *Strategy of Life Science for Sustainable Development*

- 15:15-17:10** Chairperson ; **Masafumi Odaka, Hirotohi Matsumura**
15:15-15:40 A6-1. Controlled Assembly of Heterotypic Cells in a Core-Shell Scaffold: Organ in a Droplet
Jin-Ming Lin and Qiushui Chen, Tsinghua University (CHINA)
- 15:40-16:05** A6-2. D-Amino acid productions and a novel amino acid racemase in lactic acid bacteria
Yuta Mutaguchi, Akita Prefectural University (JAPAN)
- 16:05-16:30** A6-3. Mass spectrometry of RNA toward direct analysis of epitranscriptome
Hiroshi Nakayama, RIKEN Center for Sustainable Resource Science (JAPAN)
- 16:30-16:50** A6-4. Preparation of adhesive growth factor IGF-1 by bioorthogonal chemistry
Hideyuki Miyatake, Nanomedical Engineering Laboratory, RIKEN (JAPAN)
- 16:50-17:10** A6-5. Geranylgeranylacetone alters H. pylori coccoid morphology
Ewa Grave, Akita University (JAPAN)

ICMR 2017 AKITA

October 26 (Thursday) Keynote Session

Room B Keynote Session (Special Session of Akita University Leading Program)

Session B1 : *Earth Science and Resource Development Technology*

- 9:15-10:45** Chairperson ; **Tokiyuki Sato**
9:15- 9:45 B1-1. The Future of Indonesia's Oil and Gas Energy (Technology Challenges)
Eko Widiyanto, Universitas Trisakti (INDONESIA)
9:45-10:15 B1-2. The Role of Mud Volcano System in East Java Basin Petroleum Play: Example from Kradenan Area
Muhammad Burhannudinnur, Universitas Trisakti (INDONESIA)
10:15-10:45 B1-3. The Exploration Potential of Japan 2020
Antonio Arribas, Akita University (JAPAN)

Coffee Break (10:45-11:00)

Session B2 : *Earth Science and Resource Development Technology*

- 11:00-12:00** Chairperson ; **Youhei Kawamura**
11:00-11:30 B2-1. Supergene Processes and Weathering-Related Mobility of Metals.
William X. Chavez, Jr., New Mexico Institute of Mining and Technology (USA)
11:30-12:00 B2-2. Advances in Numerical Methods for Rock Burst Modelling
Murat Karakus, The University of Adelaide (AUSTRALIA)

Lunch Break (12:00-13:00)

Session B3 : *Strategy of Environment, Resource and Energy for Sustainability and Development of New Recycling System for Rare Metals*

- 13:00-15:00** Chairperson ; **Ryo Inoue**
13:00-13:30 B3-1. Recovery and Recycling of Valuable Metals from Fine Industrial Waste Materials
Brajendra Mishra and Myungwon Jung, Worcester Polytechnic Institute (USA)
13:30-14:00 B3-2. The Key Aspects of Critical Materials Research at KIEM
Corby G. Anderson, Colorado School of Mines (USA)
14:00-14:30 B3-3. Stability Diagrams for Metal-Sulfur Systems Applied to Extractive Metallurgical Processes
Hsin-Hsiung Huang, Larry G. Twidwell and Courtney A. Young
Montana Tech of the Montana University (USA)
14:30-15:00 B3-4. Plastic containing shredder residues as reductant in base metals extraction
Bo Björkman, Caisa Samuelsson and Samira Lotf an, Lulea University of Technology (SWEDEN)

Coffee Break (15:00-15:15)

Session B4 : *Development of New Recycling System for Rare Metals*

- 15:15-17:15** Chairperson ; **Atsushi Shibayama**
15:15-15:45 B4-1. Application of Solvent Extraction to the Recycling Process of Electroless Nickel Plating Baths
Mikiya Tanaka, Hirochika Naganawa and Yukinori Saiki
National Institute of Advanced Industrial Science and Technology (JAPAN)
15:45-16:15 B4-2. Extractive Separation of Trivalent Rare Earths Metal Ions with Phenylphosphoric Acid Type of Trident Molecule for Rare Metal Recovery
Keisuke Ohto, Hiromasa Murashima, Shintaro Morisada and Hidetaka Kawakita
Saga University (JAPAN)
16:15-16:45 B4-3. Sumbawa Gold Ore Liberation Study; Ensuring the Success of Borax Method through Liberation Modelling
Himawan Tri Bayu Murti Petrus ST, Gadjah Mada University (INDONESIA)
16:45-17:15 B4-4. Implementation Morphometric and Histological study on Fish At Lebo Lake for initial Screening of Mercury Contamination in Small Scale Artisanal Gold Mining at Sumbawa Barat, Indonesia
Bambang Retnoaji, M.Sc., Gadjah Mada University (INDONESIA)

ICMR 2017 AKITA

October 27 (Friday) Poster Session

Poster Session

9:30-12:00 (3-Minutes Lecture)
12:00-15:00 (Poster Site Discussion)

Room A

Chairperson ; **Yoshihiko Kondo, Manabu Yamada**

- AP-1. Alkali Conversion of Waste Clay into Zeolitic Materials using NaOH and KOH solution, **Takaaki Wajima**, Chiba University
- AP-2. Removal of hydrogen sulfide gas using various adsorbents for methane utilization in hot spring gas, **Takayasu Ishida and Takaaki Wajima**, Chiba University
- AP-3. Selective Recovery of Palladium from PGM Containing Hydrochloric Acid Solution Using Thiocarbamoyl-Substituted Adsorbents, **Kazutoshi Haga, Shiori Sato, Muniyappan Rajiv Gandhi, Manabu Yamada and Atsushi Shibayama**, Akita University
- AP-4. Calix[4]arene-Based *n*-Dialkylamino Extractants for Platinum Group Metal Separation from Leach Liquors of Automotive Catalysts, **Manabu Yamada, Yu Kaneta, Muniyappan Rajiv Gandhi, Yetian Hu, Atsushi Shibayama and Fumio Hamada**, Akita University
- AP-5. Synthesis of SCS Type Pincer Extractants for Selective Extraction of Pd(II) from Platinum Group Metals: An Improved Approach to Current Refining Process, **Muniyappan Rajiv Gandhi, Manabu Yamada and Atsushi Shibayama**, Akita University
- AP-6. Investigation of Copper and Iron Recovery from Copper Ore by High Pressure Leaching, **Refwe Sandra Magwaneng, Kazutoshi Haga, Altansukh Batnasan, Atsushi Shibayama, Masato Kosugi, Ryo Kawarabuki, Kohei Mitsuhashi and Masanobu Kawata**, Akita University
- AP-7. Magnetic Separation and Leaching Study of Rare Earth elements from Apatite-Iron Ore, **Ariuntuya Battengel, Altansukh Batnasan, Kazutoshi Haga, Yasushi Watanabe and Atsushi Shibayama**, Akita University
- AP-8. Microwave Irradiation of Copper Ores for Improving the Degree of Liberation, **Gjergj Dodbiba, Y. Iwazaki, J. Ponou, K. Okaya, T. Fujita, J.V. Satur, R. Kawarabuki, T. Atarashi, K. Mitsuhashi and M. Kawata**, The University of Tokyo
- AP-9. Recovery of gold and copper in chips with resin mold for recycling, **Yonggu Kim, Toyohisa Fujita, Gjergj Dodbiba, Josiane Ponou and Akitake Honda**, The University of Tokyo
- AP-10. Recovery of phosphorus from sewage sludge ash by heat treatment followed by liquid-Liquid separation, **Mauricio Córdova Udaeta, Gjergj Dodbiba, Josiane Ponou, Keiichi Sone and Toyohisa Fujita**, The University of Tokyo
- AP-11. Nano Bubble and Emulsion Size Distribution Measurement by Interactive Force Apparatus, **Toyohisa Fujita, Takeshi Kurose, Josiane Ponou, Yukihiro Muta, Gjergj Dodbiba, Atsushi Shibayama and Akira Otsuki**, The University of Tokyo
- AP-12. Formation of Nano- and Micro-Gold Particles from Gold-Iodide Solution at pH 8-13, **Altansukh Batnasan, Kazutoshi Haga and Atsushi Shibayama**, Akita University
- AP-13. Carbonate Hosted Talc Deposits in Spinghar Fault Block, Nangarhar Province, Afghanistan, **Muhammad Tahir, Akira Imai, Ryohei Takahashi and Shujiro Yano**, Akita University
- AP-14. Geological Features of Quartz-Pyrite-Gold Veins in Lepanto Mine, Mankayan District, Northern Luzon, Philippines, **Pearlyn Manalo, Akira Imai, Leo Subang, Mervin De Los Santos, Kyoka Yanagi and Ryohei Takahashi**, Akita University
- AP-15. Rare metal mineralization of the Khaldzan Burgedei peralkaline complex, Western Mongolia, **Nergui Sarangua, Yasushi Watanabe and Takuya Echigo**, Akita University
- AP-16. Bismuth and tellurium minerals of the Arakawa deposit in the Northeast Japan arc, **Shota Satori, Takeyuki Ogata and Yasushi Watanabe**, Akita University

- AP-17. Petrography and Geochemistry of Plutonic Rocks along Loei Fold Belt, Northeastern Thailand, **Patchawee Nualkhao, Ryohei Takahashi, Akira Imai and Punya Charusiri**, Akita University
- AP-18. Ore and Alteration Mineralogy of the Runruno Mineral Resource Area, Municipality of Quezon, Nueva Vizcaya, Philippines, **Ma. Lourdes Stephanie V. Leido, Akira Imai, Ryohei Takahashi, Elveta C. Comsti and Janice Wayan**, Akita University
- AP-19. Preliminary Results on the Study of the Mineralization of the Kay Tanda Epithermal Gold Deposit, Batangas, Philippines, **Sof a Marah Frias, Akira Imai and Ryohei Takahashi**, Akita University
- AP-20. Petrological and Geochemical characteristics of the Selibe-Phikwe Cu-Ni deposit; Northeast Botswana, **Amogelang Kooganne, Ryohei Takahashi and Akira Imai**, Akita University
- AP-21. Field Characterization of Lithology at Target H area, Mumbwa Iron Oxide Copper Gold (IOCG) district, Northwest Zambia., **Mukuka Simusokwe, Yasushi Watanabe and Takuya Echigo**, Akita University
- AP-22. Epithermal Gold Mineralization in the Bodi Area, North Arm Sulawesi, Indonesia, **Mochammad Aziz**, Akita University
- AP-23. To the Question of the Effective Electronic Waste Management in Kazakhstan, **Zarina Akhmetvaliyeva, Natalya Kulenova, Yasushi Takasaki, Masahiko Bessho, Liadi Kolapo Mudashiru and Jurgen Bast**, East Kazakhstan State Technical University
- AP-24. Study on Strength Characteristics of Sludge Reinforced by Rice Straw Fiber and Cement, **Phan Thanh Chien, Tomoaki Satomi and Hiroshi Takahashi**, Tohoku University
- AP-25. Study on Weak Soil Improvement by Using Geopolymer and Paper Fragments, **Vu Minh Chien, Tomoaki Satomi, Hiroshi Takahashi and Le Anh Tuan**, Tohoku University
- AP-26. Study on Reducing the Soil Content in Grizzly-under -Materials Discharged from Recycling Plant of Waste Asphalt Blocks, **Milkos Borges Cabrera, Tomoaki Satomi and Hiroshi Takahashi**, Tohoku University
- AP-27. Capacity Design of Cathode and Anode in Lithium Ion Battery, **Yusuke Abe, Hiroaki Fujiwara, Tomoaki Saito, Mahmudul Kabir and Seiji Kumagai**, Akita University
- AP-28. Electric Double-layer Capacitors Using Different Types of Ionic Liquid Electrolytes, **Masaki Hatomi, Mahmudul Kabir, Daisuke Tashima and Seiji Kumagai**, Akita University
- AP-29. Lithium-ion Capacitor Using Active Materials Produced from Rice Husk, **Seiji Kumagai, Tsubasa Watanabe, Hiroaki Fujiwara, Masaki Hatomi, Tomoaki Saito, Yusuke Abe, Mahmudul Kabir and Daisuke Tashima**, Akita University
- AP-30. Anode Active Material of Lithium-ion Battery Prepared from Phenolic Resin and Rice Husk, **Tomoaki Saito, Hiroaki Fujiwara, Yusuke Abe, Mahmudul Kabir and Seiji Kumagai**, Akita University
- AP-31. Rice Husk-derived Anode Material of Lithium-ion Capacitor, **Hiroaki Fujiwara, Tomoaki Saito, Yusuke Abe, Mahmudul Kabir, Daisuke Tashima and Seiji Kumagai**, Akita University
- AP-32. A Study of Utilizing Natural Daylight for Interior Illumination System by Using Monte Carlo Simulation Method, **Chenglin Li, Mahmudul Kabir and Noboru Yoshimura**, Akita University
- AP-33. Cell Fraction and Extraction of Protein by Using Ferrite Particles Motion Controlling System, **Masaya Endo, Mahmudul Kabir and Noboru Yoshimura**, Akita University
- AP-34. Tribology Property in Oil-Impregnated Porous Carbon Materials made from Rice Hull, **Kento Honma, Tomoya Masuyama, Takeshi Takahashi, Hiroshi Iizuka and Michiaki Shishido**, National Institute of Technology, Tsuruoka College
- AP-35. Fatigue Strength Simulation of Natural Porous Structure, **Yohei Tanaka, Tomoya Masuyama, Takeshi Takahashi, Hiroshi Iizuka and Michiaki Shishido**, National Institute of Technology, Tsuruoka College

ICMR 2017 AKITA

October 27 (Friday) Poster Session

Room B

Chairperson ; **Hiroshi Yokoyama, Takayoshi Shindo**

- BP-1. Study of the Relation between Growth and Color Information of Fallopia Japonica in a River Bank, **Kenta Endo, Chikako Ishizawa, Yoichi Kageyama, Makoto Nishida, Koshi Sato, Mitsuyoshi Kaneko and Takashi Nagaki**, Akita University
- BP-2. Detection of Text Inserted by Copy-and-Paste Operations to Prevent Reference Omissions, **Chikako Ishizawa, Toshima, Masahiro, Yoichi Kageyama and Makoto Nishida**, Akita University
- BP-3. Emotion Discrimination of Amusement by Focusing on 3-Dimensional Data on Body Movements, **Huawei Zhang, Tsuyoshi Takahashi, Yoichi Kageyama and Makoto Nishida**, Akita University
- BP-4. Reduction of Flicker while Displaying Images by Switching Two-Colors on a Liquid Crystal Display, **Shogo Kitano, Chikako Ishizawa, Yoichi Kageyama and Makoto Nishida**, Akita University
- BP-5. Generating Learning Data for Vegetation Classification Method with Support Vector Machine, **Masatomo Suzuki, Yoichi Kageyama, Chikako Ishizawa, Makoto Nishida, Koshi Sato, Mitsuyoshi Kaneko and Takashi Nagaki**, Akita University
- BP-6. Development of a 3D hair simulator for supporting hairdressers, **Shota Sato, Hiroshi Yokoyama, Yoichi Kageyama, Chikako Ishizawa, Makoto Nishida and Kazuharu Konishi**, Akita University
- BP-7. Method for Detecting Slight Physical-Condition Disorders Based on Lip-Motion Changes while Speaking, **Tsuyoshi Takahashi, Hiroki Ishibashi, Yoichi Kageyama, Masaki Ishii and Makoto Nishida**, Akita University
- BP-8. Person region extraction and background replacement in images for privacy protection, **Shota Sato, Yoichi Kageyama, Chikako Ishizawa and Makoto Nishida**, Akita University
- BP-9. Detection of Second-Harmonic Ultrasonic Components from Micro Cracks Using Lamé mode of Lamb Waves, **Ikumi Fujita, Makoto Fukuda and Kazuhiko Imano**, Akita University
- BP-10. Visualization and Quantification of Ultrasonic Field using the Sensitive Tint Method and the Sénarmont Method in the Grass, **Koyo Yashima and Kazuhiko Imano**, Akita University
- BP-11. Experiments on Measurement of Ultrasonic Field by Light Deflection Methods, **Masafumi Akatsuka and Kazuhiko Imano**, Akita University
- BP-12. Method for Detecting of Higher Harmonic Ultrasonic Components from a Micro Crack, **Tatsuma Iida, Makoto Fukuda and Kazuhiko Imano**, Akita University
- BP-13. Creation and Evaluation of a Correction Table for Calibration of an RGB-D Sensor, **Shinya Fujino and Masaki Ishii**, Akita Prefectural University
- BP-14. Image Correction for Quantitative Evaluation of Proper Time of Harvesting Fruit, **Ikumi Kusada and Masaki Ishii**, Akita Prefectural University
- BP-15. Proposal of Improvement of Contact Force Visualization in Soldering Training VR System, **Katsuya Fujiwara, Hideaki Miyajima and Kazutaka Mitobe**, Akita University
- BP-16. Preliminary Study on Auditory Perception of Multiple Speech Synthesis with Different Speech Rates to Help Visually Impaired Persons Enjoy Movies, **Sawako Nakajima, Naoyuki Okochi, Kazutaka Mitobe and Tetsujiro Yamagami**, Akita University
- BP-17. Development of Learning System for Blood Sampling Technique Using Magnetic Motion Capture and AR Technology, **Masachika Saito, Yukiko Kikuchi, Yukiko Kudo, Makiko Sasaki and Kazutaka Mitobe**, Akita University
- BP-18. Improvement of Heating Efficiency and Magnetization Property of Ferromagnetic Implant with Low Curie Temperature for Hyperthermia using Nano-Magnetic Fluid, **Tonthat Loi, Yoshiyuki Yamamoto, Fumitaka Aki, Hajime Saito and Kazutaka Mitobe**, Akita University

- BP-19. Characterization of the Imaged R/S Pox Diagram for Low-rate DoS Attack, **Akinori Takahashi, Ryuji Igarashi, Kazuto Sasai, Hiroshi Ueda, Yukio Iwaya, Tetsuo Kinoshita and Hitoshi Hashimoto**, Akita University
- BP-20. A Study on Eye Movement in Opinion Test with Food Pictures Combined with Four Dishes, **Takuaki Yajima, Motoshi Tanaka and Yoshitugu Niiyama**, Akita University
- BP-21. A Study on Feature Extraction of Footsteps and Drum Sound by Time-Frequency Analysis, **Kohki Koiwa and Motoshi Tanaka**, Akita University
- BP-22. Application of Steam Pressure Cracking Agent for Treating of Industrial Ceramics Waste, **Osamu Kamiya, Kaito Suzuki, Kenji Murata and Takashi Kazumi**, Akita University
- BP-23. Effects of poly-sized grinding media and sodium polyacrylate dispersant on the fine grinding of limestone in a bead mill, **Naoya Kotakeo, Kyosuke Sato, Motonori Iwamoto, Yasuyoshi Sekine and Susumu Gunji**, Yamagata University
- BP-24. Effect of Nitrogen Addition on Synthesized Diamond Films on Molybdenum Substrate Surface by Flame Combustion Method, **Mamoru Takahashi, Naoaki Serizawa and Osamu Kamiya**, Akita University
- BP-25. Thermogravimetric Study of Concrete Sludge in Gaseous Hydrogen Chloride during Neutralizing Reaction at 773 K, **Yoshiyuki Sato, Keisuke Sato and Kenzo Munakata**, Akita University
- BP-26. Preparation of LaNi₅ Layers by Electrodeposition Using Molten Salt and Anodic Polarization Characteristics after Hydrogen Charge, **Yuya Suto, Naka Sato, Michihisa Fukumoto and Motoi Hara**, Akita University
- BP-27. Fe-Co-B amorphous tips for ultra high-resolution imaging of magnetic recording media by alternating magnetic force microscopy: effect of Si doping on the temporal degradation of tip performance, **Marina Makarova, Yusuke Akaishi, Taku Igarashi, Satoru Yoshimura and Hitoshi Saito**, Akita University
- BP-28. Methanol oxidation activity and CO adsorption/desorption behavior of electrochemically reduced Pt oxide, **Hiroki Takahashi, Masato Sato, Keisuke Ohkubo and Masami Taguchi**, Akita University
- BP-29. Electrochemical reduction of carbon dioxide and synthesis of methanol on Pt oxide film, **Keisuke Ohkubo, Hiroki Takahashi and Masami Taguchi**, Akita University
- BP-30. Lateral distribution of irradiated ions in L1₀ FeMnPt films, **Takashi Hasegawa and Kaori Sasaki**, Akita University
- BP-31. Effect of lattice distortion on magnetic anisotropy in Fe films, **Hiroto Nakane and Takashi Hasegawa**, Akita University
- BP-32. Magnetic phase change in Co/Pd multilayers caused by ion irradiation, **Yasuko Nakamura and Takashi Hasegawa**, Akita University
- BP-33. Fabrication of ε-Fe₂O₃ multiferroic thin films with high coercivity and magnetization for electric-field writing magnetic recording, **Satoru Yoshimura**, Akita University
- BP-34. Synthesis and Properties of Biodegradable Polymers Containing Zwitterionic Groups, **Yuuki Kobayashi, Kazuya Matsumoto and Mitsutoshi Jikei**, Akita University
- BP-35. Cloning and Comparison of Aggregation Properties of HbREF Like Proteins from *Ficus carica*, **Saki Yokota, Y. Suzuki, K. Saitoh, S. Kitajima, N. Ohya and T. Gotoh**, Akita University
- BP-36. Heterologous Expression of *Streptomyces* Cellulase Genes for the Molecular Breeding of Antibiotic Producing Streptomycetes from Cellulosic Biomass, **Kano Kasuga, Yuka Chida, Ayaka Sabanai, Shunichiro Kyono, Kumiko Tomotsune, Jun Ishikawa, Haruo Ikeda and Ikuo Kojima**, Akita Prefectural University
- BP-37. Non-destructive Measurement of Salinity Concentration to Evaluate Suitable Food Dipping States During Salting, **Kyoko Ishikawa, Masashi Nako, Shuya Sato and Yoshinobu Akiyama**, Akita Prefectural University
- BP-38. Cellular Biocompatibility of TEMPO-oxidized Cellulose Nanofibers to Human Umbilical Vein Cells with Different Counter-ions, **Ruizhi Ning, Linlu Yi, Akira Isoga and Jin-Ming Lin**, The University of Tokyo

Main Room

15:10-15:30 Closing Ceremony

ORGANIZING COMMITTEE

Honorary Chairpersons :

K. Otsuka(Prof. Emeritus of Akita Univ.)
Y. Nagai(Prof. Emeritus of Akita Pref. Univ.)
N. Yoshimura(President of Tohoku Univ. of Community Serv. and Sci.)
F. Hamada(Research Prof. Akita Pref. Univ.)

General Chairperson :

A. Shibayama(Chairman of SMER Japan, Akita Univ.)

Organizing Committee

Chairperson: A. Shibayama(Chairman of SMER Japan, Akita Univ.)
Members: T. Aichi(Dowa Metals & Mining), H. Iizuka(Yamagata Univ.), N.Iki(Tohoku Univ.),
Y. Ohta(Fukuoka Inst. of Tech.), K. Ohto(Saga Univ.), S. Kamada(Akita Pref. Univ.),
I. Kojima(Akita Pref. Univ.), M. Koshimura(Mitsubishi Materials Electronic Chemicals),
A. Sato(Ichinoseki Natl. Col. of Tech.), T. Sato(Akita Univ.), T. Okabe (Akita Zinc),
H. Takahashi(Tohoku Univ.), H. Tamamoto(Tohoku Univ. of Community Serv. and Sci.),
T. Fujita(Univ. Tokyo), M. Muraoka(Akita Univ.)

Executive Committee

Chairperson: M. Jikei(Akita Univ.)
Members: T. Gotoh(Akita Univ.), M. Taguchi(Akita Univ.)

Finance Committee

Chairperson: M. Jikei(Akita Univ.)
Members: T. Ogasawara (Akita Pref. Univ.), S. Kagaya (DOWA Holdings),
M. Miyakawa (Mitsubishi Materials), H. Taguchi(TDK), A. Tanata (Before Uedalime
manufacturing)

Programming Committee

Chairperson: M. Jikei(Akita Univ.)
Members: T. Imai(Akita Univ.), K. Imano(Akita Univ.), M. Odaka(Akita Univ.),
Y. Kageyama(Akita Univ.), O. Kamiya(Akita Univ.), T. Shindo (Akita Univ.),
M. Hara(Akita Univ.), K. Mitobe(Akita Univ.), Y. Watanabe(Akita. Univ.)

Steering Committee

Chairperson: T. Gotoh(Akita Univ.)
Members: K. Asano(Akita Natl. Col. of Tech.), S. Aso (Akita Univ.),
H. Itoh (Akita Univ.), A. Imai(Akita Univ.), H.Saito(Akita Univ.), H. Fujii(Akita Univ.)

Awarding Committee

Chairperson: M. Taguchi(Akita Univ.)
Members: N. Ogawa(Akita Univ.), A. Shibayama(Akita Univ.),
M. Nishida(The Open Univ. of Japan)



Edited by :

The Programming Committee of ICMR2017 AKITA
The Society of Materials Engineering for Resources of JAPAN
In Akita University, Akita,010-8502 Japan
Phone · Fax:+81-18-889-2439

September, 2017