

4th Forum of Center for Advanced Materials Research and International Collaboration (CAMRIC-FORUM4), University of TOYAMA

(15th Light Metals International Workshop By JILM)

TOYAMA DAIICHI HOTEL
Toyama, Japan



October 31 – November 1, 2018

The 4th Forum of Center for Advanced Materials Research and International Collaboration, Faculty of Sustainable Design, University of Toyama will be held at TOYAMA DAIICHI HOTEL on **31 October-1 November, 2018**.

This forum will be focused on the future innovation for industrial products of light weight materials, especially aluminum and magnesium alloys, and other materials including energy and hybrid composites for next generation.

31 October, 2018

[Opening address]

08:50 Director of CAMRIC, Prof. Kenji Matsuda, University of Toyama, Japan
President of University of Toyama, Prof. Shunro Endo, University of Toyama, Japan
Dean of Faculty of Sustainable Design, Prof. Tohru Watanabe, University of Toyama, Japan

Programme

Admission Free

Session I

Chair: Prof. Kenji Matsuda, University of Toyama, Japan

- 09:00-09:30 1-1 "Complex Alloys: Functional Properties and Future Manufacturing"
Prof. Dr. Gary J. Shiflet, University of Virginia, U.S.A.
- 09:30-10:00 1-2 "Phase and orientation mapping in Al alloys using SPED"
Director, Prof. Dr. Randi Holmestad, Norwegian University of Science and Technology, Norway
- 10:00-10:30 1-3 "Improving strength of aluminium alloys by the combination of grain refinement and precipitation strengthening – opportunities and challenges"
Prof. Dr. Małgorzata Lewandowska, Warsaw university of Technology, Poland
- 10:30-11:00 1-4 "Characterisation of two dimensional materials by advanced techniques of Scanning very low energy electron microscopy"
Director of ISI Brno, Dr. Ilona Mullerova, Czech Academy of Sciences, Czech Republic
- 11:00-11:30 1-5 "Powder metallurgy: Innovative processing tool"
Assoc. Prof. Dr. Robert Bidulsky, TUKE, European Powder metallurgy R&D Centre, Slovakia
- 11:30-12:00 1-6 "Deformation and aging behavior of an SPD processed Al-5%Cu alloy, and associated strengthening mechanisms"
Prof. Dr. Knut Marthinsen, Norwegian University of Science and Technology, Norway

12:00-13:00 Break Luncheon seminar about Scientific Instruments by Thermo Fisher Scientific Inc. (For 50 people)

Session II

Chair: Prof. Toshiya Shibayanagi, University of Toyama, Japan

- 13:00-13:30 1-7 "Cementitious and zeolitic materials for environmental cleanup"
Dept Chair, Assist. Prof. Dr. Kedsarin Pimraksa, Chiang Mai University, Thailand
- 13:30-14:00 1-8 "1)Single Crystal Growth of Rare Earth Orthoferrites RFeO₃ and their Novel Magneto-Electrical, Opto-Magnetic Properties
2)Single Crystal Growth, Magnetic Anisotropy and Magnetolectric coupling in A₄B₂O₉ system"
Prof. Dr. Shixun Cao, Shanghai University, P.R.China
- 14:00-14:25 1-9 "Equal Channel Angular Pressing of Al Alloys: Microstructure and Properties"
Assoc. Prof. Dr. Chaiyasit Banjongprasert, Chiang Mai University, Thailand
- 14:25-14:50 1-10 "Oxidation behavior of Ti-Al-based alloys with niobium addition"
Prof. Dr. Kazimierz Przybylski, AGH University of Science and Technology, Poland
- 14:50-15:20 1-11 "Harmonized Multi-structure Control of Aluminum Alloys and Their Mechanical Properties"
Prof. Emu., Dr. Tatsuo Sato, Tokyo Inst. Tech., Japan, Senior Adviser, University of Toyama

Session III

Chair: Prof. Hideki Ono, University of Toyama, Japan

- 15:20-15:50 1-12 "Microstructure and properties of friction stir welded aluminum alloy body for high-speed train"
Prof. Dr. Zou Yong, Shandong University, P.R.China
- 15:50-16:15 1-13 "Fabrication of Thermoelectric Modules by Wet-process Surface Modification"
Assoc. Prof. Dr. Injoon Son, Kyungpook National University, Korea
- 16:15-16:40 1-14 "Pulsed Electric Current Sintering and Characterization of Fe₁₃Mn-TiC Composite for Crusher Hammer Application"
Lecturer, Dr. Dang Quoc Khanh, Hanoi University of Science and Technology, Viet Nam
- 16:40-17:05 1-15 "Oxidation behavior of Al_x(CoCrFeNi)_{100-x} (x = 0; 3; 6; 9; 12) high entropy alloys under thermal cyclic conditions in air atmosphere"
Assist. Prof. Dr. Miroslaw Stygar, AGH University of Science and Technology, Poland
- 17:05-17:30 1-16 "Atomic Clustering in a 6016 Al-Mg-Si Alloy"
Senior Scientist, Dr. Calin D. Marioara, SINTEF, Norway
- 17:30-19:30 Banquet "Temhyo – no - MA", 2nd floor at Toyama Daiichi Hotel

1 November, 2018

[Address]

08:50 Department Chair of Materials Design and Engineering,
Prof. Atsushi Saiki, University of Toyama, Japan

Session IV

Chair: Prof. Katsuhiko Nishimura, University of Toyama, Japan

- 09:00-09:30 2-1 "Studies of material magnetic properties using neutron scattering"
Prof. Dr. Wayne D. Hutchison, The University of New South Wales, Canberra, Australia
- 09:30-10:00 2-2 "Recent Research Activities on Plastically Deformed Magnesium Alloys"
Prof. Dr. Min Guanghui, Shandong University/Changji University, China
- 10:00-10:30 2-3 "Microstructural and Electrochemical Studies of Zn-Mg Alloys for Use as Anode in Zinc-Air Batteries"
Prof. Dr. Torranin Chairuang Sri, Chiang Mai University, Thailand
- 10:30-11:00 2-4 "Evolution of electron microscopy II – Recent progress of materials development –"
Prof. Emu., Dr., Makoto Shiojiri, Kyoto Inst. Tech., Senior Advisor, Faculty of Sustainable Design, University of Toyama, Japan
- 11:00-11:30 2-5 "Emerging understanding of manmade and incidental nanoparticle impacts on Earth systems"
Prof. Dr. Mitsuhiro Murayama, Virginia Tech, U.S.A.
- 11:30-12:00 2-6 "Rapid Diffusion Induced by Severe Plastic" Director of IRC-GSAM, Prof. Dr. Zenji Horita, Kyushu University, Japan
- 12:00-12:30 2-7 "Introduction of alloy development for extrusion and foundry alloys in Hydro"
Dr. Takeshi Saito, Research and Technology Development, Hydro Aluminium, Sunndalsøra, Norway
- 12:30-13:30 Break Luncheon seminar about Scientific Instruments by Thermo Fisher Scientific Inc. (For 50 people)

"Sustainable Design", Trends of technology and development for research in aluminum, light metals/materials

Chair: Prof. Seiji Saikawa, University of Toyama, Japan

- 13:30-14:15 3-1 "Introduction of JAPAN ALUMINIUM ASSOCIATION and the recent trends of the domestic and foreign aluminum industries"
Dr. Motohiro NABAE, Director, Japan Aluminium Association, Japan
- 14:15-15:00 3-2 "Technology strategy road map for Japanese aluminum industry and its relevant activities"
Dr. Shinji NUMAO, Japan Aluminium Association, Chief researcher, Oyama plant, SHOWA DENKO.K.K, Japan
- 15:00-15:45 3-3 "Application of aluminum alloys for infrastructure construction (temporary)"
Prof. Toshiya Shubayanagi, Japan Aluminium Association, University of Toyama, Japan
- 15:45-16:30 3-4 "Introduction of activities of Aluminium Architectural Structures Association"
Mr. Masashi Izumi, General Manager, Aluminium Architectural Structures Association, Japan
Mr. Fuminori Fujii, Manager, LIXIL Corporation, Japan
- 16:30 Closing address Department Deputy Chair of Materials Design and Engineering,
Prof. Seiji Saikawa, University of Toyama, Japan

Contact Us

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