# ALMA Forum 2023

## Program

Date: 11 November, 2023

Venue: Tokyo Metropolitan University Minami-Osawa Campus,

Minami-Osawa, Hachioji-shi, Tokyo Japan

## **Opening Ceremony**

Chairperson: Prof. Masahiro Kubota (Nihon University, International Communication Committee of Japan Institute of Light Metals, Japan)

9:00 Opening Address

**Prof. Shigeru Kuramoto** (Ibaraki University, Chair of ALMA and Chair of International Communication Committee of Japan Institute of Light Metals, Japan)

#### Session 1

Chairperson: Dr. Ho Lin Tsai (Metal Industries Research & Development Centre, Taiwan)

9:05 Adding Value Through Innovation in Light Metals Casting

**Prof. Roger Lumley** (AW Bell & Materials Australia, Australia)

9:35 Development of Conform Technology for Light Metal in China

Assoc. Prof. Jiuyang Pei (Dalian Jiaotong University, China)

10:05 Electropulsing Treatments for Lightweight Metals

Assoc. Prof. Taekyung Lee (Pusan National University, Korea)

10:35 Coffee Break (10:35 – 10:45)

## Session 2

Chairperson: Prof. Gaowu Qin (Northeastern University, China)

10:45 Aluminum Recycling Techniques and Industrial Applications in Taiwan

Dr. Ho Lin Tsai (Metal Industries Research & Development Centre, Taiwan)

- 11:15 Low Environmentally Impact Aluminum Manufacturing Process via Ionic Liquid Electrolytes

  Dr. Yoichi Kojima (UACJ Corporation, Japan)
- 11:45 Additive Manufacturing in Australia and the Role of Light Metals

Assoc. Prof. Andrey Molotnikov (RMIT University, Australia)

#### Session 3

Chairperson: Prof. Roger Lumley (AW Bell & Materials Australia, Australia)

- 15:10 Ultrafine Grains, High Strength and Ductility of Wrought Magnesium Alloys Achieved by Grain Boundary Segregation Engineering
  - Prof. Gaowu Qin (Northeastern University, China)
- 15:40 Effects of Nanocluster Formation on Multi-Step Aging Behavior in Al-Mg-Si Alloys

  Dr. JaeHwang Kim (Korea Institute of Industrial Technology, Korea)
- 16:10 Synergy of Strengthening Mechanism of Integrated Computational Materials Engineering Assisted 3D Printing High Strength Al-Sc Alloy

Assist. Prof. Che-Nan Kuo (National Sun Yat-Sen University, Taiwan)

16:40 Development of Flame-Retardant Wrought Magnesium Alloys and Those Application To High-Speed Railway Body

Dr. Yasumasa Chino (National Institute of Advanced Industrial Science and Technology, Japan)

Kazunori Shimizu (Sankyo Tateyama, Inc.), Hironori Ueda (Fuji Light Metal Co., Ltd.)

Takeshi Ishikawa (Japan Transport Engineering Company) and

Makoto Taguchi (Kawasaki Railcar Manufacturing Co., Ltd.)

### Closing Ceremony

Chairperson: Prof. Toshiya Shibayanagi (Toyama University, Vice Chair of the International Communication

Committee of Japan Institute of Light Metals, Japan)

- 17:20 Honoring Ceremony and Group Photo
- 17:50 Closing Address

**Prof. Toshiji Mukai** (Kobe University, Vice Chair of the International Communication Committee of Japan Institute of Light Metals, Japan)