2023-11-18 Saturday

Morning Session: Plenary Talks

Venue: Delta Hall B1 ACX Auditorium

Chair: Jien-Wei Yeh, National Tsing Hua University, Taiwan

09:30 a.m. – 10:15 a.m. (Plenary Talk) Haruyuki Inui, Kyoto University, Japan "Single-Crystal Mechanical Properties of High- and Medium-Entropy Alloys with the FCC Structure"

Symposium D: High Entropy Materials Venue: Delta Hall 107

Chair: An-Chou Yeh, National Tsing Hua University, Taiwan

1:30 p.m. – 2:05 p.m. (Keynote Speech)Stéphane Gorsse, University of Bordeaux, France"High Entropy Alloys and Sustainable Development: A Data-Driven Approach"

2:05 p.m. – 2:30 p.m. (Invited Talk)
Jer-Ren Yang, National Taiwan University, Taiwan
"The investigation of annealing twins and deformation twins in FCC high-entropy and medium-entropy alloys"

2:30 p.m. – 2:55 p.m. (Invited Talk)
Hung-Wei Yen, National Taiwan University, Taiwan
"Mechanical Response to Hydrogen in High/Medium-Entropy Alloys"

2:55 p.m. – 3:20 p.m. **(Invited Talk)** Yoko Yamabe-Mitarai, the University of Tokyo, Japan "High-temperature deformation of HEAs"

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2023-11-19 Sunday

Morning Session: Plenary Talks Venue: ACX Auditorium Delta Hall B1

Chair: Jien-Wei Yeh, National Tsing Hua University, Taiwan

09:30 a.m. – 10:15 a.m. (Plenary Talk)

Raj Banerjee, University of North Texas, USA "Solution thermodynamics guided tuning of local chemical ordering in high entropy alloys: breaking the strength-ductility compromise"

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Symposium D: High Entropy Materials Venue: Delta Hall 107

Chair: Ming-Hung Tsai, National Chung Hsing University, Taiwan

1:30 p.m. – 2:05 p.m. (Keynote Speech)
Hideyuki Murakami, National Institute of Materials Science, Japan
"Development of High Entropy Alloys for High Temperature Applications"

2:05 p.m. – 2:30 p.m. (Invited Talk)
Jyh-Ming Wu, National Tsing Hua University, Taiwan
"Piezocatalysis and Piezo-photocatalysts based on a Ferroelectric High-Entropy Oxide"

2:30 p.m. – 2:55 p.m. (Invited Talk)
Chuan-Feng Shih, National Cheng Kung University, Taiwan
"Conductivity Model and Potential Application of Refractory HEA Thin Films"

2:55 p.m. – 3:20 p.m. (Invited Talk)
Wei-Hsuan Hung, National Central University, Taiwan
"Advanced High Entropy Oxides for Seawater Splitting"

Break

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Symposium D: High Entropy Materials Venue: Delta Hall 107

Chair: Che-Wei Tsai, National Tsing Hua University, Taiwan

3:40 p.m. – 4:05 p.m. (Invited Talk)

Shian-Ching Jang, National Central University, Taiwan "Development of novel lightweight Ti-rich Medium Entropy Alloys with superior synergy of mechanical properties and ductility"

4:05 p.m. – 4:30 p.m. (Invited Talk)

Wen-Jay Lee, National Center for High-Performance Computing, Taiwan "Exploring Material Property Attribution from Compositions in High Entropy Alloys Through Deep Learning"

4:30 p.m. – 4:55 p.m. (Invited Talk)

Wu Kai, National Taiwan Ocean University, Taiwan "Air-oxidation Behavior of FeCoNi-based Medium-and High-entropy Alloys with Cr and Al Additions"

4:55 p.m. – 5:20 p.m. (Invited Talk)

Krishanu Biswas, Indian Institute of Technology Kanpur, India "Can lattice distortion be tuned in FCC High Entropy Alloys to obtain high strength with optimum ductility?"

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2023-11-20 Monday

Symposium D: High Entropy Materials Venue: Materials Science Building 511

Chair: Che-Wei Tsai, National Tsing Hua University, Taiwan

9:30 a.m. – 09:55 a.m. (Invited Talk)

Anna Manzoni, Bundesanstalt für Materialforschung und -prüfung (BAM), Germany "Corrosion in the Co-Cr-Fe-Ni high entropy alloy family"

9:55 a.m. – 10:20 a.m. (Invited Talk) Tung-Han Yang, National Tsing Hua University, Taiwan "Construction and Catalytic Application of a Nanocrystal Library of High-Entropy Alloys"

Break

Chair: An-Chou Yeh, National Tsing Hua University, Taiwan

10:40 a.m. – 11:05 a.m. (Invited Talk)
E-Wen Huang, National Yang Ming Chiao Tung University, Taiwan
"Element-dependent-diffusion-induced Shape Memory Effects in High Entropy Alloys for Phase Transformation"

11:05 a.m. – 11:30 a.m. (Invited Talk)Shih-Hsun Chen, National Yang Ming Chiao Tung University, Taiwan"High-Entropy Alloy Powders and their Phase-Adjustable Coatings Prepared via Thermal Spray Process"

11:30 a.m. – 11:55 a.m. (Invited Talk)Han-Yi Chen, National Tsing Hua University, Taiwan"High Entropy Materials for Lithium and Sodium-Ion Batteries"

.....End of HEMs Symposium.....