

## [TS16W1]

### Computational Materials and Data Science for Nanotechnology I

Date & Time	July 3(Wed.), 2024 / 09:00–10:30
Place	Room 213
Session Chair(s)	Ki-Ha Hong (Hanbat Nat'l Univ.)

**TS16W1\_O\_1** 09:00–09:20

**Small Dataset Machine-Learning Approaches to Explore the Design Space of Multicomponent Alloys**

Seung-Hyun Victor Oh<sup>1</sup>, Su-Hyun Yoo<sup>2</sup>, and Woosun Jang<sup>1</sup>

(<sup>1</sup>Yonsei University, <sup>2</sup>KRICT)

**TS16W1\_O\_2** 09:20–09:40

**Understanding Off-Stoichiometry of Q-Phase in Al-Cu-Mg-Si Alloys**

Kyoungdoc Kim

(POSTECH)

**TS16W1\_O\_3** 09:40–10:00

**Exploration of High-Ductility Ternary Refractory High-Entropy Alloys using First-Principles Calculations and Machine Learning**

Hyo-Sun Jang<sup>1</sup>, Jin-Woong Lee<sup>2,3</sup>, Byung Do Lee<sup>2</sup>, Kee-Sun Sohn<sup>2</sup>, Jiwon Park<sup>1</sup>, and Chang-Seok Oh<sup>1</sup>

(<sup>1</sup>KIMS, <sup>2</sup>Sejong University, <sup>3</sup>SK Siltron Inc.)

**TS16W1\_O\_4** 10:00–10:15

**Understanding and Control of Nano-Scale Grain Evolution in Nb<sub>3</sub>Sn Superconducting Wire**

Sang-Ho Oh<sup>1</sup>, Yang-Jin Jeong<sup>2</sup>, Sin-Hye Na<sup>2</sup>, Jiman Kim<sup>2</sup>, and Byeong-Joo Lee<sup>1</sup>

(<sup>1</sup>POSTECH, <sup>2</sup>Kiswire Advanced Technology Ltd.)

**TS16W1\_O\_5** 10:15–10:30

**Machine Learning-Driven Solutions to Evaporation-Induced Variability in Chemical Composition of In-Situ Alloyed Products Fabricated by Direct Energy Deposition**

Jaemin Wang, Eun Seong Kim, Hyoung Seop Kim, and Byeong-Joo Lee

(POSTECH)