

**Room A #101** 13:30-15:30**[Th-A2] New Battery Systems****Session Chairs:**

Youngsik Kim (UNIST, Korea),
Nobuyuki Zettus (Shinshu Univ., Japan)

Th-A2-1 [Invited] 13:30-14:00**Development of Rechargeable Seawater Battery**

Youngsik Kim
UNIST, Korea

Th-A2-2 [Invited] 14:00-14:30**Mixed Anion Compounds as a New Direction for the Promotion of New Battery Materials Chemistry**

Nobuyuki Zettsu, Dae-wook Kim, Hiromasa Shiiba, and Katsuya Teshima
Shinshu Univ., Japan

Th-A2-3 14:30-14:45**High Energy Density Rechargeable Metal-Free Seawater Batteries: a Phosphorus/Carbon Composite as a Promising Anode Material**

Yongil Kim, Soo Min Hwang, Hyein Yu, and Youngsik Kim
UNIST, Korea

Th-A2-4 14:45-15:00**Chemical Bath Deposited ZnO/Cu₂SnS₃ (CTS) Electrocatalysts on the Nickle Foam for the Applications of Zn-Air Batteries**

Yu-Min Chou¹, Po-Yen Chen¹, and Kong-Wei Cheng^{1,2}
¹Chang Gung Univ., Taiwan, ²Chang Gung Memorial Hospital, Taiwan

Th-A2-5 15:00-15:15**Chlorination and Dechlorination for Seawater Disinfection during Seawater Battery Operation**

Jeong-Sun Park, JeHee Park, Soo Min Hwang, and Youngsik Kim
UNIST, Korea

Th-A2-6 15:15-15:30**Structural and Electrochemical Changes of Dual Doped Holey Graphene during Heat Treatment at Various Temperatures**

Masoud Nazarian-Samani^{1,2}, Safa Haghghat-Shishavan¹, Mahboobeh Nazarian-Samani¹, Ha-Kyung Roh¹, Seyed Farshid Kashani-Bozorg², and Kwang-Bum Kim¹
¹Yonsei Univ., Korea, ²Univ. of Tehran, Iran

Room B #102 13:30-15:30**[Th-B2] Emerging Advanced Materials V****Session Chair:**

Subhash Singh (Nat'l Inst. of Tech. Jamshedpur, India)

Th-B2-1 13:30-13:45**Multifunctional Core-Shell SiC/TiO₂, SiC/Li₄Ti₅O₁₂ Microcomposites as Reinforcement in Al Matrix: A Comparative Study on Microstructure, Mechanical and Damping Properties**

Subhash Singh¹ and Kaushik Pal Pal²
¹Nat'l Inst. of Tech. Jamshedpur, India, ²IIT, India

Th-B2-2 13:45-14:00**Damage Evolution and Fracture Prediction in Plasma Sprayed Coatings Subjected to Bending Fatigue Tests: An Acoustic Emission Method**

Ian-nong Jing^{1,2}, Hai-dou Wang², Li-hong Dong², Guo Jin¹, Yue-lan Di², and Ya-wei Xu²
¹Harbin Engineering Univ., China, ²Academy of Armored Forces Engineering, China

Th-B2-3 14:00-14:15**Diluted HF Cleaning Process for Metal and Particle Contamination Removal from Silicon Wafer**

Yu-Jin Lee¹, Dong-Hwan Lee¹, Hee-Jin Song¹, Sung-Hae Jang¹, Hyun-Tae Kim¹, Jae-Hwan Lee², Eun-Suck Choi², and Jin-Goo Park¹
¹Hanyang Univ., Korea, ²SK Siltron, Korea

Th-B2-4 14:15-14:30**A Study on the Reclamation of Silicon Carbide by Re-using Si Wafer Sludge with Carbon at High Temperature**

Sakib Tanvir Hossain, Woo-Gwang Jung, and Fatima Tuz Johra
Kookmin Univ., Korea

Th-B2-5 14:30-14:45**Improvement of Wear Resistance of CVD Diamond Films on WC-Co Alloy**

Yeo-Ho Kim¹, Myeong-Jun Kim¹, Heon-Yul Ryu¹, Jung-Hwan Lee¹, Ji-Woo Kim², Da-bin Hyun², Hae-geun Jee², and Jin-Goo Park¹
¹Hanyang Univ., Korea, ²SAESOL Diamond Ind. Co. Ltd., Korea