

Seoul National University -Kyushu University

Joint Symposium on Materials Chemistry and Engineering



SEOUL
NATIONAL
UNIVERSITY

Jan 20 PM -Jan 21 AM, 2019

Venue: CE41, Institute for Materials Chemistry and Engineering
Kyushu University-Ito Campus



<http://www.kyushu-u.ac.jp/en/campus/ito>

Monday, January 20

13:00-13:10

Opening Remarks Prof. Atsushi Takahara (Institute for Materials Chemistry and Engineering, Kyushu University)

13:10-14:00 A

- 1) Prof. In Ho Jung (Department of Materials Science and Engineering, SNU)
Phase diagram study and development of thermodynamic database for steelmaking process
- 2) Prof. Kenji Kaneko (Department of Materials Engineering, Kyushu University)
2D & 3D nanocharacterization of precipitates in austenitic steels

14:00-14:50 B

- 3) Prof. Howon Jang (Department of Materials Science and Engineering, SNU)
2D materials and halide perovskites for chemical sensors, photoelectrochemical water splitting, and memristors
- 4) Profs. Kwati Leonard, Takaya Fujisaki, Hiroshige Matsumoto, (I2CNER Kyushu University)
Proton conducting metal oxide and steam electrolysis for hydrogen production

15:20-16:10 C

- 5) Prof. Gwan Hyoung Lee (Department of Materials Science and Engineering, SNU)
2D materials for advanced electronics
- 6) Dr. Tsunaki Takahashi (Institute for Materials Chemistry and Engineering, Kyushu University)
Nanoelectronics of single-crystalline metal oxide nanowires: fundamentals and sensor applications

16:10-17:00 D

- 7) Prof. Tae Woo Lee (Department of Materials Science and Engineering, SNU)
Organic Artificial Sensory Nerves
- 8) Prof. Tsuyohiko Fujigaya (Department of Applied Chemistry, Kyushu University)
Development of n-type carbon nanotube sheet for thermoelectric conversion

17:00-17:50 E

- 9) Prof. Sangbum Kim (Department of Materials Science and Engineering, SNU)
Non-volatile memory for neuromorphic computing
- 10) Dr. Y. Kurokawa, Prof. H. Yuasa (Dept Electrical and Electronic Eng. Kyushu University)

Emerging memories by using magnetic materials

18:30- Welcome Party(Ten Ten)

Tuesday, January 21

9:30-10:20 F

- 11) Prof. Ken Kojio (Institute for Materials Chemistry and Engineering, Kyushu University)
in situ Molecular Aggregation Structure Analyses on Polymer Films during Various Mechanical Deformation Modes
- 12) Prof. Insuk Choi (Department of Materials Science and Engineering, SNU)
Selective crack suppression during deformation in metal films on polymer substrates using electron beam irradiation

10:20-11:10 G

- 13) Prof. Hisao Matsuno (Dept of Applied Chemistry, Kyushu University) Mechanical properties of deoxyribonucleic acid-based structural materials
- 14) Prof. Ki Tae Nam (Department of Materials Science and Engineering, SNU)
Biomolecule encoded chirality in single gold nanoparticle

11:10-11:20 Break

11:20-12:10 H

- 15) Dr. Atsushi Inoishi (Institute for Materials Chemistry and Engineering, Kyushu University)
All-solid-state batteries based on NASICON-type material
- 16) Prof. Kisuk Kang (Department of Materials Science and Engineering, SNU)
Design of new electrode materials for lithium ion batteries and beyond

12:10-12:20

Closing Remarks Prof. Yongsok Seo (Department of Materials Science and Engineering, SNU)

