

## Summit of Materials Science 2018, October 29-30, 2018,

The Summit of Materials Science (SMS) 2018, the International general conference organized by IMR, was held on October 29<sup>th</sup> -30<sup>th</sup>. 6 Invited speakers and 14 internal speakers gave presentations on Spintronics, Magnetism, Energy-related Materials, Structural Alloys, Phase Transformation, and so on. At The end of the meetings, 72 poster presentations were given by younger researchers.



The Summit of Materials Science (SMS) is an international conference, held by the IMR and initiated after the catastrophic earthquake in 2011. It covers a broad range of topics in solid-state physics and chemistry as well as materials science. After the first conference, SMS 2016 was organized as a part of our centennial celebration. This time, IMR held the 3<sup>rd</sup> international general conference as SMS2018 on October 29<sup>th</sup> -30<sup>th</sup>.

The topics of this conference are "Spintronics and Computational Materials Science", "Materials for Energy", "Materials for Infrastructure and Analytical Science", "Materials Physics", "Chemistry and Electronics", and "Collaborating Research Facilities (Nuclear Engineering/High Magnetic field/Quantum Beam/ Industry)".

Exciting invited talks were presented by prominent speakers representative of cutting-edge researches in various fields. Moreover, professors in IMR also presented ongoing research activities in IMR. Participants were fully inspired the contents of the presentations, and many spirited discussions have been observed throughout all the sessions.



6 Invited speakers gave presentations

At the end of the conference, 72 poster presentations were given by burgeoning researchers and about 100 participants enjoyed the posters and fruitful



(Upper) Poster presentation  
(Lower) Winners of Young Scientist Poster Presentation Award

## Schedule of SMS2018 and IMR International Evaluation Committee

Date: Oct. 29 - 31, 2018.

### Oct. 29: Day 1

#### International evaluation committee meeting (Venue: IMR Auditorium)

Chair: Prof. T. Kakeshita (Fukui Univ. Tech.)

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|-------------|--|
| 10:00-11:00 | Overall Performance of IMR<br>Prof. K. Takanashi (IMR) |
| 11:00-11:30 | Discussion   |
| 11:30-13:00 | Lunch & Discussion (IMR Conference Room)               |

#### SMS2018 (Venue: IMR Auditorium)

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|-------------|-----------------------|
| 12:30-13:10 | SMS 2018 Registration |
|-------------|-----------------------|

#### *13:30-15:05 Opening & Spintronics and Computational Materials Science*

*(Chair: M. Fujita)*

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|-------------|--|
| 13:30-13:35 | Prof. K. Takanashi, Welcome Address                          |
| 13:35-14:05 | Prof. B. Hillebrands (TU Kaiserslautern) <b>Invited</b>      |
| 14:05-14:25 | Prof. K. Takanashi (Magnetic Materials, IMR)                 |
| 14:25-14:45 | Prof. G. Bauer (Theory of Solid State Physics, IMR)          |
| 14:45-15:05 | Prof. M. Kubo (Materials Design by Computer Simulation, IMR) |

----- Coffee Break: 15:05-15:25 -----

#### *15:25-17:05 Materials for Energy (Chair: G. Bauer)*

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|-------------|--|
| 15:25-15:55 | Prof. A. Züttel (EPFL SB ISIC LMER) <b>Invited</b>     |
| 15:55-16:25 | Prof. T. Duffar (Grenoble INP) <b>Invited</b>          |
| 16:25-16:45 | Prof. S. Orimo (Hydrogen Functional Materials, IMR)    |
| 16:45-17:05 | Prof. A. Yoshikawa (Advanced Crystal Engineering, IMR) |
| 17:15-18:30 | Lab. Tour  |

----- Dinner with distinguished guests: 19:00-21:00 -----

### Oct. 30: Day 2

#### SMS2018 (Venue: IMR Auditorium)

#### *9:00-10:30 Materials for Infrastructure and Analytical Science (Chair: H. Kato)*

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|-------------|--|
| 09:00-09:30 | Prof. N.-J. Kim (POSTECH) <b>Invited</b>   |
| 09:30-09:50 | Prof. A. Chiba (Deformation Processing, IMR)                                     |
| 09:50-10:10 | Prof. T. Furuhashi (Microstructure Design of Structural Metallic Materials, IMR) |
| 10:10-10:30 | Prof. T. Konno (Materials Science of Non-Stoichiometric Compounds, IMR)          |

----- Coffee Break: 10:30-10:50 -----

#### *10:50-12:10 Materials Physics, Chemistry and Electronics (Chair: D. Aoki)*

10:50-11:20 Prof. H. Takagi (MPI for Solid State Research) **Invited**  
11:20-11:40 Prof. A. Tsukazaki (Low Temperature Physics, IMR)  
11:40-12:00 Prof. T. Sasaki (Low Temperature Condensed State Physics, IMR)  
12:00-12:20 Prof. H. Miyasaka (Solid-State Metal-Complex Chemistry, IMR)

----- Lunch: 12:20-13:40 -----

**13:40-15:10 Collaborating Research Facilities**  
**(Nuclear Engineering/High Magnetic field/Quantum Beam/ Industry)**  
*(Chair: S. Awaji)*

13:40-14:10 Prof. E. van Walle (SCK • CEN/KU Leuven) **Invited**  
14:10-14:30 Prof. Y. Nagai (International Research Center for Nuclear Materials Science,  
IMR)  
14:30-14:50 Prof. H. Nojiri (High Field Laboratory for Superconducting Materials, IMR)  
14:50-15:10 Prof. N. Masahashi (Cooperative Research and Development Center for  
Advanced  
Materials, IMR)

----- Coffee Break: 15:10-15:30 -----

15:30-17:00 Poster session (Venue: IMR 2nd build. Entrance Hall)

----- SMS Exchange Party (17:30-19:30) (at IMR Lounge) -----

### **Oct. 31: Day 3**

**International evaluation committee meeting (Venue: IMR Conference Room)**

9:30-11:30 Committee meeting Chair: Prof. T. Kakeshita (Fukui Inst. Tech.)