

Report on First Asia Advanced Materials Summit (AAMS)

The First Asia Advanced Materials Summit was initiated by China Association for Science and Technology (CAST), and organized by Advanced Materials Alliance of CAST Member Societies (AMAC), Asia Pacific Academy of Materials (APAM) and International Union of Materials Research Societies (IUMRS) Regional Office in Asia. Tremendous supports received for this event are from following institutions, including:

- ✧ China Textile Engineering Society
- ✧ Chinese Materials Research Society
- ✧ Chinese Society of Micro-Nano Technology
- ✧ Donghua University
- ✧ Fudan University
- ✧ Shanghai Institute of Ceramics, CAS
- ✧ Shanghai Jiao Tong University
- ✧ Shanghai University
- ✧ The Chinese Society for Metals
- ✧ The Chinese Ceramic Society
- ✧ The Nonferrous Metals Society of China

The goal of the summits is to provide a platform for materials scientists, governmental officials and entrepreneurs from Asia and the world to exchange recent research and technological achievements, and to promote cooperation.

The first summit was hosted in Marriott Shanghai Parkview Hotel, Shanghai, China, March 8-10, 2021, consisting of the plenary session and six parallel sessions covering areas in advanced materials research including

- A. Energy materials,
- B. Advanced process of light alloys,
- C. New electronic ceramic materials,
- D. Sensor system materials,
- E. Biomedical materials and
- F. Advanced biomaterials.

The summit has attracted over 220 participants, including 72 invited speakers. Among them, 16 plenary speakers gave their lectures at the plenary sessions on March 9, 2021:

1. Prof. Jacques Amouroux from Sorbonne University /ENSCP/EMRS, France:
Plasma Technics: The Green Processes for Atmospheric Depollution and Industrial Innovation
2. Prof. Christofer Hierold from ETH Zurich, Switzerland:
Suspended Carbon Nanotube FETs for NO₂ Gas Sensors

3. Prof. Rodrigo Martins from New University of Lisbon, Portugal:
Materials for a Sustainable World
4. Prof. Nobuhiro Matsushita, Tokyo Institute of Technology, Japan:
Functional Oxide Films Fabricated by Whole Processes below 100 °C
5. Prof. Ramakrishna Seeram from National University of Singapore:
Intelligent Materials & Systems: Healthcare
6. Prof. Young Moo Lee from Hanyang University, Korea:
Energy Generating Systems Incorporating Polymer Membranes
7. Prof. Hideo Hosono and Prof. Nobuhiro Matsushita from Tokyo Institute of Technology Japan:
Transparent Amorphous Oxide Semiconductors IGZO: From Materials Design to Implementation in Advanced Displays
8. Prof. Byungha Shin from KAIST, Korea:
Efficient, Stable Silicon Tandem Cells Enabled by Anion-Engineered Wide-Bandgap Perovskites
9. Prof. Adisorn Tuantranont from National Sci. and Tech. Development Agency, Thailand:
Graphene Technology for Energy Storage Applications
10. Prof. Lu Jian from Dept of Mechanical Engineering City University of Hong Kong:
Recent Development of Structural Materials and Its Integration as Multifunctional Materials
11. Prof. Guo Zhengxiao from The University of Hongkong:
Engineering Catalytic Sites for Effective Energy Conversion
12. Prof. Chen Lidong from Shanghai Institute of Ceramics, CAS:
Ductile Inorganic Semiconductors and Their Applications in Thermoelectrics
13. Prof. Deng Tao from Shanghai Jiao Tong University:
Bioinspired Thermal Materials and Applications
14. Prof. Chengtie Wu, Shanghai Institute of Ceramics, CAS, China:
3D Printing of Biomimetic Biomaterials
15. Prof. Mei Yongfeng from Fudan University:
Materials and Their Architectures for Micro/Nanorobotics
16. Evvy Kartini, Materials Research Society Indonesia:
The Current State of Research and Development of Lithium-ion Battery NMC Based on the Local Mineral Resources
(presented at parallel session A on March 10 due to tight schedule on March 9)

Summit Photos



Group Photo



Plenary Session 1



Plenary session 2



Plenary session 3



Parallel session 1



Parallel session 2



Parallel session 3



Parallel session 4