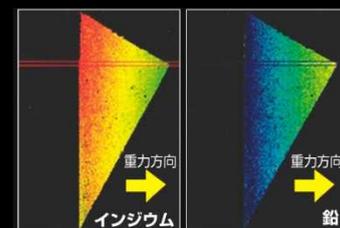
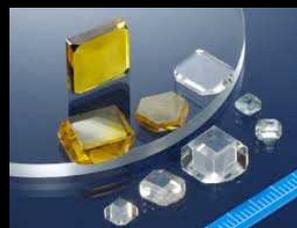
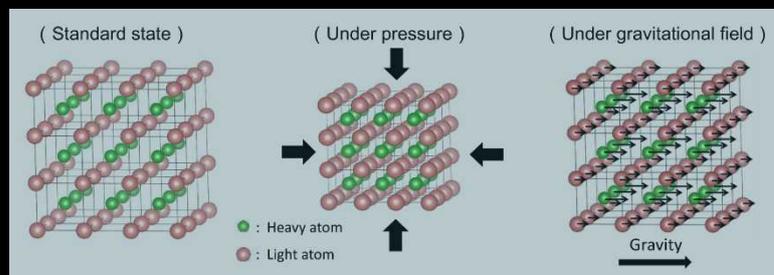


# First International Forum on the Advanced Materials Processing using Extreme Conditions

March 6, 2015

Auditorium C329, Third Floor, Building C, Dept. of Science



## Opening Remark

9:15 - 9:20 Leading Takashi Hiyama

Head of International Collaborative Research Group for Science and Technology

## Session-1 "High pressure process" (Chaired by Tsutomu Mashimo)

9:20 - 10:00 **Dr. Takashi Taniguchi (National Institute for Materials Science)**

"Impurity control in high pressure synthesis; Realization of promising potentials of superhard material of cubic boron nitride"

10:00 - 10:40 **Dr. Lucyna Jaworska (The Institute of Advanced Manufacturing Technology)**

"Diamond-ceramic bonding phase composites obtainse using HP-HT Method"

10:40 - 11:10 **Dr. Hitoshi Sumiya (Sumitomo Electric Industries, Ltd.)**

"Novel Development of HPHT synthetic diamond; High-pressure synthesis and properties of high-quality single-crystal diamond and nano-polycrystalline diamond"

11:10 - 11:30 **Prof. Eiji Ito (Institute for study of the Earth's Interior, Okayama University)**

"Development of the Kawai-type apparatus equipped with sintered diamond anvils"

11:30 - 12:10 **Prof. Kenneth Koga (Université Blaise Pascal)**

"Silicate mineral synthesis in volatile element-bearing environment, and subsequent high precision characterizations"

12:10 - 13:10 **Lunch time**

## Session-2 "Extreme conditions and advanced materials" (Chaired by Akira Yoshiasa)

13:10 - 13:50 **Prof. Kazumasa Sugiyama (Tohoku University)**

"Pseudo-Machay clusters realized in the approximant phases for icosahedral quasicrystals"

13:50 - 14:20 **Dr. Hiroshi Arima (Tohoku University)**

"Structural Study of Metal-Metalloid Amorphous Alloy by Anomalous X-ray Scattering Coupled with Neutron Diffraction"

14:20 - 15:00 **Prof. Shinichi Yoda (JAXA & Kumamoto University)**

"High Reflective Index Glass Material Production with Larger Size by Aerodynamic Levitator"

15:00 - 15:40 **Prof. Krzysztof Wojciechowski (AGH University of Science and Technology)**

"Thermoelectric materials for waste heat recovery in process industries"

15:40 - 16:00 **Prof. Tsutomu Mashimo (Kumamoto University)**

"Recent progress in strong gravity materials science"

16:00 - 16:20 **Coffee break**

## Session-3 "Recent studies by young researchers" (Chaired by Kojima)

16:20 - 16:35 **Mr. Tomotaka Nakatani (Kumamoto Univ.) D3**

"High temperature single-crystal X-ray diffraction study of tetragonal and cubic perovskite-type  $\text{PbTiO}_3$  phases"

16:35 - 16:50 **Miss. Zhazgul Kelgenbaeva (Kumamoto Univ.) D3**

"Fe-system nanoparticles synthesized using Pulsed Plasma in Liquid"

16:50 - 17:05 **Mr. Tsubasa Tobase (Kumamoto Univ.) M2**

"XAFS study on the zirconium local structure in natural impact related glasses"

17:05 - 17:20 **Mr. Jahirul Islam Khandaker (Kumamoto Univ.) D3**

"Formation of graded vanadium oxide material under strong gravitational field"

19:00 - 21:00 **Banquet**

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