

The 6th International Workshop on Nano-, Bio- and Amorphous Materials

Research on biomaterials has recently become crucial due to strong demands in developing materials for replacing human-body parts. The international workshop on nano-, bio- and amorphous materials has provided a valuable forum for presentation, discussion, idea sharing, collaboration as well as interdisciplinary exchanges among the experts, researchers and students from different fields and expertises to meet and establish the interface science on biomaterials.

The 6th International Workshop on Nano-, Bio- and Amorphous Materials was held on August 8 – 9, 2011 in Miyagi-Zao Royal Hotel, Miyagi, Japan as the last series of international forums in the frame of a 5-year research and collaboration project on the Interface Science of High Functional Biomaterials. The project involves 3 institutions, namely Institute for Materials Research, Graduate School of Dentistry (both are of Tohoku University) and Research Institute for Applied Mechanics, Kyushu University. The Workshop was organized under the financial supports from:

- Highly-functional Interface Science: Innovation of Biomaterials with Highly functional Interface to Host and Parasite (MEXT),
- International Collaboration Center (ICC-IMR), Tohoku Univ.
- Global COE Program: Materials Integration International Center of Education and Research, Tohoku University.

The Workshop was held in a two-day technical program in which 22 papers were presented including 3 invited lectures by researchers of bio-/medical materials from the People Republic of China. About 50 participants consisting of experts, researchers and students attended the Workshop. The invited speakers in this workshop were Dr. Guangyin Yuan (School of Materials Science, Shanghai Jiao Tong University), Dr. Yu-Feng Zheng (Dept. of Advanced Materials and Nanotechnology, Beijing University) and Dr. Cuanliang Feng (State Key Lab. Metal Matrix Composites, Shanghai Jiao Tong University).



Fig. 1. Participants of the 6th International Workshop on Nano-, Bio- and Amorphous Materials in a photo session.

The lecture by Dr. G.Y. Yuan was on the research on Mg alloy as a degradable cardiovascular stent material. The talk described the fabrication of cardiovascular stent prototype from the so-called JDBM alloy which exhibits outstanding mechanical properties, excellent corrosion resistance and biocompatibility. Dr. Y.F. Zheng presented the study on bulk metallic glasses for biomedical application. Meanwhile, Dr. C.L. Feng's lecture was on the investigation of cell adhesion on nano-patterned polymeric fabricated by reactive microcontact printing. Besides the invited lectures, numbers of papers on bio, dental and skeletal as well as amorphous and nanostructured materials were presented by researchers and students.



Fig. 2. A situation during Japanese-style banquet in the 6th International Workshop on Nano-, Bio- and Amorphous Materials

The different academic backgrounds among the participants has provided the interdisciplinary exchange and enriched the viewpoints during the discussion of a specific topic. In addition, this workshop also accommodated researchers to have a good opportunity and forum to present their research in English as well as to touch the cutting edges of the development on bio, nanostructured and amorphous materials. Finally, in the closing remarks, Prof. Takashi Goto as one of organizers emphasized the importance of continuation for the project on the interface science of biomaterials as a means and place to develop collaboration among interdisciplinary field and studies.

Key Words

International forum, biomaterials, interdisciplinary collaboration

Contact to

Dr. Hidemi Kato

(Assoc. Prof., Division of Non-Equilibrium Materials)

E-mail: hikato@imr.tohoku.ac.jp

<http://www.nem.imr.tohoku.ac.jp/>