

Okazaki Conference

The 74th Okazaki Conference Frontier of X-Ray Absorption Spectroscopy and Molecular Science

(February 3–5, 2015)

Organizers: T. Yokoyama (*IMS*), K. Asakura (*Hokkaido Univ.*)

Invited Oversea Lecturers: T. -K. Sham (*Univ. West. Ontario*), A. Rogalev (*ESRF*), P. Fischer (*LBNL & UC Santa Cruz*), L. X. Chen (*ANL & Northwestern Univ.*), S. P. Cramer (*UC Davis & ALS*)

Invited Oversea Lecturers: S. Takakusagi (*Hokkaido Univ.*), T. Miyanaga (*Hiroshima Univ.*), H. Oyanagi (*AIST*), H. Abe (*KEK-PF*), S. Adachi (*KEK-PF*), T. Masuda (*NIMS*), Y. Takahashi (*Univ. Tokyo*), M. Uo (*Tokyo Med. Dent. Univ.*), M. Tada (*Nagoya Univ.*), T. Katayama (*JASRI/SPRING-8*), T. Uruga (*JASRI/SPRING-8*), N. Ishimatsu (*Hiroshima Univ.*), T. Ohgishi (*IMS*), M. Nagasaka (*IMS*), Y. Takagi (*IMS*), Y. Uemura (*IMS*)

The 74th Okazaki Conference, designated as “Frontier of X-ray Absorption Spectroscopy and Molecular Science” was held on February 3–5, 2015 at the Okazaki Conference Center.

Following the celebrated tradition of the preceding Okazaki Conferences, of which origin dated back to just after the foundation of IMS, the conference focused on the topic that is emerging as a fundamental issue in the field of molecular science and related research area. This time, 21 invited lectures including five overseas lecturers represented cutting-edge researches, and the number of participants was 50. We have discussed about new science that can be opened by advanced XAFS (X-ray Absorption Fine Structure) techniques like spatial and/or time-resolved measurements. Although XAFS has matured as a sophisticated promising technique, recent progress based on the advance of synchrotron radiation light sources is found to be really outstanding. We have summarized the advanced XAFS methods and discuss near-future XAFS techniques and more importantly new science. It was quite fruitful since the new XAFS science discussed could contribute to construction plans of diffraction-limited synchrotron radiation facilities in Japan.

