

## The 68th Chemical Society of Japan (CSJ) Award

Prof. Nobuhiro Kosugi

Advanced Experimental and Theoretical Studies on Molecular Inner-shell Excitation

Dr. N. Kosugi has accomplished leading research projects based on soft X-ray absorption spectroscopy as follows:

1. Methodological developments in experiment and theory for the chemical application of molecular inner-shell excitations,
2. Local intermolecular interactions revealed by the chemical shift in inner-shell excitations,
3. Multi-electron and multi-state interactions revealed by the polarization dependence in inner-shell excitations.

He succeeded in finding various new aspects in molecular systems by his original chemical applications of soft X-ray absorption spectroscopy. His pioneering studies on the molecular inner-shell excitation as a unique probe are well known internationally and are affecting soft X-ray photoelectron spectroscopy and soft X-ray emission spectroscopy resonating with precisely selected inner-shell excited states. Furthermore, he led the upgrade projects UVSOR-II and UVSOR-III of the UVSOR Synchrotron and expanded chemical studies using soft X-rays in complementary collaboration with foreign synchrotron radiation facilities. His achievements in advanced experimental and theoretical studies on molecular inner-shell excitation have been recognized with the 68th Chemical Society of Japan (CSJ) Award. The CSJ Award started in 1948 and is historically most important in the CSJ. It is the first time this award has been given for the synchrotron radiation based research.

For more detail, see <http://www.chemistry.or.jp/en/awards/2015/>



IMS celebrated Prof. Kosugi's achievements awarded by the Chemical Society of Japan.