

Yoshihiko Ito (1937–2006)

The world of synthetic and organometallic chemistry lost a great man and a great scientist when Professor Yoshihiko Ito passed away from a heart attack on December 23, last year at the age of



69. Just a week before his sudden death, his former students and colleagues gathered in Kyoto to celebrate his 69th birthday and his receipt of the 2006 Special Award in Synthetic Organic Chemistry from The Society of Synthetic Organic

Chemistry, Japan. Professor Ito attended the gathering of more than hundred chemists with his wife Reiko, sharing fond memories of his time at Kyoto University.

Yoshihiko Ito was born in Osaka, in 1937 and obtained his undergraduate degree at Kyoto University, where he was a classmate and housemate of Ryoji Noyori. After finishing his doctoral degree under the supervision of the Ryohei Oda in 1966, Ito began his academic career at Kyoto University. Following a postdoctoral fellowship from 1970 to 1971 with Teddy G. Traylor at the University of California, San Diego, Ito was promoted to associate professor in 1972, and to full professor in 1985. After his retirement from Kyoto University in 2001, he stayed on at

Kyoto Pharmaceutical University as a visiting professor for two years and then moved to Doshisha University in 2003 to resume running a laboratory.

Yoshihiko Ito was one of the visionaries in the use of transition metals to solve complex problems in organic synthesis. For example, he developed the palladium(II)-mediated oxidation reaction of silyl enol ethers to form α,β -unsaturated ketones. This reaction has become a popular and indispensable tool for organic synthesis, and his first communication on this reaction has been cited more than 450 times.^[1] Another milestone in the field of asymmetric synthesis resulted from his collaboration with Tamio Hayashi, who was an assistant professor in Ito's laboratory: Excellent levels of enantioselectivity and diastereoselectivity were attained simultaneously in the gold-catalyzed aldol reaction of α -isocyanate esters with aldehydes.^[2] Ito unveiled the unique properties of isonitriles associated with organometallic compounds. Being isoelectronic with carbon monoxide, isonitriles can be converted into the beautifully arranged helical structures of poly(quinoxaline-2,3-diyl)s^[3] as well as a remarkable number of carbonyl-containing compounds. He also proved that isonitriles can act as unique and versatile ligands for transition metals.^[4]

For his achievements, Ito received numerous awards, including the Japan Chemical Society Award, the Bio-Mega Boehringer-Ingelheim Lectureship award, and the Merck Schuchardt Lectureship award. He was also involved as a board member of the prestigious International Kyoto Conference on

Organic Chemistry (IKCOC) since its inception. The 10th IKCOC, which took place in November 2006, saw him as a vivid attendee.

Yoshihiko Ito was not only an eminent scientist, he was also a quintessential gentleman. In addition to his outstanding science, his warmth and charm made a journey to Kyoto a wonderful experience for chemists from all over the world. Even Ito's son, Masato Ito, was inspired to become a chemist and is currently working at the Tokyo Institute of Technology. In February, Masato received a special award on behalf of his late father on the occasion of the general meeting of The Society of Synthetic Organic Chemistry, Japan. Ito's academic progeny are numerous and include some of the top researchers in Japan, all of whom benefited from Ito's mentorship. His influence will continue to be felt throughout Japan and the world for many years to come, and he will be greatly missed by all who were lucky enough to have made his acquaintance.

Masahiro Murakami
Kyoto University

- [1] Y. Ito, T. Hirao, T. Saegusa, *J. Org. Chem.* **1978**, 43, 1011.
- [2] Y. Ito, M. Sawamura, T. Hayashi, *J. Am. Chem. Soc.* **1986**, 108, 6405.
- [3] M. Sugimoto, Y. Ito, *Adv. Polym. Sci.* **2004**, 171, 77.
- [4] Y. Ito, *J. Organomet. Chem.* **1999**, 576, 300.

DOI: 10.1002/anie.200701275