Obituary

Professor Emeritus

Dr. OKA, Shinzaburo (1926–2012)

Dr. Shinzaburo Oka, Professor Emeritus of Kyoto University, passed away unexpectedly on March 12, 2012, in Osaka.

Dr. Shinzaburo Oka was born in Dalian, Manchuria (the present People's Republic of China) on March 21, 1926. He graduated from the Department of Chemistry, Faculty of Sciences, Kyoto University in 1947 and was employed in the Tuberculosis Research Institute, Kyoto University (the present Institute for Frontier Medical Sciences, Kyoto University) as a researcher, then in the Institute for Chemical Research, Kyoto University as a researcher in June, 1948 to continue his research on organic syntheses under the supervision of Professor Sango Kunichika. He was promoted to an Associate Professor in the Institute for Chemical Research, Kyoto University and received a doctoral degree from the Kyoto University for his studies on the dehydrogenation from aliphatic glycols in 1962. In 1971, Dr. Oka was promoted to a Full Professor of the Kyoto University to hold a chair of organic chemistry, or Laboratory of Organic Unit Reactions, the Institute for Chemical Research, Kyoto University. He retired from the Kyoto University on March 31, 1989 and was honored with the title of Professor Emeritus, Kyoto University on April 1, 1989.

Dr. Oka performed extensive researches in both fundamental and applied fields of organic chemistry such as alkylation of polyphenols, synthesis of crotonaldehyde by gas-phase condensation of acetaldehyde, preparation of lactones from aliphatic glycols, synthesis of acrolein from propylene or from formaldehyde and alkyl malonate, synthesis of methylene malonate from alkyl malonate and formaldehyde, and syntheses of cage-compounds.

He was also interested in organic syntheses mediated by organometallic compounds. The research in this field includes the carbon-carbon bond formation assisted by mercury or 8th group transition-metal elements, preparation of nitriles or halo compounds from halogenated compounds, dimerization of alkynes, preparation of ketones from acid chlorides, and preparation of nitriles from azides. His study in this field has been developed to the bio-inorganic chemistry of cytochrome P-450, which shed light on the mechanisms of certain biological reactions. His interest also concerned with organic syntheses by means of rare-earth metals such as of cerium. Dr. Oka's interest in organic syntheses did not stay in organic chemistry but further extended to the field of bio-organic chemistry including microbe-mediated syntheses of chiral building blocks.

Dr. Oka introduced sophisticated and modern technologies for elemental analyses to the Institute for Chemical Research, Kyoto University, and extended it very much.

Dr. Oka's superiority as a teacher, insight into science, and warm hospitality not only have attracted and stimulated many young and talented students but also have won him the respect and admiration of many friends and colleagues. Among his numerous professional activities, he has served as a executive board of a couple of scientific societies such as Chemical Society of Japan, Catalysis Society of Japan, and the Society of Synthetic Organic Chemistry, Japan.

