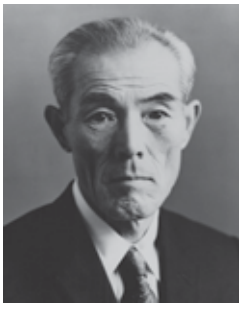
Obituary



Professor Emeritus

Dr. KUNICHIKA, Sango (1909-2004)

Dr. Sango Kunichika, Professor Emeritus of Kyoto University passed away on January 28, 2004 in Kyoto.

Dr. Kunichika was born on February 18, 1909 in Hirosima. In Hirosima High School, his interest in organic chemistry was first excited. He graduated from the Department of Chemistry, Faculty of Science, Kyoto Imperial University in March, 1935. His first achievement was in the success of the synthesis of acethylformoin under the direction of the late Professor Ryuzaburou Nodzu, Department of Chemistry, Faculty of Science. He was appointed a research assistant in April, 1935. He joined the Institute for Chemical Research, Kyoto University in May, 1938, and was appointed a lecturer in April, 1940, and an assistant professor in February, 1944. In September, 1948, he was conferred a D. Sc. from Kyoto University for his study on the synthesis of acetaldehyde from acetylene by the vapor phase method. For these years, he was concerned with the studies on reactivities of acetylene and its derivatives. In June, 1951, he was promoted to a full professor at Kyoto University. In the following years his interest was directed to the exploitation of new synthetic methods of various monomers and to the elucidation of the reactions used for the syntheses with many remarkable academic achievements.

Since 1955, Dr. Kunichika gave lectures on polymer chemistry at the graduate school of science, and supervised dissertation works of many graduate students. In 1965, he visited the United States to give a lecture on the new synthesis of methyl methacrylate from propylene at New York University.

For three years from December, 1964 to December, 1967 Dr. Kunichika served as Director of the Institute and above all contributed very much to the move of the Institute from Takatsuki to Uji. In December, 1970 he was nominated again as the Director, and he aided in the solution of many of problems until his retirement in March, 1972. He also showed his administrative ability as a member of the University Council and various committees on the campus. Further, he served as Director of the Kinki Area Chapter of the Chemical Society of Japan and that of the Society of Synthetic Organic Chemistry, Japan.

Owing to his sincere thoughtful and warm personality, Dr. Kunichika communicated well not only with the older member of the University but had a deep understanding with the students as well. His participation in student activities and his personal contact with the students helped to deepen this understanding. His motto was “to be deliberate in council and prompt in action.” For these great academic and educational contribution Dr. Kunichika was awarded the Second Class Order of the Sacred Treasure in 1981.

Obituary

Professor Emeritus

Dr. KURATA, Michio (1925-2004)

Dr. Michio Kurata, Professor Emeritus of Kyoto University, passed away on September 10, 2004, in Kyoto.

Dr. Kurata was born on February 23, 1925 in Tokyo. In 1947, he graduated the Department of Applied Chemistry, Faculty of Engineering, Tokyo Institute of Technology and entered the Graduate School of Engineering in the same Institute. In 1948, he joined the Department of Industrial Chemistry, Faculty of Engineering, Kyoto University as a research student while keeping his position in Tokyo Institute of Technology. In 1952, he quitted Tokyo Institute of Technology and was appointed as a Lecturer in the Faculty of Engineering, Kyoto University. In 1954, he was appointed as an Associate Professor in the same Faculty. He got a Ph.D. (Doctor of Engineering) from Kyoto University in 1955. He stayed in USA as a Sloan Foreign Post-Doctoral Fellow at Massachusetts Institute of Technology from 1959 to 1960 and as a Research Associate at the same Institute and Dartmouth College from 1960 to 1961. In 1962, he was promoted to a full Professor of the Institute for Chemical Research, Kyoto University to direct the Laboratory of Polymer Solution (later reorganized to the Laboratory of Fundamental Material Properties, and presently, the Laboratory of Molecular Rheology, Division of Multidisciplinary Chemistry). In 1974, he spent two months in Sweden as a Nobel Guest Professor of Royal Academy of Sciences. He was appointed as the 21st director of the Institute for Chemical Research and a member of the University Council, Kyoto University from 1986 to 1988. He retired from Kyoto University in 1988, and was honored with the title of Professor Emeritus of Kyoto University. After the retirement, he served as an adviser for Mitsubishi Gas Chemical Company from 1988 to 1995.

Dr. Kurata contributed significantly to the progress in molecular understanding of physical properties of polymers in solutions and bulk. He was a pioneer in the research of dilute polymer solution properties and developed a statistical theory relating the intrinsic viscosity of the solution to molecular parameters of polymer chains. His theory motivated extensive experimental studies of dilute solutions that provided the basis of the current research field of dilute solutions. For polymers in concentrated solutions and bulk, he made extensive investigation of the nonlinear rheological properties and the chain dynamics. He utilized viscoelastic and optical methods backed up with detailed theoretical analyses to establish a molecular picture for the dynamics and relaxation of entangled polymer chains. His findings served as a basis for later development of the tube model theory for entangled chains. He extended his research to interactions of polymer chains and small molecules and revealed important effects of this interaction on transport phenomena such as the non-Fickian diffusion of the small molecules.

Dr. Kurata was a gentle and honest person. He educated many students and young scientists. He served as the Chief Editor of the Journal of the Society of Rheology, Japan from 1975-1979 and the President of this Society from 1985 to 1987. For his brilliant achievements in scientific and educational fields, Dr. Kurata was honored with the SPSJ Award for Outstanding Achievement in Polymer Science and Technology in 1988, Award of the Society of Rheology, Japan in 1990, and the Second Class of the Order of the Sacred Treasure in 2002.

Obituary

Assistant Professor

Dr. NAKAMATSU, Hirohide (1956-2004)

(Structural Molecular Biology,
Advanced Research Center for Beam Science)

Dr. Nakamatsu, Assistant Professor of Kyoto University, passed away on July 1, 2004 in Kyoto.

Dr. Nakamatsu was born on April 11, 1956 in Osaka. He graduated the Department of Chemistry, Faculty of Science, Osaka University in 1979 and entered the Graduate School of Science, Osaka University. After he got a Master of Science on Inorganic and Physical Chemistry from Osaka University, he was employed as a technician by the Institute for Scientific and Industrial Research, Osaka University. In 1989 he moved to the Institute for Chemical Research, Kyoto University and was appointed to an Assistant Professor of the Laboratory of Nuclear Radiation (presently, the Laboratory of Structural Molecular Biology, the Advanced Research Center for Beam Science). He got a Ph.D. (Doctor of Science) from Kyoto University in 1996.

His thesis was on the molecular orbital calculations of x-ray absorption spectra. From 1998 to 1999 he stayed at Northwestern University, Illinois, USA as a research fellow.

The work of Dr. Nakamatsu was mainly on the theoretical study of electronic structures of molecules by the use of the Discrete Variational Xα (DV-Xα) molecular orbital method. He extended this method for molecular excited states and calculated x-ray absorption spectra, especially x-ray absorption near-edge structure (XANES) for gases and solids. In order to produce the realistic potential in solids, he developed the chemically complete cluster method. His interest was also on the relativistic effects on electronic structures and he studied various molecules containing heavy elements using the relativistic DV-Xα method.

Dr. Nakamatsu served a Secretary and the member of the Steering Committee of the Society for Discrete Variational Xα form 1989. For his scientific achievements and contributions to the Society, he was awarded the Special Prize from the Society for Discrete Variation Xα in June, 2004.