

A Glorious Future for Chemistry

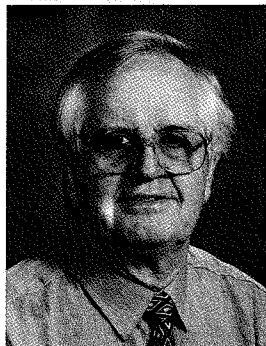
I would like to congratulate the Chemical Society of Japan (CSJ) on the occasion of its 125th Anniversary. Considering that our science can be said to have started only 100 years before the founding of the CSJ, it is remarkable that Japanese chemists were able to establish a viable Society so early in the life of chemistry.

The relation of IUPAC with Japan extends to the early history of IUPAC. The predecessor to IUPAC was the International Association of Chemical Societies, and the Japanese Chemical Society was admitted as a member at the second meeting, Berlin 1912. The Tokyo Chemical Society is listed as the member society and the three members of the Council of the IACS from Japan at the Brussels meeting in 1913 were N. Nagai, J. Sakurai, and T. Takamatsu. The IACS was dissolved to form IUPAC in 1919, and Japan became a member in 1921. An early member of the IUPAC Bureau was J. Sakurai (1928-32). K. Matsubara was elected one of four Vice-Presidents for 1934-38. Other members of the IUPAC Bureau from Japan were: S. Mizushima (1955-60, 1963-65), S. Shibata (1967-75), N. Tanaka (1973-77), S. Nagakura (1975-79), S. Ito (1979-81 and 1985-93), T. Saegusa (1987-89), K. Kuchitsu (1994-95), M. Ōki (1994-95), H. Ohtaki (1996-2003), and J. Miyamoto (1996-99). Prof. S. Nagakura was elected Vice-President of the Union for 1979-81 and was President for 1981-83, and Past-President for 1983-85.

Japanese chemists have served IUPAC as Division or Commission officers, as Titular or Associate Members, and as National Representatives. There are currently 51 members of IUPAC bodies and 72 IUPAC Fellows from Japan.

In addition to the successful 26th IUPAC Congress in 1977, there have been numerous other IUPAC sponsored conferences held in Japan over the many years of close and fruitful association between IUPAC and Japanese chemists.

Chemical research continues to expand in many directions, as does the chemical industry. The challenge for those of us who are concerned about the future of chemistry is to remind those who fund research that traditional chemistry has provided and will continue to provide the tools used by thousands of scientists who may not think of themselves as chemists, or feel that what they are doing is chemistry. The theme of the IUPAC Congresses is *Frontiers in Chemistry*. This theme implies both the frontiers of knowledge and the frontiers between traditional disciplines.



Chemistry will in the coming years enable greater control of molecular structure at both the molecular scale and at the scale of supramolecular structures. Advances in genetic engineering and nanostructured materials both result from the ability of chemists to control the assembly of molecules and molecular aggregates.

The future of chemical industry continues to be determined by advances in basic chemistry. The coming changes in the nature of the industry will stem from the improvement of products and processes so that the impact of the industry and its products on human health and the environment are significantly reduced. The global community cannot abandon the lifestyle that has been developed through the application of chemistry, but the global community can expect that the health and environmental costs of that lifestyle be significantly reduced.

The practice of chemistry has always been international and it has been global for at least the last 100 years. Progress in chemistry, or any other science, requires interaction among practitioners so that concepts can be shared, theories challenged, and duplication avoided. These interactions are of course individual; groups do not interact, only their individual members interact. However, groups can facilitate the interaction among their members. That is a role of chemical societies, both internally and externally. IUPAC has as its reason for existence the facilitation of interactions among chemists globally. Expressed most succinctly, it is IUPAC's role to ensure that chemists can discuss their work with each other without fear of being misunderstood or basing their conclusions on different sets of fundamental data.

IUPAC cannot carry out its role of facilitating communication among chemists without the cooperation of chemical societies. I would like to take this opportunity to say how grateful IUPAC is for the cooperation of the CSJ in the furtherance of its mission.

P. S. STEYN

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