45th IUPAC Council Meeting

Glasgow, UK, 5-6 August 2009

Election of Officers and Bureau Members

According to IUPAC statutes, Council must elect officers of the Union and elected members of the Bureau. Nominations for the various positions that fall vacant at the end of 2009 had to be received by the Secretary General at the IUPAC Secretariat before 5 June 2009 (i.e., two months before the start of the Council meeting).

Professor Nicole Moreau (France), Vice President and President-Elect will be president on 1 January 2010. The vice president to be elected will be president-elect on 1 January 2010 and will become president on 1 January 2012. The retiring president, Jung-Il Jin (Korea), will remain an officer and a member of the Bureau for a period of two years. Secretary General David StC. Black (Australia) was re-elected to a four-year term 2007-2011 and continues his service for two more years. Treasurer John Corish (Ireland) was elected to a four-year term 2007-2011 and continues his service for two more years.

The nominations received for **Vice President** are as follows:

- Srinivasan Chandrasekaran (India)
- Kazuyuki Tatsumi (Japan)

Elected Members of Bureau, retiring in 2009, who are not eligible for reelection, but may be nominated for another office:

- Chunli Bai (China)
- Srinivasan Chandrasekaran (India)
- Alan Smith (UK)

Elected Members of Bureau, retiring in 2009, who are eligible for reelection for a further four-year period:

- Stanislaw Penczek (Poland)
- Elsa Reichmanis (USA)
- Maria van Dam-Mieras (Netherlands)

Elected Members of Bureau, who were elected at the 44th Council until 2011:

- Anders Kallner (Sweden)
- Werner Klein (Germany)
- Ram Lamba (Puerto Rico)
- Natalia Tarasova (Russia)

At least six Elected Members of the Bureau must be elected at the 45th Council in Glasgow, i.e., the minimum number of ten Elected Members (Statute 7.2) less the four Elected Members who continue in office until 2011. The nominations received for **Elected Members of the Bureau** are as follows:

- Colin Humphris (UK)
- Stanislaw Penczek (Poland) -*reappointment*
- Elsa Reichmanis (USA) -*reappointment*
- Maria van Dam–Mieras (Netherlands) –*reappointment*
- Itamar Willner (Israel)
- Qi-Feng Zhou (China/Beijing)

Srinivasan Chandrasekaran (India)

Professor Chandrasekaran's research has been concerned with the development of new synthetic methodology for organic synthesis, synthesis of natural products, organometallic chemistry, catalysis, study of reaction mechanisms, and organic materials.

Education and Career

Chandrasekaran earned his B.S. (1965), M.S. (1967), and Ph.D. (1972) degrees at Madras University in Madras, India. His doctoral supervisor was Prof. S. Swaminathan in the Department of Organic Chemistry. He held postdoctoral fellowships/associateships in the laboratories of Prof. E.J. Corey at Harvard University, Cambridge, Massachusetts, USA (1973–1975 and 1976–1977) and Dr. J.A. Edwards at Syntex Research, Palo Alto, California, USA (1975–1976).

He is currently the chairman of the Division of Chemical Sciences and a professor of Organic Chemistry at the Indian Institute of Science, Bangalore, India. He was earlier the chairman of the Department of Organic Chemistry (1996–2003) and the Amrut Mody Chair Professor of Chemistry. From 1978 to 1989, he worked in the Department of Chemistry at the Indian Institute of Technology, Kanpur, India, where he served as lecturer (1978–1980), assistant professor (1981-1985), and professor (1985–1989). He has been a visiting professor at the Australian National University, Canberra (1985); University of Karlsruhe, Germany (1987); RWTH, Aachen, Germany (1992, 1996); and the Chinese Academy of Sciences, Beijing (2001).

Chandrasekaran has published over 200 research papers and reports in national and international journals. Over the years he has supervised 35 Ph.D students, 60 M.S. students, and 48 postdoctoral fellows. He is a consultant to a number of chemical and pharmaceutical industries in India and abroad.

IUPAC Involvement

Chandrasekaran is an elected member of the IUPAC Bureau (2002–2009) and has served as a member of the Project Committee (2002–2007). He is currently a member of the Evaluation Committee and also a member of the Executive Committee. Earlier he served on the IUPAC Commission on Nomenclature of Organic Chemistry (1993–1995) . At present, he is the chairman of India's National Committee of IUPAC at the Indian National Science Academy.

Related Professional Activities

Chandrasekaran has been a member of many committees and organizations: associate editor, *Proceedings of the Indian Academy of Sciences* (Chemical Sciences, 1991–2000); associate editor, *Tetrahedron Letters*; member: Sectional Committee, Chemistry, Indian Academy of Sciences (1991–1998); editor, 10th International Conference on Organic Synthesis, Bangalore (1994); member, Editorial Board, *Indian Journal of Chemistry* (1995–2001); member, Program Advisory Committee in Organic Chemistry, Department of Science and Technology, New Delhi (1995–2001); chairman, Research Committee on Chemistry and Technology, Council of Scientific and Industrial Research (CSIR), Government of India (2008–present); member, Council of Indian National Science Academy (1998–2000); convener, National Symposium in Chemistry, Bangalore (1999); chairman, Task Force on Green Chemistry, Government of India; chairman, FIST, Dept. of Science & Technology; secretary, Indian Academy of Sciences, Bangalore (2004-2009); vice president, Chemical Research Society of India (2005-2010); co-convener, Indo-French Centre for Organic Synthesis (2002–present); secretary, National Organic Symposium Trust (2007–2009). He also serves as a member of the research councils of a number of CSIR laboratories and leading academic institutions in India. He has also served as a member of the Board of Studies of a number of universities in India. Chandrasekaran has delivered more than 200 invited lectures and seminars at various national and international meetings, universities, and research institutions in India and overseas.

Awards

Chandrasekaran received the Basudev Banerji Medal and Prize from the Indian Chemical Society in 1988 and the Shanti Swarup Bhatnagar Prize from CSIR in 1989. He was the Prof. A.B. Kulkarni Endowment Lecturer at the University of Bombay (1992); Prof. N. Venkatsubramanian Endowment Lecturer at the University of Madras (1993); Prof. T.R. Seshadri Memorial Lecturer at Delhi University (1998); Prof. Siddappa 60th Birthday Commemoration Lecturer at Dharward University (1999); Prof. O.P. Vig Endowment Lecturer, Panjab University, Chandigarh (2000); Jawaharlal Nehru Birth Centenary Lecturer of the Indian National Science Academy (2001); 125 Years-Indian Association for the Cultivation of Science, Kolkata, Commemoration Lecturer (2002); Prof. Sukh Dev Endowment Lecturer, Pune University (2004); Medal of the Material Research Society of India (2005); Kalyani

University Endowment Lecturer (2006); Ram S. Goyal Prize—Chemistry (2006); A.V. Rama Rao Foundation Lecture Award of JNCASR, Bangalore (2006); J.C. Bose National Fellowship of Ministry of Science & Technology (2007–2011); and the Golden Jubilee Commemoration Medal, Indian National Science Academy (2007).

He received the Silver Medal of the Chemical Research Society of India (2002), Medal of the Material Research Society of India (2004), and the Alumni Award for Excellence in Research in Science, IISc (2004). Chandrasekaran was appointed research fellow of the Indian National Science Academy (1985–1987); fellow of the Indian Academy of Sciences (1989); and fellow of the Indian National Science Academy (1992); Honorary Professor of the Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore (2000–present); and Fellow of the Third World Academy of Sciences, Trieste, Italy (2000–present).

Kazuyuki Tatsumi (Japan)

Professor Kazuyuki Tatsumi started his carrier as a theoretical chemist, and his research subjects have shifted into synthetic inorganic chemistry, extending over coordination chemistry, organometallic chemistry, and bioinorganic chemistry. His recent research interests include the synthesis of coordinateively unsaturated organometallics, transition metal chalcogenides, and transition metal sulfide/thiolate clusters modeling the active sites of reductases such as nitrogenase, hydrogenase, and acetyl-CoA synthase.

Education and Career
Tatsumi received his B.S. (Hons.) in 1971, and obtained a Ph.D. in theoretical inorganic chemistry in 1976 at Osaka University. He held postdoctoral fellowships at Texas A&M University (1977–1979), where he studied lanthanide and actinide chemistry with the late Prof. Minoru Tsutsui, and then in the theoretical group of Prof. Roald Hoffmann at Cornell University (1979–1982), where he learned about the beauty of chemistry. In 1982, he joined the group of Prof. Akira Nakamura at Osaka University (Faculty of Science) as an assistant professor. There he started researching the chalcogenide chemistry of early transition metals while continuing to study theoretical inorganic chemistry. He was awarded a visiting professorships at the University of Helsinki in 1985, and at EPFL (Switzerland) in 1987. He was promoted to associate professor at Osaka University (Faculty of Engineering Science) in 1991, and to professor of chemistry at Nagoya University in 1994.

IUPAC Involvement
Tatsumi is the president of the Inorganic Chemistry Division, which he has been a member of since 2002. He was appointed the chairman of the IUPAC Subcommittee of the Science Council of Japan (NAO) in 2008.

Related Professional Activities
Since 2005, Tatsumi has been on the Council for Science and Technology Committee (Subdivision on Science Committee) of the Ministry of Education, Culture, Sports, Science, and Technology, Japan. He became a member of the Science Council of Japan in 2008. He led the Grant-in-Aid on Priority Area Project, “Reaction Control of Dynamic Complexes” from 2002 to 2006, and has been a head investigator of Grant-in-Aid on Creative Scientific Research on the chemistry of reductases since 2006. He has been a member of the International Organizing Committee of Pacifichem since 1996, where he is currently the vice-chair for Pacifichem 2010. He served on the Editorial Advisory Board of the *New Journal of Chemistry* (1995-1997) and on the International Advisory Editorial Board of *JCS Dalton* (1998-2002). Presently, he serves on the Editorial Board of *Chemistry: An Asian Journal*. He has also been the Regional Editor of *J. Organomet. Chem.* since 2002.

Awards
Tatsumi received the Inoue Prize for Science in 1998, the Humboldt Research Award in 2004, and The Chemical Society of Japan Award in 2006. He was awarded lectureships from the Chinese Academy of Science in 2000, KAIST (Korea) in 1999 and 2001, and the National Science Council (Taiwan) in 2003. He was appointed Honorary Professor of Nanjing University of Science of Technology (2004) and Lanzhou University (2004), Visiting Professor of the University of Helsinki (1985), EPFL (Switzerland, 1987), Suzhou University (2001), and the University of Heidelberg (2005).

Colin Humphris (UK)

Colin Humphris is the incoming chair of the Royal Society of Chemistry's IUPAC Committee. He is a titular member of the Committee on Chemical Industry, IUPAC. Humphris organized the World Chemistry Leadership Meeting in 2007 in Torino, Italy, and represents ICCA on the International Year of Chemistry Management Committee. He is managing the developing IUPAC involvement in SAICM and with UNEP and WHO.

Humphris is a former business leader of speciality chemical and technology activities, who had a 32-year career in BP. From 2003–2006, he was executive director of the European Chemical Industry Council, CEFIC, based in Brussels. In this position, he was responsible for developing industry programs in research and science that underpinned industry commitments to sustainable development. He was the originator of SUSCHEM, which focused on European policy for innovation and economic growth, and on research into the health and environmental impacts of industry products and operations. Humphris represented the World Business Council for Sustainable Development on the WHO's European Environment & Health Committee.

Since leaving Cefic in 2006, he has consulted for them and other industry groups on European issues relating to innovation, environment, and health, and on alternatives to animals in toxicological testing. He is a member of ITFEX and a member of the RSC Roadmap Steering Committee.

Humprhis joined BP from school as a BP University apprentice. After graduation in 1974 BSc 1st Class Honours in Applied Chemistry (BP Sunbury/Kingston Polytechnic), began working as a materials scientist at BP, rising to project leader in 1982. From there he held increasingly responsible positions, culminating in business unit leader of BP Specialities. In this role, he led the merger of BP and Amoco's speciality chemicals interests, resolving potential competition issues for the overall Amoco merger in Europe. Prior to that, he was business venture manager for the Polyketones, a position in which he managed the business development of a new plastic for BP. Before that, as managing director of Adibis (BP Subsidiary), he returned the company to profit after three years of losses and failed attempts to divest it.

Stanislaw Penczek (Poland)

Professory Penczek's research activities have focused on kinetics, thermodynamics, and mechanisms of the polymerization processes, as well as on the synthesis of new polymer structures. He established identical reactivities of ions and ion-pairs in some polymerizations at a time when the paradigm of higher reactivity of ions (free) was generally accepted as a dominating viewpoint. He also applied, for the first time in macromolecular chemistry, dynamic NMR for studies of the ultra-fast reactions.

Education and Career
Since 1974, Penczek has been a professor in the Department of Polymer Chemistry at the Polish Academy of Science in Lodz. He received his Ph.D. in 1963 and D.Sci. (Habilitation) in 1970 at the Lodz Technical University. From 1966–1967, he was a post-doctoral fellow under Prof. M. Szwarc at Syracuse University, New York, USA.

Penczek has been a visiting professor at nine universities in Europe and the USA. He has given invited lectures at 80 international meetings and made over 300 printed contributions; 8 monographs (including "Models of Biopolymers," 1990) and textbooks; and 15 chapters in books and monographs. His works were cited 270 times in 2008. Penczek teaches polymer courses at the graduate school at the Jagiellonian University (Cracow) and every second year at the KTH, Stockholm.

IUPAC Involvement
Stanislaw Penczek (Poland) is a titular member of the Polymer Division and was elected to the Bureau in 2006, in which he serves on the Evaluation Committee. He was chairman of the IUPAC World Polymer Congress 2000. He has also been chairman of two, and co-chairman of four, international IUPAC symposia. Recently, he published the *Glossary of Terms Related to Kinetics, Thermodynamics, and Mechanisms of Polymerization*, prepared by the Polymer Division.

Related Professional Activities
In 1998, Penczek was elected a member of the Polish Academy of Science. He is also a longstanding member of the Polish Chemical Society, serving as chairman of the Division of Kinetics (1978–1988) and chairman of the Polymer Division (1988–1998). From 1997–1999, he was president of the European Polymer Federation and, in 1993, he was a titular professor of the French Academy of Science. He is a member of the editorial boards of nine international scientific journals, and is *co*-editor-in-chief of *e-Polymers*.

Awards
Penczek has received numerous honors: Medal of the University of Jena (1988); M. Sklodowska-Curie Prize (1990); Medal of the French Academy of Science (1993); Chevalier dans l'Ordre de Palmes Académiques, France (1998); Biannual International Award of the Belgian Polymer Group (2001); International Award and Personal Medal of the Society of Polymer Science, Japan (2002); Otto Warburg Foundation Award, Germany (2003).

Penczek is Doctor of Honoris Causa of the University Pierre and Marie Curie in Paris (2003) and Doctor of Honoris Causa of the Russian Academy of Sciences (2004). In 2004, he was also given a title of honorary professor of the Jagiellonian University in Cracow. He was elected to the German Nordrhein-Westfälische Academy of Sciences in 2006.

Elsa Reichmanis (USA)

Elsa Reichmanis—a member of the IUPAC Bureau since 2005—recently joined the faculty of the School of Chemical and Biomolecular Engineering of the Georgia Institute of Technology. Previously, she was a Bell Labs Fellow and director of the Materials Research Department at Bell Labs, Alcatel-Lucent. She received her Ph.D. and B.S. degrees in chemistry from Syracuse University. In 1984, she was promoted to supervisor of the Radiation Sensitive Materials and Application Group, followed by promotion to head of the Polymer and Organic Materials Research Department in 1994. Her research interests include the chemistry, properties, and application of materials technologies for photonic and electronic applications, with particular focus on polymeric and nanostructured materials for advanced technologies.

She has had impact on the field of microlithography, which is central to the manufacture of electronic devices. Her work has contributed to the development of a molecular-level understanding of how chemical structure affects materials function, leading to new families of lithographic materials and processes that may enable advanced VLSI manufacturing. Notably, she was responsible for the design of new imaging chemistries for 193 nm lithography that were the first, readily accessible and manufacturable materials for this technology. In a related area, she was involved in the design and characterization of "closed-pore" nanoporous low-dielectric constant ($k > 1.4$) materials exhibiting a high degree of mechanical and environmental stability. She is currently exploring imaging and hybrid organic/inorganic materials chemistries for photonic applications, in addition to materials and processes for plastic electronics.

Elsa Reichmanis was elected to the National Academy of Engineering in 1995 and has participated in several National Research Council activities. She currently serves as co-chair of the NRC Board on Chemical Sciences and Technology, and is a member of the Visiting Committee on Advanced Technology of the National Institute of Standards and Technology. She has been active in the American Chemical Society throughout her career. Most recently, she was 2003 president of the Society. In other technical activities, she served as a member of the Air Force Scientific Advisory Board.

Elsa Reichmanis is the recipient of several awards, including named university lectureships. She was presented with the 1993 Society of Women Engineers Achievement Award and, in 1995, was named a Bell Laboratories Fellow. She is the 1996 recipient of the ASM Engineering Materials Achievement Award, she was elected a Fellow of the American Association for the Advancement of Science in 1998, and was awarded the ACS Award in Applied Polymer Science in 1999. In 2001, she was awarded the Society of Chemical Industry's Perkin Medal and was the recipient of the Arents Medal from Syracuse University. In 2002, she was elected a Fellow of the Polymer Materials Division of the American Chemical Society and in 2003 she was the recipient of the first Braude Award from the ACS Maryland local section. In 2004, she was elected as a Foreign Member of the Latvian Academy of Sciences, and in 2005 was named a Fellow of the Royal Society of Chemistry. She is also a member of the American Physical Society, the Materials Research Society, the Institute of Electrical and Electronics Engineers, and the Society of Photo-optical Engineers. She is associate editor of the ACS Journal, *Chemistry of Materials*.

M.C.E. (Rietje) van Dam-Mieras (Netherlands)

Rietje van Dam-Mieras was born in Dordrecht, the Netherlands, in 1948. She studied chemistry at Utrecht University, The Netherlands, graduated in 1973 and did her Ph.D. thesis at the same university in 1976. From there, she worked at Maastricht University and the Open University of the Netherlands (OUNL). In 1993, she was appointed as a professor (chair, natural sciences, especially biochemistry and biotechnology) at OUNL. From 1996 to 1998, she was the chairperson of the board of professors (rector) at the OUNL. In September 2007, she was nominated Vice-Rector Magnificus of Leiden University. She also holds the chair of Sustainable Development and Innovation of Education at Leiden.

She has been, and still is, a member of several advisory and supervisory committees: the Programme Committee Science and Technology of the European Association of Distance Teaching Universities, a Dutch national committee which defined a new natural sciences component in Dutch secondary education; the scientific advisory board of the Deutsches Institut für Fernstudien Forschung an der Universität Tübingen; the supervisory board of AKZO Nobel Nederland BV; the Copernicus Working group of the European Association of University Rectors; the Dutch Scientific Council for Government Policy; the Advisory Board of AXIS, the national platform for science and technology in education and labour market; the scientific advisory board of Delft Cluster, a consortium of research institutions for civil engineering; the supervisory board of the Netherlands Organisation for Applied Scientific Research; the societal advisory board for chemical sciences of the Netherlands Council for Scientific Research and its program committee on The Sociatal Component in Genomics Research; the Stiftungsrat of Lüneburg University, the Dutch/Flemish Association of Science Centre's; the supervisory board of Unilever the Netherlands; and the advisory board of Deltares.

Van Dam-Mieras is a founding member of the Regional Centre of Expertise (RCE) on Education for Sustainable Development, Rhine-Meuse. She is actively involved in the RCE-initiative of the United Nations University as a visiting professor at the UN Institute for Advanced Studies in Yokohama and as a member of the Ubuntu Committee of Peers.

Itamar Willner (Israel)

Itamar Willner is a chemistry professor in the Institute of Chemistry at the Hebrew University of Jerusalem. His research interests include supramolecular chemistry, molecular self-assembly, molecular and biomolecular machines, molecular and biomolecular electronics, bionanotechnology, sensors and biosensors.

Education

After receiving his Ph.D. in physical organic chemistry from The Hebrew University of Jerusalem in 1978, Willner was a post-doctoral fellow at U.C. Berkeley for two years. He was a staff scientist and adjunct assistant professor at U.C. Berkeley from 1980–1981 before returning to Hebrew University where he was a senior lecturer (1981–1983) and associate professor (1983–1986) prior to becoming a professor in 1986.

Awards

Among his many awards and honors, Willner received the Rothschild Prize in Chemistry in 2008 and the EMET Prize in chemistry (under the auspices of the prime minister of Israel) in 2008. He also was given the Bergmann Award in 1986, an honorary professorship at Osaka University in 1991, the Kolthoff Award in 1993, an AAAS (American Association for the Advancement of Science) fellowship in 1996, the Sandoz-Novartis Award in 1997, the Kaye Innovations Award in 1998 and 2004, the Max Planck Research Award for International Cooperation in 1998, the Israel Chemical Society Award in 2001, the Israel Prize in Chemistry in 2002, membership in the Israel Academy of Sciences in 2002, the Klachky Family Prize for the Advancement of the Frontiers of Science in 2003, membership in the European Academy of Sciences and Arts in 2004, an honorary guest professorship at Tsinghua Univesity in Beijing in 2005, and an honorary professorship at East China University of Science and Technology in Shanghai in 2007.

Qi-Feng Zhou (China)

Qi-Feng Zhou was born in Hunan province, China in 1947, graduated from Peking University, and became a teaching assistant of the same university in 1970. He worked there until January 1980 when he was accepted by the graduate school of the University of Massachusetts at Amherst, USA, where he was awarded a master's degree in 1981 and a Ph.D. in 1983, majoring in polymer science and engineering.

Immediately after receiving his Ph.D., he came back to China and returned to his post at Peking University. Zhou has been deeply involved in the study of liquid crystalline polymers, with over 200 papers and a few books, including a textbook on liquid crystalline polymers published by World Scientific Publishing Co.

His academic contributions include the proposal and experimental verification of the concept of "Mesogen-Jacketed Liquid Crystalline Polymers," which leads to a group of novel LCPs with very interesting properties. Zhou also made the first observation of some perforated layer structures in liquid crystalline rod-coil block copolymers. He was also responsible for the design and synthesis of a wide variety of mesogenic polymers without using mesogenic building blocks, the synthesis of macromolecular helix and optically active materials by using "jacket effect" in molecular designs, the discovery of the oldest synthetic thermotropic liquid crystalline polymer, and the understanding of molecular parameters controlling the monotropic-enantiotropic transition of LCPs. These findings have attracted much interest in this area and deepened the understanding of polymers and macromolecular liquid crystals.

In addition to his scientific achievements, he also has made great contributions as an administrator. He served as the executive dean of the Graduate School of Peking University for six years and the director general of the Office of Academic Degrees Committee of the State Council and director general of the Department of Postgraduate Education of the Ministry of Education for three years. He was president of Jilin University for four years before becoming president of Peking University in November 2008.

Vice President Candidates Statement
At the Beijing Council meeting in 2005 a number of delegates expressed a desire for candidates for IUPAC office to provide a statement regarding their plans if they are elected. The Executive Committee discussed this concept and decided that such a statement was suitable in the case of candidates for vice president. The VP candidates have been asked to write a brief statement describing their goals and objectives.

Statement by Kazuyuki Tatsumi

I am confident and optimistic about the future of IUPAC, as it continues to be one of the foremost international organizations for science. IUPAC will aid the community of chemistry by strengthening its expertise for the benefit of society worldwide, through excellence in science and innovative technology.

We have witnessed recent reforms of IUPAC structures, functions, and governance, which owe much to the dedication of successive presidents, officers, and active members. This movement is very encouraging, and I look forward to assisting the innovation-based development of the Union. For instance, the *ad hoc* Committee for Streamlining IUPAC Operation played a major role in improving the efficiency of operations, and I would like to pave the way in harmonizing operational efficiency with a positive attitude of members towards IUPAC activities.

I list below some specific items to be emphasized, which have in fact been highlighted by the current president and his predecessors as pressing issues:

Coping with World Needs:
IUPAC should respond to global interests and urgent necessities, such as sustainable development of society and civilization, alternative energy sources, climate change mitigation, global human health and environmental issues. With that in mind, cooperation between academic and industrial sectors of the Union is desirable. Our contribution to these assessments must be data-based, and the scientific resources of chemical societies in the world need to be utilized to that end.

Promoting the Strategic Planning of IUPAC:
By virtue of the successful reforms, perhaps it is time for IUPAC to examine key emerging issues in chemistry and civil society, and to identify priority areas for future commitments and new initiatives of IUPAC.

Enhancing the Visibility and Compatibility of IUPAC:
It is hoped that the importance of IUPAC activities will be acknowledged better by a wide range of chemists, and the public in general. We should continue to explore methods to improve the Union's visibility. For example, a mechanism should be introduced for Nobel laureates, and other world-leading chemists, to contribute to our mission on a regular basis. On the other hand, promotion of young chemists, as well as teachers and students of middle and high schools, remains a vital issue. In this regard, the direct involvement of IUPAC in the International Chemistry Olympiad and the recent development of prizes and funds for young chemists, are very timely. These can be recognized as important steps towards our goals.

Working in Closer Connection with Other Organizations:
We have to continue to expand collaborations with NAOs, chemical societies, and perhaps relevant parts of the ICSU and UN systems. In particular, closer ties with NAOs of emerging and developing countries are imperative in order to make IUPAC a more representative body of the whole chemistry community.

IUPAC has exciting years ahead with various activities associated with the International Year of Chemistry 2011. The opportunity for better recognition of IUPAC is greater than ever.

Statement by Srinivasan Chandrasekaran

I am honored to have been nominated to run for the position of vice president of IUPAC. IUPAC is a highly respected professional organization that has been striving to advance the chemical sciences worldwide in the service of humankind. IUPAC has been continuously evolving, expanding its scope and objectives to meet the challenges facing the globalizing chemistry community. The project-driven system that we adopted a few years ago along with the new initiatives to encourage and engage young chemists are beginning to pay rich dividends in terms of the utility and visibility of the Union. I have been closely associated with many of these new and positive developments in the Union for over 10 years. I would feel privileged to continue this association and contribute to many of the ongoing initiatives and launch new programs to enhance the appeal and activities of IUPAC.

Some of the key issues that I would like to address are the following.

Repositioning the Union in the changing world:
Many new and interesting developments are taking place in the chemical sciences to meet the emerging challenges that our planet and humankind are confronting. Apart from contributions from traditional subdisciplines, major discoveries are being made in the interfacial areas to address the growing concerns of energy, environment, and human well-being, and chemistry has a pivotal role to play in these endeavors. IUPAC will be required to galvanize the chemistry community to provide critical and enabling inputs to find sustainable solutions to these global challenges.

Chemistry education and engaging students:
With the declining interest of students in taking up science as a career, we will have to take more imaginative and proactive steps through the Union to inspire our students to pursue chemistry education and research. In addition to engaging the students, major new programs need to be initiated to retrain and enhance the skills of chemistry teachers.

Public understanding and appreciation of chemistry:
The common man's perception of chemistry continues to be negative and it is generally associated with poison, pollution, fire, explosions, etc. Media also tend to project chemistry as something less desirable and rarely mentions its myriad benefits to society. Sustained efforts need to be made through various chemical societies and NAOs to highlight the many useful and positive contributions of chemistry.

Through the concerted efforts of IUPAC, the year 2011 has been declared as the International Year of Chemistry by the United Nations and this provides a golden opportunity, not only to celebrate the art and science of chemistry, but also to change the public perception and image of chemistry.

Open access for chemistry journals:
Access to scientific information, particularly for scientists in developing countries, is a major concern. It is worth championing the cause of "open access" to augment information resources and thereby stimulate chemical research in all parts of the world.

Strengthen the interaction with NAOs/Industry:
While many new NAOs have joined the Union in recent times, there are still major "geographic gaps." In order to make our Union as inclusive as possible, we must endeavor to increase our membership and provide new members with opportunities for more effective interactions. Proactive steps also need to be taken to strengthen the Company Affiliates program and stimulate the participation of chemists from industry in IUPAC activities. Members of divisions and committees can play an important role in achieving this goal.

IUPAC Congress:
IUPAC Congresses are generally large and reasonably successful. It would be a good idea to not only make the program more attractive, but also devise ways to facilitate the participation of a large number of young chemists, particularly from developing countries and scientifically emerging regions.