

IUPAC Elections

Nominations for the various positions that fall vacant at the end of 2003 must be received by the Secretary General at the IUPAC Secretariat before 15 June 2003, (i.e., two months before the start of the 42nd IUPAC Council Meeting). Prof. Leiv K. Sydnes (Norway), vice president and president-elect, becomes president on 1 January 2004. On that date, Prof. Pieter S. Steyn (South Africa), current president, will become past president and remain an officer and a member of the Bureau for a period of two years. See Web site for final document <www.iupac.org/news/archives/2003/42nd_council>. The candidates—as of 1 May 2003—for each position are listed below:

IUPAC Elections Ballot

Vice President

- ☐ Hitoshi Ohtaki (Japan)
- ☐ Robert G. Gilbert (Australia)
- ☐ Bryan Henry (Canada)

Secretary General

- ☐ David StClair Black (Australia)
- ☐ John Corish (Ireland)

Treasurer

- ☐ Christopher F. Buxtorf (Switzerland)

Bureau

- ☐ Bryan Henry (Canada)
- ☐ Anders Kallner (Sweden)
- ☐ Werner Klein (Germany)
- ☐ Nicole Moreau (France)
- ☐ Oleg Nefedov (Russia)

Hitoshi Ohtaki (Japan)



Prof. Ohtaki's research interests cover various areas of solution chemistry and coordination chemistry, especially structural chemistry of solutions, including solvents, solvated ions, and complexes existing in solution by means of solution X-ray diffraction. Recently, he has focused on structural studies of supercritical water and other liquids and solvation structures of ions in supercritical fluids. He has been determining structures of short-lived reaction intermediates by the stopped-flow-EXAFS method developed by his group.

Education and Career

Prof. Ohtaki obtained M.S. and Ph.D. degrees in 1957 and 1961, respectively, from Nagoya University. From 1961 to 1964 he was a postdoctoral research fellow at the Royal Institute of Technology, Stockholm, Sweden.

Following are just a few highlights from Ohtaki's illustrious career, which began in 1959. He was director of the Coordination Chemistry Laboratories of the Institute for Molecular Science of the Okazaki National Research Institute, dean of the School of Mathematical and Physical Science of the Graduate University for Advanced Studies, director of the Institute of Science and Engineering at Ritsumeikan University. In 1993 he was named emeritus professor of the Tokyo Institute of Technology and the Graduate University for Advanced Studies. In March 2003 he retired from Ritsumeikan University where he had been a professor since 1993 and director of the Institute of Science and Engineering since 1994. Over the course of his career Ohtaki has served as a visiting professor in Sweden, Austria, Thailand, and the Philippines.

IUPAC Involvement

Prof. Ohtaki was a member of the Commission on Equilibrium Data (V.6) of the Analytical Chemistry Division of IUPAC from 1975 to 1993 (associate member, 1975–79; titular member, 1979–85; secretary, 1981–83; chairman, 1983–85; national representative, 1985–89; and coopted member, 1989–93). He was also a member of the Inorganic Chemistry Division from 1987 to 1991. He is currently a Bureau member of IUPAC, as well as a member of the Executive Committee. Recently, he was chairman of the

Vice President

The vice president to be elected at the 42nd Council Meeting will be president-elect, and will become president on 1 January 2006. Nominations for vice president received (as of 1 May 2003) are as follows:

- Prof. Hitoshi Ohtaki (Japan)
- Prof. Robert G. Gilbert (Australia)
- Prof. Bryan Henry (Canada)

Committee on Conferences in Developing Countries and of the Membership Development Committee.

Related Professional Activities

Prof. Ohtaki has served as president of the Science Council of Japan, Federation of Asian Chemical Societies, the Japanese Society of Coordination Chemistry, and the Association of Japanese Solution Chemists. Currently he is the chairman of the Committee for International Affairs of the Chemical Society of Japan.

For three decades Ohtaki has been organizing and leading major international chemistry conferences. Most recently he was chairman of the International Organizing committee for the 12th Eurasia Conferences on Chemical Sciences held in Karachi, Pakistan, in 2002.

Ohtaki has published more than 300 research papers and reviews. He has authored and coauthored five books and edited and coedited three books. His book *Chemistry of Reactions in Solutions* has been translated into Chinese. Ohtaki is also a member of the editorial boards of the *Journals of Molecular Liquids*, *Solution Chemistry*, the *Brazilian Chemical Society*, and the *Malaysian Chemical Society*.

Awards

Prof. Ohtaki received the Matsunaga Prize in 1976, the Teijima Memorial Award in 1989, the Takei Prize of the Electrochemical Society of Japan in 1990, the National Medal of Purple Ribbon in 1995, and the Prize for Scientific Merits of the Electrochemical Society of Japan in 2000. In 2002, Ohtaki was awarded the 17th M. H. Khundkar Memorial Lectureship (University of Dhaka, Bangladesh) and he was named Honorary Professor of St. Petersburg University, Russia, and a Honorary Member of the Japan Society of Coordination Chemistry.

Robert G. Gilbert (Australia)



Prof. Robert (Bob) Gilbert's research interests are in the areas of chemical dynamics and in the fundamentals and applications of the formation and properties of polymer colloids. He developed theories to understand the pressure dependence of unimolecular reactions, including models for collisional energy transfer and for microscopic rate coefficients for barrierless reactions. His 1990 book on the theory of uni-

molecular reactions is regarded as the definitive authority in that field. In polymer colloids, his work includes the development of the means, using appropriately designed experiments, of determining rate coefficients for individual processes in these complex heterogeneous systems, and then using these data to determine the dominant mechanisms. His book on this topic, published in 1995, is regarded as a landmark. His research has since broadened to look at polymer colloids in natural systems, and to bridge the gap between chemical and chemical engineering sciences in the manufacture of industrial products. He consults widely with multinational industry.

Education and Career

Prof. Gilbert received his bachelor's degree from the University of Sydney and completed his Ph.D. at the Australian National University, Canberra, in 1970. After two years of postdoctoral research at MIT (Cambridge, MA, USA), he returned to the University of Sydney where he holds a Personal Chair in Polymer Chemistry.

IUPAC Involvement

He has served IUPAC in many capacities, including creating and leading a Working Party on polymerization kinetics. He was also president of the Macromolecular Division (1998–2001), convener of the IUPAC "New Directions" Summit in Singapore (1997), a member of the IUPAC Strategy Development and Implementation Committee in 1997, and co-chair of the IUPAC Scientific Congress in 2001. He was elected a Bureau Member for the period 2002–2005. He is currently serving on both the Evaluation Committee and the Membership Development Committee.

Related Professional Accomplishments

He has supervised 50 Ph.D. and M.S. students and 25 postdoctoral fellows. Gilbert serves on the editorial board of several major polymer journals and is the author of two books, four patents, and 270 papers.

Awards

Gilbert received an Excellence in Teaching Award at the University of Sydney in 1990. Other awards include both the Polymer and Physical Chemistry Medals, and the Smith Medal, of the Royal Australian Chemical Institute. In 1994, he was elected a Fellow of the Australian Academy of Science.

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Bryan Henry (Canada)



The central theme of Prof. Henry's research concerns the experimental and theoretical study of highly vibrationally excited molecules. Dr. Henry has maintained a distinguished and active research career and is recognized as one of Canada's leading physical chemists. Dr. Henry is enthusiastically involved in the activities of IUPAC in Canada and abroad. He has been particularly active in trying to create interactions between universities and industry.

Education and Career

Professor Henry received his B.S. in 1963 from the University of British Columbia and his Ph.D. from Florida State University in 1969. He started his academic career at the University of Manitoba, and in 1987 moved to the University of Guelph where he became chairman of the Department of Chemistry and Biochemistry. Since 2003 he has been acting dean of the College of Physical and Engineering Science.

Occasionally over the last 25 years, he has been visiting professor at the Australian National University, the Institute for Molecular Science in Okazaki, Japan, and the University of British Columbia.

Not only has Henry chaired two chemistry departments in two of Canada's major universities, but he served as chair of the Chemistry Department Chairs of Ontario Universities. He has served as president of the Chemical Society of Canada and as chair of the Chemical Institute of Canada, of which he is also a fellow. He currently chairs the Canadian National Committee for IUPAC and is scientific program chair of the 2003 IUPAC International Congress which will be held in Ottawa in August 2003.

Related Professional Activities

Henry has also served in a number of other capacities, including on the Editorial Advisory Board of the *Canadian Journal of Chemistry*, on the Selection Committee for the Canadian Science and Engineering Hall of Fame, as a member of the Natural Sciences and Engineering Research Council Chemistry Grant Selection Committee, and more. In addition, he has authored or co-authored over 100 research papers.

Awards

Prof. Henry has earned a number of honors, including the Gerhard Herzberg Award of the Spectroscopy

Society of Canada for Outstanding Contributions to the Science of Spectroscopy, the LesSueur Memorial Award from the Society of Chemistry Industry, and the Montreal Medal from the Chemical Institute of Canada.

Secretary General

Secretary General

Dr. Edwin D. Becker (USA), the present Secretary General, completes eight years (1996–2003) of service and is not eligible for re-election. Nominations for Secretary General received (as of 1 May 2003) are as follows:

- Prof. David StClair Black (Australia)
- Prof. John Corish (Ireland)

David StClair Black (Australia)



Prof. David StClair Black has made major contributions in the areas of heterocyclic chemistry, coordination chemistry, and natural products. These include a book (together with J. M. Swan) entitled *Organometallics in Organic Synthesis*, and approximately 250 research papers.

Education and Career

Prof. Black received his B.S. and M.S. degrees in chemistry at the University of Sydney. He then undertook a Ph.D. in Cambridge from 1960–1963, working with Professor Lord Todd. He was a postdoctoral associate with Prof. Thomas Katz at Columbia University (1963–1964) before taking up a lectureship in Chemistry at Monash University in 1965. He was appointed to the chair of Organic Chemistry at the University of New South Wales in 1983. Since 2000 he has been associate dean (Research) in the Faculty of Science.

He has spent study leave at the ETH Zürich, Würzburg University, and Cambridge University, and held Visiting Professorships in Tokyo, Auckland, Göttingen, Innsbruck, and Kobe, and given invited lectures at international conferences and major universities.

IUPAC Involvement

Professor Black has been a member of the Organic and Biomolecular Chemistry Division of IUPAC since 1994. He has been division secretary (2000–2001) and is currently vice president. He has served as a

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member and secretary of the Biomolecular Subcommittee (1995–2000). He is also chair of the Subcommittee on Organic Synthesis (1997–present) and member of the Inter-Divisional Subcommittee on Green Chemistry (2001–present).

Recently he was also a member of the Editorial Board of *Pure and Applied Chemistry* (1997–2001) and a member of the ad hoc working party on the Strategic Plan Upgrade. From 1999–2002, Black was the chair of the Australian National Committee for Chemistry, with responsibility for relationships with IUPAC. In this context he was involved in the planning and execution of the IUPAC Congress and General Assembly in Brisbane in 2001.

Related Professional Activities

He has been a member of the Editorial Board of *Advances in Heterocyclic Chemistry*, and the executive of the International Society for Heterocyclic Chemistry, serving a term as past president. He is currently editor of Volume 15 of *Science of Synthesis*, being published by Thieme.

Awards

Prof. Black has won the Royal Australian Chemical Institute Rennie and H. G. Smith medals, and was national president in 1998.

John Corish (Ireland)



Prof. Corish's research interests are in matter transport in solids, including transdermal drug delivery. He has published more than 150 papers and several patents that resulted in a commercial product sold in 22 countries.

Education and Career

Prof. Corish obtained his B.S. and Ph.D. Degrees at University College Dublin before moving to the University of Western Ontario as a postdoctoral fellow and lecturer. He returned to University College as a college lecturer before being appointed in 1982 to the chair of Physical Chemistry at Trinity College, University of Dublin. He was elected a fellow of the College in 1986.

He is currently head of the Department of Chemistry at Trinity, a post he previously held from 1985 to 1991. In Trinity he has also served as dean of the Faculty of

Science, bursar (vice president finance), and as its first dean of research (vice president research). In the latter post he was responsible for the university's interaction with industry and for its very successful campus company program. He served on the Board of the College for 10 years and has extensive experience in project management having chaired a number of committees including the Business and Industry Committee, the High Performance Computing Development Committee, the Research Committee, and the building committees for two major buildings.

Related Professional Activities

Outside the college, Corish has been a member of the Council of the Institute of Chemistry of Ireland. He was president of the Institute from 1990–92. He has served on the Trades Council and Innovation and Technology Policy Committee of the Irish Business and Employers Confederation, as chair of the Chemical and Allied Products Industrial Training Committee of the Irish Industrial Training Authority, and as a member of the Royal Dublin Society's Science Committee. He was elected a member of the Royal Irish Academy in 1986, was a member of its Council from 1998–2002, and was Academy vice president in 2000.

IUPAC Involvement

Corish's service in IUPAC started in 1979. On the Commission on High Temperature and Solid State Chemistry, he has served as secretary (1987–91) and chairman (1991–95). He served as vice president (1995–97) and president (1997–2001) of the Inorganic Chemistry Division. From 1987–93 he was a member of the Interdivisional Committee on Terminology, Nomenclature and Symbols (ICTNS) and from 1999–2001 he was a member of the Evaluation Committee. He is currently acting secretary of the Inorganic Division, chairman of the Subcommittee on Materials Chemistry, and a member of ICTNS.

Since 1999 he has been responsible for the IUPAC process for the naming of new elements. He has also served on the Bureau and has been a member of the Irish delegation to several Councils.

Treasurer

Dr. Christoph F. Buxtorf (Switzerland), the present treasurer, was elected to a four-year term in 1999. He is eligible for re-election for a second four-year term. As of 1 May 2003, there were no other nominations for treasurer.

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Christoph F. Buxtorf (Switzerland)



In 2000, after 34 years with Sandoz and Novartis, Dr. Buxtorf retired as head of Manufacturing and Technology at Novartis Crop Protection, now Syngenta. In his career, he had technical and managerial responsibilities in manufacturing and chemical development in Switzerland and the USA. Dr. Buxtorf was a member of Boards in Europe and the Far East on behalf of Novartis. He was a member of the Executive Committee of Novartis Crop Protection, which was responsible for worldwide operations in manufacturing and technical development. He was also a member of the Technology Advisory Board and the Safety and the Environmental Council of Novartis. Buxtorf was further trained in finance management and corporate strategy in Europe and at Harvard University.

Education

Dr. Buxtorf received a degree in chemistry from the Engineering School in Burgdorf, a Dr. of Science from the University of Fribourg, Switzerland, followed by a post doctoral fellowship with the National Council of Canada at the McGill University, Montreal.

IUPAC Involvement

Since 1999 Buxtorf has been Treasurer and a member of the Executive Committee and the Finance Committee. He chaired the working party on National Subscriptions and Related Finance Matters and was a member of the Conference Policy Development Committee and the ad hoc working group on industrial relations.

Related Professional Activities

Dr. Buxtorf is a member of the Society of the Swiss Chemical Industry and the Swiss Chemical Society in which he was active in the division of Chemical Industry for 12 years. As chairman of the manufacturing section of the European Crop Protection Industry, he had extensive responsibility for worldwide industry standards.

Bureau

Elected Members of Bureau, retiring in 2003, who are not eligible for reelection, but who may be nominated for another office:

- Prof. Hitoshi Ohtaki (Japan)
- Prof. Gerhard M. Schneider (Germany)

Elected Members of Bureau, retiring in 2003, who are eligible for reelection for a further four-year period:

- Prof. Nicole J. Moreau (France)
- Prof. Oleg M. Nefedov (Russia)

Elected Members of Bureau who were elected at the 41st Council until 2005:

- Prof. Chunli Bai (China)
- Prof. S. Chandrasekaran (India)
- Prof. Robert G. Gilbert (Australia)
- Dr. Edwin P. Przybylowicz (USA)
- Dr. Alan Smith (UK)
- Prof. Gus Somsen (Netherlands)

Nominations for Bureau received as of 1 May 2003 (the statutory deadline of 15 June 2003), are as follows:

- Prof. Bryan Henry (Canada)
- Prof. Anders Kallner (Sweden)
- Prof. Dr. Werner Klein (Germany)
- Prof. Nicole Moreau (France)—reappointment
- Prof. Oleg Nefedov (Russia)—reappointment

Bryan Henry (Canada)

See profile above as nominee for vice president.

Anders Kallner (Sweden)



Kallner's main research areas have been lipid and vitamin metabolism, nutrition, clinical conditions related to various markers, statistics and modelling, and the chemistry of natural products, particularly innate antibiotics. He has been active in various aspects

of quality improvement in the laboratory and promoted accreditation of medical laboratories. He has contributed to several Standards from ISO (TC 212, and CASCO 10) and CEN (TC140) and been a consultant to the World Health Organization in Alexandria and Geneva. In addition, he has been project leader for several projects on quality management in hospital laboratories in the Baltic countries and Russia and is presently project leader for a major project in N.W. Russia (Murmansk and St. Petersburg).

Education and Career

Anders Kallner studied general chemistry at the University of Stockholm and organic chemistry at the

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Royal Institute of Technology in Stockholm before graduating in biochemistry (Ph.D.) from the Karolinska Institute in 1967. He later earned his M.D. at the same university and later became associate professor of Clinical Chemistry at the Karolinska Institute. He has held positions in county, regional, and university hospitals and is presently senior consultant at the Department of Clinical Chemistry at Karolinska University Hospital in Stockholm, Sweden.

IUPAC Involvement

Kallner is presently president of the Chemistry and Human Health Division. He has been involved since 1991 when he became a member of the Clinical Chemistry Section of the Division. In 1999, he coordinated a project to establish strategies to set global quality specifications in laboratory medicine, and he is now a member on a task group whose goal is to compile a compendium for chemists of terms applied to drug development.

Related Professional Activities

Kallner has been active in the Executive Board of the International Federation of Clinical Chemistry and Laboratory Medicine as secretary, treasurer, and vice president. He is currently chairman of the Swedish Committee for Standardisation in Laboratory Medicine. He is also a member of the Swedish Society for Clinical Chemistry and the American Association of Clinical Chemistry.

Kallner has published more than 150 scientific papers in international journals, authored educational material for medical students, and made over 200 oral presentations and posters at national and international congresses and conferences.

Werner Klein (Germany)

Profile submitted after press deadline—see Web site for details.

Nicole J. Moreau (France)



Prof. Moreau successfully designed the first purification, using affinity chromatography, of enzymes that inactivate aminoglycoside antibiotics. Her research is at the interface of chemistry and life sciences, and she continues to

study the mode of action of antibiotics and the way bacteria can resist them.

Education and Career

Prof. Moreau received an M.S. in physical chemistry from the University of Paris (Sorbonne). She obtained a doctorate in physical sciences (chemistry distinction) in 1967 from Orsay University. In 1972, Moreau joined the chemistry laboratory of Prof. Le Goffic at Ecole Normale Supérieure in Paris, where she worked until 1993. In 1973, she was a postdoctoral fellow in the laboratory of Dr. J. S. Pitton at the Medical Microbiology Institute in Geneva, Switzerland. Prof. Moreau began service with the Centre National de la Recherche Scientifique (CNRS) in 1962, where she was directeur de recherche from 1979 to 1992. She has been a full professor at University Paris 6 (Pierre and Marie Curie) since 1993. She also has been a professor at the Laboratory of Molecular Research on Antibiotics of the University Paris 6 since 1994.

IUPAC Activities

Prof. Moreau served as vice president of the French National Committee for Chemistry (IUPAC NAO) since 1994 and as a member of the French National Committee of Chemistry Delegation at IUPAC since 1995.

Related Professional Activities

Moreau has held a number of leadership positions with leading chemistry institutions: Chargé de Mission, ministère de la recherche—Adjoint du chef du département “Médicaments” (1984–89); secretary (1989–97) and president (1997–99) of EUCHEM (European Chemistry); president of GESA (Study Group of Structure-Activity Relationships, 1990); Chargé de Mission, Department of Chemical Sciences—CNRS (1993–97); secretary of the Maison de la Chimie Foundation International Prize (1994–present); directeur Scientifique Adjoint, Department of Chemical Sciences—CNRS (1998–present). In addition, she is a long-time member of the French Chemical Society, French Microbiology Society, and the French Biochemistry and Molecular Biology Society.

Awards

Moreau was awarded the Prix de l'Académie de Pharmacie, Paris, in 1974, and the Chevalier de l'Ordre National du Mérite, awarded by the State Department of Research, in 2002.



Oleg Nefedov (Russia)

Prof. Nefedov is a well-known organic chemist with special interests in physical organic chemistry, small-ring chemistry, organic synthesis, and organometallic chemistry. He is one of the founders of

the modern chemistry of carbenes and their Group 14 element analogs. His first review published in this area in *Angewandte Chemie* in 1966 actually initiated the development of this new field of organometallic chemistry. Another area of his research activities is related to the chemistry of diazocompounds, cyclopropanes, and cyclopropenes. Prof. Nefedov has also developed a new approach to the introduction of fluorine into aromatic rings.

Education and Career

Nefedov pursued his graduate studies at the Mendelev Institute of Chemical Technology, Moscow. In 1967 he received a Doctor of Sciences (Organic Chemistry) from the N. D. Zelinsky Institute of Organic Chemistry, Moscow. From 1957 to 1968, he was a research scientist at the Zelinsky Institute of Organic Chemistry, Moscow. Between 1959 and 1960, he held a postdoctoral fellowship at Heidelberg University, Germany and from 1965 to 1966 he was a postdoctoral fellow at the Free University in Brussels, Belgium.

In 1968 he became professor of chemistry and head of the Laboratory of Carbene and Small-Ring Chemistry at the Zelinsky Institute. In 1987, Nefedov was made a full member of the USSR Academy of Sciences, subsequently the Russian Academy of Sciences. He later became vice president of the Academy and academician-secretary of its Division of General and Technical Chemistry. Since 1990, he has been chairman of the Russian Academy of Sciences Higher Chemical College, and since 1996 he has been

chairman of the National Committee of Russian Chemists. He has also been a visiting professor in the USA, Japan, France, and Germany.

IUPAC Offices and Assignments

Currently Prof. Nefedov is an elected member of the IUPAC Bureau (2000–2003) and its Executive Committee (2001–2003). He serves as a member of the Evaluation Committee for IUPAC projects as well. Since 1996 he has been the chairman of the National Committee of Russian Chemists for IUPAC. He was also a titular (1981–91) and associate (1991–93) member of the Commission on Physical Organic Chemistry. Since 1981 he has regularly participated in all IUPAC General Assemblies and in many IUPAC and other international conferences.

Related Professional Activities

Nefedov is editor-in-chief of a number of journals, namely, *Mendelev Communications*, *Russian Chemical Bulletin* (*Izvestiya Akademii Nauk. Seriya Khimicheskaya*), and the *Russian Chemical Reviews* (*Uspekhi khimii*). He has authored numerous scientific papers and books on organic and physical chemistry, chemical aspects of ecology, and social problems of science.

Awards

Among the many honors that Nefedov has received are the USSR State Prize, Moscow, 1983 and 1990; Zelinsky Prize, Moscow, 1987; Prize of the USSR and Hungarian Academies of Sciences, Moscow, 1988; Semenov Prize, Moscow, 1991; Karpinsky Hamburg, 1993; and D. I. Mendelev Gold Medal, Moscow, 1998; and the Russian State Prize in Science and Technology, 2002. 🏆



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