European in Spirit and International in Appeal

10th Anniversary

In their inaugural Editorial in *Chemistry—A European Journal* in April 1995, Peter Gölitz, the founding Editor, and Jean-Marie Lehn, the founding Chairman of the Editorial Board, outlined that the first issue of the journal represented the first step towards a common goal of creating a journal that is "European in spirit and international in appeal". Dedication to this goal by all the parties involved in the journal has resulted in what the journal is today. Over the last ten years, *Chemistry—A European Journal* has grown dramatically both in terms of its European backing and support as well as its international reputation. This is clearly illustrated by this issue of the journal, which celebrates our official 10th anniversary—the first issue of *Chemistry* appeared in April 1995. To mark this occasion a one-day symposium entitled: *Chemistry—A European Conference: Stimulating Concepts in Chemistry* will be held at the Institut de Science et d'Ingénierie Supramoléculaires in Strasbourg. The diverse international program of world renowned researchers for the symposium was selected following discussions with the Chairman of the Owner Societies, Professor Wolfram Koch, and the Chairman of the Editorial Board, Professor Jan-Erling Bäckvall, and we are delighted that all the speakers agreed immediately to give lectures at the event. Their influence on *Chemistry—A European Journal* is illustrated in part in the accumulated data in Tables 3–9 in the Editorial in issue 1 of this year (see p. 4–12).

Chemistry—A European Conference: Stimulating Concepts in Chemistry

10.00–10.30 Opening Remarks

10.30–11.20 Professor Fraser Stoddart (UCLA, USA)
"A Decade of Matching Chemistry with *Chemistry*"

11.20–12.10 Professor Günter Schmid (Essen, Germany)
"The Relevance of Size and Shape of Metal Nanoparticles"

12.10–13.40 Lunch

13.40–14.30 Professor José Barluenga (Oviedo, Spain)
"The Stimulating Role of Transition-Metal Carbene Complexes in the Organic Synthesis Scenario"

14.30–15.20 Professor Frans De Schryver (Leuven, Belgium)
"Dancing with Molecules"

15.20–15.40 Coffee Break

15.40–16.30 Professor Steven Ley (Cambridge, UK)
"Development of New Tools and Methods for Organic Synthesis"

16.30–17.20 Professor George Whitesides (Harvard, USA)
"Reinventing Chemistry"

17.20–17.30 Closing Remarks


J. F. Stoddart


G. Schmid


J. Barluenga


F. C. de Schryver


S. V. Ley


G. M. Whitesides

 DOI: 10.1002/chem.200500114

Fully Booked

Since the symposium was announced the response from the scientific community to the program has, not surprisingly, been tremendous. All the places available have been taken.

The location for these celebrations and for the first event of this kind for the journal could not have been more appropriate. Not only is the Institut de Science et d'Ingénierie Supramoléculaires (ISIS; see Figure 1) where our Founding Chairman, Jean-Marie Lehn, is based, but Strasbourg is a truly European city (Figure 2 and 3), being one of the key centers of the European Parliament (see Figure 4) at which plenary sessions are held for one week every month, and also home to the European Court of Human Rights and the Council of Europe.

Fitting Location

Figure 1. View of the Institut de Science et d'Ingénierie Supramoléculaires in Strasbourg.

Figure 3. View of the Cathedral in Strasbourg. Picture taken by Mario Müller.

Figure 2. View of the Maison Kammerzell in Strasbourg. Picture taken by Mario Müller.

Figure 4. View of the European Parliament Building in Strasbourg. Picture taken by Mario Müller.

Table 1. The European chemical societies that own *Chemistry—A European Journal*.

Land	Society	Founded	Web address
Austria	Gesellschaft Österreichischer Chemiker (GÖCh)	1897	http://www.goech.at/
Belgium	La Société Royale de Chemie (SRC)	1887	http://www.ulb.ac.be/assoc/src/
Belgium	Koninklijke Vlaamse Chemische Vereniging (KVCV)	1939	http://www.kvcv.be/
Czech Republic	Česká společnost chemická (ČSCh) (Czech Chemical Society CCS)	1866	http://www.csch.cz/
France	Société Française de Chimie (SFC)	1857	http://www.sfc.fr/
Germany	Gesellschaft Deutscher Chemiker (GDCh)	1867	http://www.gdch.de/
Greece	Association of Greek Chemists (AGC)	1924	http://www.eex.gr/
Hungary	Magyar Kémikusok Egyesülete (MKE) (Hungarian Chemical Society)	1907	http://www.mke.org.hu/
Italy	Società Chimica Italiana (SCI)	1909	http://www.sci.uniba.it/
The Netherlands	Koninklijke Nederlandse Chemische Vereniging (KNCV)	1903	http://www.kncv.nl/
Poland	Polskie Towarzystwo Chemiczne (PTCh) (Polish Chemical Society PCS)	1919	http://www.ptchem.lodz.pl/
Portugal	Sociedade Portuguesa de Química (SPQ)	1911	http://www.spq.pt/
Spain	Real Sociedad Española de Química (RSEQ)	1903	http://www.ucm.es/info/rsequim/
Sweden	Svenska Kemistsamfundet (Swedish Chemical Society SCS)	1883	http://www.chemsoc.se/

Table 2. Former members of the Editorial Board of *Chemistry—A European Journal*.

Board member	Institution
Lia Addadi	Weizmann Institute of Science, Rehovot, Israel
Geoffrey Bodenhausen	Ecole Normale Supérieure, Paris, France
Malcolm H. Chisholm	Iowa University, USA
Robert J. P. Corriu	Université Montperllier II, Montpellier, France
Christopher M. Dobson	University of Oxford, Oxford, UK
Alessandro Dondoni	Universitá di Ferrara, Ferrara, Italy
Léon A. Ghosez	Université Cathol. de Louvain, Louvain-la-Neuve, Belgium
Claude Hélène[a]	France
Olivier Kahn[a]	France
Charles M. Lieber	Harvard University, Cambridge, USA
Josef Michl	University of Colorado, Boulder, USA
Peter E. Nielsen	University of Copenhagen, Copenhagen, Denmark
Jean Rouxel[a]	France
Hideki Sakurai	Science University of Tokyo, Japan
Dieter Seebach	ETH Zürich, Switzerland
Lutz F. Tietze	Georg-August-University, Göttingen, Germany
M. E. Vol'pin[a]	Russia
Curt Wentrup	University of Queensland, Brisbane, Australia
K. I. Zamareaev[a]	Russia

[a] Deceased.

Chemistry—A European Journal has been built on a series of strong partnerships and relationships, all of which have the common goal to make the journal as successful as possible.

The partnership between the Owner Societies and the publisher Wiley-VCH: The strength of this partnership has been paramount to the success of *Chemistry—A European Journal*, and the subsequent developments of related projects that have culminated in a family of top quality European Journals, namely the *European Journal of Organic Chemistry*, the *European Journal of Inorganic Chemisty*, *ChemBioChem*, and *ChemPhysChem*. The strength and tradition of European chemistry and the various European Chemical Societies that oversee its development is clearly illustrated in Table 1. The histories and background information on the chemical societies that own *Chemistry—A European Journal* are given on p. 2251. The web addresses of all the societies are also given in Table 1. The societies can be accessed directly from the journal homepage by clicking on the society logo on the European map under the section "Society". The publisher and the societies are working closely together to promote European chemistry within the world marketplace. This issue contains contributions from members of most of our partner societies.

The partnership between the publisher and the Editorial Office: The rapid development and expansion of *Chemistry—A European Journal* has involved considerable investment both in terms of personnel and also extra funding to ensure the continued growth and competitiveness of the journal. Major developments that have been driven by the publisher, which have benefited *Chemistry—A European Journal*, include Wiley InterScience and manuscriptXpress.

Working Together to Promote European Chemistry

The partnership between the Editorial Office and the Editorial Board: The Editorial Board members have provided guidance and critical advice on all editorial matters. From the outset, the journal has had an Editorial Board packed full of experts from the whole spectrum of chemistry. Profiles of the current board members are given on p. 2257. But it is also important not to forget those Board Members who have served their periods in office and who have contributed greatly to the success of the journal (see Table 2) as well as those who have unfortunately passed away. These members of the Editorial Board have not only been instrumental in upholding the high standards of the journal, but have backed the journal in the most important way—through their top papers. This issue is no exception with papers from our Editorial Board Chairman Jan Bäckvall (p. 2327), Chi-Ming Che (p. 2405), François Diederich (p. 2284), Makoto Fujita (p. 2519), Susan Gibson (p. 2566), David Milstein (p. 2319), Armin de Meijere (p. 2471), Michael Paddon-Row (p. 2525), C. N. R. Rao (p. 2433), David Reinhoudt (p. 2426), Claudio Toniolo (p. 2395), and Barry Trost (p. 2577). In addition this issue features a contribution from one of our speakers José Barluenga (p. 2276) and our host for this special event Jean-Marie Lehn (p. 2549).

Active Board Members

The partnership between the Editorial Office and the reviewers: Developments in the relationship between the Editorial Office and the reviewers have helped to enhance the reputation of the journal and to guarantee efficient and fair peer-reviewing. Technological advances such as manuscriptXpress have certainly helped to cement these relationships, and we are constantly taking into consideration the input from our authors and reviewers on how to further improve our systems and presentation of information.

The partnership between the Editorial Office and the authors: The quality of service provided by the Editorial Office, from the review process to the production of the print and electronic versions of the journal, has encouraged top authors to send more of their best papers to the journal. Consequently, the journal has benefited from the quality of the papers published.

The partnership between the Owner Societies and the members of the individual Chemical Societies: The Owner Societies have given their wholehearted support to *Chemistry—A European Journal*. Top chemists from the different countries are encouraged by their respective societies to publish "Their Best Papers" in "Their Journal". The additional advertising in the national society literature and at top national events has helped to increase the visibility of the journal and its authors and papers.

Wholehearted Support of Owner Societies

The partnership among the Owner Societies (EUChemSoc): "A day will come when all the nations of this continent, without losing their distinct qualities or their glorious individuality, will fuse together in a higher unity and form the European brotherhood." (Victor Hugo, 1849). Great strides towards a similar goal have been taken by the Owner societies of *Chemistry—A European Journal*, in particular in the subsequent developments and decisions to combine many of the national chemical journals to form the *European Journal of Organic Chemistry* and the *European Journal of Inorganic Chemistry*. This group of chemical societies have grouped together for many of their publishing activities under the Editorial Union of Chemical Societies (EUChemSoc). The common aims of this group of forward-thinking scientists will certainly lead to further exciting developments in the future that will have dramatic impact on European Science and its worldwide perception and standing. Importantly, in line with the recent expansion of the European Union to 25 members, there are options to expand the "*Chemistry* Community". The Owners of the journal fortunately had the foresight 10 years ago to make the necessary provisions to enable other Societies to join the partnership.

EUChemSoc

Our 10th anniversary year has already witnessed several highlights and improvements. The feedback from our readership has been very positive to the new layout for the table of contents, which we launched in January this year. The additional color in the graphical abstracts has helped to improve the visibility of the papers, and the additional headings have served to aid readers in their browsing.

Positive Feedback to New Layout

EarlyView®

Publication Times Cut Further

The use of manuscriptXpress and its acceptance by our authors and reviewers, together with the EarlyView feature in Wiley InterScience has enabled us to cut our publication times still further since the beginning of the year. Owing to the quality of the refereeing and the constructive criticisms raised by the referees, many papers are enhanced through additional experiments and analysis of the data. Nevertheless, since the beginning of 2004 we have managed to reduce the average publication times by over 60 days. We are pleased with this progress, especially as more and more of our full papers are now published online in less than 100 days. Our aim is to reduce our publication times further and to make more of our content available in its final form quickly and efficiently.

ManuscriptXpress has been further upgraded. The addition of a "To do list" on the author homepage helps authors and referees to identify the status of manuscripts and tasks required.

Downloads up by 30%

The full-text download statistics for *Chemistry—A European Journal* are a testament to the quality and visibility of the papers that appear in the journal. The number of downloads increased in 2004 by approximately 30% over the value in 2003.

We would like to thank all our partners for their support over the last 10 years. Even though the number of papers published by authors from our partner countries has continued to rise since the new millennium, larger increases have been witnessed in terms of papers from the rest of the world, especially China and Japan. Without this support and acceptance, we would not have been in a position to achieve our common goal of establishing *Chemistry—A European Journal* as a journal that is "European in spirit and international in appeal".

Neville Compton

Dr. Neville Compton
Editor

Anne Deveson

Dr. Anne Deveson
Deputy Editor

Owner Societies of *Chemistry—A European Journal*

Austria: Gesellschaft Österreichischer Chemiker (GÖCh)

The Gesellschaft Österreichischer Chemiker (GÖCh) was founded in 1897 with the Austrian Society of Analytical Chemistry (ASAC) representing the analytical section. Currently it has 1900 members, including many students and sponsoring companies. There are 24 divisions (seven from the ASAC) that cover specific fields of interest. It also runs local subgroups for personal contacts, and participates and contributes in international societies.

The activities of the society include promoting collaboration among chemists in common projects, publishing the *Monatshefte für Chemie* in co-operation with the Austrian Academy of Science, organizing national and international symposia, congresses, and public discussions covering the whole field of chemistry and aspects of chemistry in neighboring disciplines of science. The society supports students through regular lectures by renowned international experts at Austrian Universities, annual prizes for the best Ph.D and Masters theses together with the Federation of Chemical Industry (FCIO) as the sponsoring association, and makes contributions to trips to scientific events. The society is also influential in improving chemistry education, it participates in approving or disapproving new laws and regulations concerning chemistry issues.

Belgium: Société Royale de Chimie (SRC)

The "Association Générale des Chimistes Belges" was founded in 1887 in a café in Brussels at the request of the sugar industry. In 1904, the association became the "Société Chimique de Belgique" with the purpose to encourage the advancement of chemistry, to promote research in chemical science and industry, and to increase and disseminate chemical knowledge through its meetings, reports, papers, and publications. After one hundred years of existence the association was recognized as a Royal Society in 1987.

In 1930, the Association started the publication of the *Bulletin de la Société Chimique de Belgique* whose name was changed in 1946 into the "*Bulletin des Sociétés Chimiques de Belgique*" a few years after the splitting of the Association and the founding of the "Vlaamse Chemische Vereniging". The Bulletin disappeared in 1998 when several European journals were merged to form the two leading publications, the *European Journal of Organic Chemistry* and the *European Journal of Inorganic Chemistry*. In 1982, the "Société Royale de Chimie" founded its periodical *Chimie Nouvelle* that publishes reviews devoted to all modern aspects of chemical sciences. Internationally known chemists such as E. Solvay, J. Stas, W. Spring, I. Prigogine, and many others have been members of the SRC.

Belgium: Koninklijke Vlaamse Chemische Vereniging (KVCV)

The "Vlaamse Chemische Vereniging" (VCV) was founded in 1939 by separation from the "Société Chimique de Belgique" (SCB). It was at this time the Dutch language became the official language of all universities in the Flemish part of Belgium. In collaboration with the SCB the VCV published a scientific journal, the *Bulletin des Sociétés Chimique Belges*. In 1975 a new periodical *Chemie Magazine* started bringing news and general chemical information to its members. After 50 years of existence VCV was allowed to bear the title "Koninklijke Vlaamse Chemische Vereniging" (KVCV). In 1998 the *Bulletin des Sociétés Chimique Belges* was merged into the *Euruopean Journal of Organic Chemistry* and the *European Journal of Inorganic Chemistry*. From 2005, *Chemie Magazine* was discontinued and the members now receive "*Mens & Molecule*" (Man and Molecules), a periodical edited in collaboration with the Dutch chemical society (KNCV).

The KVCV consists of many different sections such as Analytical Chemistry, Biotechnology, Belgian Chemometrical Society, Culture and Popularization, Hyphenated Techniques in Chromatography, Industry, Young KVCV, the Kékulé Section (which organizes a biennial cycle of evening courses), Medicinal and Bio-organic Chemistry, Environment and Safety, and Education and Training (which organizes the National Chemistry Olympic Games for pupils of secondary schools).

Czech Republic: Česká Společnost Chemická (Czech Chemical Society; CCS)

The first organization of Czech chemists was established in 1866 at the Prague Technical University. Later, in 1872 it was reorganized as the Association of Czech Chemists. The society has existed with some cosmetic changes to its name for the past almost 140 years. Today the Czech Chemical Society (CCS) is the successor to these various societies, joining chemists in the Czech lands since 1866. CCS is a member of the Scientific Societies Council of the Czech Republic, the Association of Czech Chemical Societies (ACCS), and the European Association for Chemical and Molecular Sciences (FECS). There are seven local and one foreign CCS chapters, 26 working groups, and a young chemists section. The Society publishes a monthly scientific journal, *Chemicke Listy*, and a quarterly publication, *the Bulletin of the ACCS*, as a magazine. A joint congress is organized by the ACCS with Slovak chemical and pharmaceutical societies every year (in the High Tatras in 2005).

The CCS is active in educational matters through its membership in ECTN (European Chemistry Thematic Network) and through its broad collaboration with schools, boards and the Ministry of Education. Its activities are traditionally connected with academia, with more than 80% of the individual members being university graduates; many members are from universities, schools, and research institutes, oriented both at basic and technological research. The society also organizes scientific and professional events, meetings, conferences, symposia, and courses.

France: Société Française de Chimie (SFC)

The genesis of the Société Française de Chimie (SFC) can be traced back to 1857 when three students, Arnaudon, Collinet, and Ubaldini, of renowned chemists, Balard, Berthelot, Chevreul, and Dumas, aimed at founding a society providing their members with the "latest progress in Chemistry". This "club", which organized weekly meetings in a café of Paris Latin Quarter, was structured as the Société Chimique de Paris in 1858, with new bylaws and J.-B. Dumas as President in 1859. The Society intends to "contribute to the advancement and dissemination of studies in general chemistry through its proceedings, publications of its members, awards, and promotions". In 1864, the Society was recognized by Napoleon III as a charity and became the Société Chimique de France (SCF) just before the commemoration of its 50th anniversary. Among the most illustrious Presidents, J.-B. Dumas, L. Pasteur, M. Berthelot, H. Moissan, V. Grignard, and P. Sabatier were portrayed on a medal struck on the occasion of the memorable centenary events of the Society in 1957. The present Société Française de Chimie was founded 126 years later, on March 15, 1983. It results from the merger of the SCF and the Société de Chimie Physique, founded in 1908. This learned society aims "to be open to any chemist" and to "gather all the chemists in France, regardless of their specialty or adherence to academic or industrial world". In addition to its magazine, *l'Actualité Chimique*, SFC issued three journals: *Bulletin de la Société Chimique de France*, *Journal de Chimie Physique*, and *Analusis*, which are now incorporated in four European journals: the *European Journal of Inorganic Chemistry*, the *European Journal of Organic Chemistry*, and *ChemPhysChem* published by Wiley-VCH, and *Analytical and Bioanalytical Chemistry* published by Springer. The Société Française de Chimie will celebrate its 150th anniversary in 2007.

Germany: Gesellschaft Deutscher Chemiker (GDCh)

The Gesellschaft Deutscher Chemiker (GDCh) is the largest chemical society in continental Europe. Its close to 27000 members from academia, industry, and other areas are organized in over 60 regional sections and 25 divisions, which cover the whole spectrum of the chemical and molecular sciences. It was founded in 1949, but builds on a long tradition that began in 1867 when the first of its predecessor organizations, the Deutsche Chemische Gesellschaft, was founded in Berlin. Its scientific journal, the *Berichte der Deutschen Chemischen Gesellschaft* began publication in 1868. This journal was later renamed as *Chemische Berichte*, one of the national European journals, which in 1998 merged to create the *European Journal of Inorganic Chemistry* and the *European Journal of Organic Chemistry*. In 1887, the second predecessor organization of today's GDCh was founded, the Verein Deutscher Chemiker, whose membership magazine *Angewandte Chemie* has developed into one of the most highly respected chemistry journals worldwide and is now GDCh's flagship publication. While the Deutsche Chemische Gesellschaft was primarily active in the university sector, the Verein Deutscher Chemiker became the organization mainly focussing on members from the chemical industry. After the second World War both organizations ceased to exist and the new Gesellschaft Deutscher Chemiker was formed in West Germany. After the end of the cold war, the chemical society of the former German Democratic Republic was dissolved and in 1991 most of their members joined the GDCh.

The GDCh activities, organized and coordinated by the 45 employees at its Frankfurt-based headquarter, include a wide spectrum of services to its members, such as conferen-

ces and meetings, a highly respected continuing education program, the publication of a wide range of successful scientific journals (like *Chemistry—A European Journal*, most of these together with the partner societies from the EUChemSoc) and the Gmelin database (together with its partner MDL), science policy, and the promotion of the chemical sciences to the public. Among the highlights in the recent GDCh history was the "Year of Chemistry" on the occasion of the 200th birthday of Justus von Liebig in 2003, which was initiated and coordinated by the GDCh together with the German Federal Ministry for Education and Research with the aim to bring chemistry closer to the public. The more than 2000 events in all parts of Germany in this year attracted more than one million visitors who gained information about the many facets and assets of chemistry and the vital but often hidden role that it plays for our quality of life.

Greece: Association of Greek Chemists (AGS)

The Association of Greek Chemists (AGC) was founded in 1924. Its aim is to promote the science of chemistry in industry, education, and research within the country and abroad and thus contribute to the economic, social, and cultural development of Greece. Another goal is to promote the chemical profession in the country, protect the benefits and the professional rights of chemists, and contribute to the collaboration and solidarity among its members.

The AGC has approximately 14000 registered members and organizes a number of different activities to communicate with its members and achieve the goals of the society. Among these activities are the annual Panhellenic Conferences, the Greek–Cypriot Chemical Conferences, the newly established chemistry conferences of South Eastern European Countries (ICOSECS), and the European Mediterranean Conferences in Inorganic Chemistry which take place biannually. The 11th of March is the Panhellenic Day of Chemistry, and every year a Panhellenic Competition in Chemistry is organized among graduating secondary school students. Also the AGC participates annually in the National Chemistry Olympiad, and organizes symposia, seminars, lectures, and courses in chemistry and chemistry related fields.

Since 1998, the Association of Greek Chemists has been active in realizing an organized cooperation with the chemical societies from South Eastern Europe. This cooperation includes, apart from the AGC, chemical societies from Albania, Bulgaria, Cyprus, FYROM, Montenegro, Romania, and Serbia. The first activities involve scientific and technical meetings.

All members of the society receive the monthly news magazine *Chimika Chronika* in Greek, first published in 1936. The magazine is the society's principal means of communication with its members. The magazine contains important scientific articles of general interest and keeps the chemists up to date on chemistry and science in general. The AGC used to publish the *Chimika Chronika New Series* every four months, a journal which was published in English and in which all articles were peer reviewed. As of January 1st 1998 the *Chimika Chronika New Series* was discontinued and the AGC joined the three European Journals: *Chemistry—A European Journal*, the *European Journal of Inorganic Chemistry*, and the *European Journal of Organic Chemistry* as well as supporting *ChemBioChem* and *ChemPhysChem*.

Hungary: Magyar Kémikusok Egyesülete (MKE; Hungarian Chemical Society)

The Hungarian Chemical Society (MKE) was founded by some 50 chemists, under the guidance of Rudolf Fabinyi, in 1907. Their objectives included the protection of the interests of Hungarian chemists, because at that time the majority of chemists holding leading positions in Hungary were foreigners. Their program was centered on promoting the development of chemical science and chemical industry, and this has not changed since that time. The objective of MKE is to raise the professional level of its members (and thereby that of MKE itself), protect their interests, promote their public activity, and recognize their work and contributions to chemistry. The ultimate goal of its activities is to promote technical, economic, and social development in Hungary.

Amongst other things, the MKE organizes lectures, meetings, symposia, conferences, congresses, professional demonstrations, and exhibitions. It also participates in the preparation of radio and TV programs on subjects related to the chemical industry. In addition, the society organizes professional in-service training courses, professional counseling, and study trips in and outside Hungary.

The MKE publishes several professional journals, including *The Hungarian Journal of Chemistry* and *Hungarian Chemical Journal*. It also presents a forum for young experts. To recognize professional work and have it recognized, the MKE has founded memorial plaques and awards them together with competition prizes as well as prizes for outstanding diploma theses.

The MKE has established and maintains contacts with state and social organizations, participates through its members in the work of leading organizations and bodies of the Federation of Technical and Scientific Societies (MTESZ), and has established links and cooperates with the professional societies of foreign countries and their international federations.

Italy: Società Chimica Italiana (SCI)

The Società Chimica Italiana (SCI) was founded in 1909, following other associations operating in the last decades of the 19th century in the frame of the academic culture. It now has 4500 members and it is the largest scientific association in Italy. Members come from universities, schools, industry, research, and control institutions as well. The SCI has 11 institutional divisions and a variety of interdivisional groups, reflecting the broad spectrum of the chemical areas and interests. All the divisions and groups have their own program of activities, most of them within international disciplinary networks. The chemical magazine, *La Chimica e l'Industria* is distributed to the SCI members, while the educational journal *La Chimica nella Scuola*, is sent to the members of the education division. All members belong to regional sections, which provide opportunities on a local basis.

From its birth, the SCI took the charge of publishing one of the most ancient journals of chemistry in Europe: the *Gazzetta Chimica Italiana*. The editorial activity of the SCI was implemented during the years with other journals covering the medicinal chemistry and the environmental and analytical areas. Ten years ago, the Italian Chemical Society participated with enthusiasm in the project to launch the European Journals, when some of the editorial activities of some national societies were amalgamated. The SCI, with its management and all its members, is now deeply involved in the consolidation and implementation of the European editorial projects.

The Netherlands: Koninklijke Nederlandse Chemische Vereniging (KNCV)

The KNCV is the Chemical society of the Netherlands. Our society, founded in 1903, started as an organization open only to chemists. Since 1924 the society has opened up for other specialists from disciplines related to chemistry. Today the society welcomes not only members with a higher education in chemistry or related sciences but everybody interested in the chemical and related world. At the moment it has around 10000 members and 2000 associated members.

From the beginning the KNCV joined the GDCh and other European Societies in producing scientific journals on a European scale. It is with great pleasure that together in EUChemSoc we now celebrate the 10th anniversary of *Chemistry—A European Journal*. We hope that many more celebrations will follow in the future.

Poland: Polskie Towarzystwo Chemiczne (Polish Chemical Society; PCS)

The Polish Chemical Society (PCS) was established in 1919, at the beginning of independence, by a group of enthusiasts and famous Polish chemists who worked in high schools located in different parts of unified Poland. During World War II the PCS was officially banned, but it continued to work as an underground organization.

The first four branches of our society were founded in Lwów, Łódź, Kraków, and Poznań in 1920. Since then it has grown considerably and at present the society acts through 20 branches located in main Polish university cities and through 27 sections devoted to different areas of chemistry.

The aim of the society, expressed in its statutes, is promotion of chemical sciences and spreading chemical knowledge in society. To achieve these aims, the society organizes meetings, sessions, and conferences for chemists, organizes public lectures and scientific courses, issues its own journals and publications connected with the activity of the society, awards prizes, distinctions, and medals in the area of chemistry, furnishes information in area of chemistry, and elaborates and formulates opinions in all cases connected with the development and education in chemistry in Poland.

The PCS is a member of the Federation of European Chemical Societies (FECS) and closely cooperates with Czech, Hungarian, Slovak, Lithuanian, and Ukrainian Chemical Societies by exchanging information, inviting members of these societies for our national meetings and so forth. The main part of this cooperation is an exchange of students and young chemists. Every year the PCS organizes the Forum of Young European Chemists at which our young collaborators present their research and participate in discussions and lectures. The PCS also founded the Museum of Maria Skłodowska-Curie in 1967, which is situated in the house in which Maria was born in 1867. The museum has exhibits that include personal items connected with the life and scientific activity of this great scientist as well as of other Polish chemists.

Portugal: Socieadade Portuguesa de Química (SPQ; Portuguese Chemical Society)

The Portuguese Chemical Society (SPQ) was founded in 1911 by a group of prominent Portuguese chemists gathered by Ferreira da Silva (1853–1923), a distinguished analytical chemist and professor at Oporto University and the first pres-

ident of the SPQ. The history of the Portuguese Chemical Society is closely linked to the publication of the journal *Revista de Química Pura e Aplicada*, the first issue of which appeared in 1905. The journal was published regularly until 1997 (when SPQ joined EUChemSoc), although its title was changed in 1958 to *Revista Portuguesa de Química.* The bulletin of the society, *Química*, has been published four times a year since 1977, and aims to promote and popularize chemistry among high-school teachers, chemists, and chemical engineers. In 1981, the SPQ founded the *Ferreira da Silva Award* that recognizes relevant contributions by Portuguese chemists. In 2002, the *Vicente Seabra Medal* was created to distinguish the research work of young scientists in chemistry. Vicente Seabra (1764–1804) was involved in the chemical revolution of the end of the 18th century, and in between 1788 and 1790 published, in Coimbra, his two-volume work *Elementos de Chimica*, already written according to Lavoisier's theories and nomenclature.

The Portuguese Chemical Society has presently around 2500 members, and has as a major objective the development of high-quality research and teaching in all branches of chemistry. In pursuit of this goal, the SPQ organizes a national meeting every two years and, in the alternate years, specialized meetings on the scientific areas of the society divisions. The SPQ also organizes the National Chemistry Olympiad, from which are selected the teams that take part in the International Chemistry Olympiad and in the Ibero–American Chemistry Olympiad. The SPQ is also actively involved in international organizations, namely IUPAC (for which it is the national adhering organization) and EuCheMS.

As a consequence of the integration of SPQ in the EUChemSoc, in 1996, the publication of the *Revista Portuguesa de Química* came to an end. Following the spirit of the EUChemSoc, SPQ advertises the new European Journals in every issue of *Química* and at its scientific meetings. The Portuguese researchers are invited to publish their work in the European Journals contributing, in this way, to the development and visibility of European Chemistry.

Spain: Real Socieadad Española de Química (RSEQ; Spanish Royal Society of Chemistry)

The Spanish Society of Physics and Chemistry was founded in January 23, 1903, with a first meeting celebrated in Madrid and chaired by the first President of the Society, the Spanish Literature Nobel Prize winner José Echegaray. The aim of the new scientific society was immersed within the Spanish cultural movement known as the *Regeneracionismo español* whose broad goal was to bring Spain into modernity and, specifically, to support the study of sciences facilitating the scientific interchange between scientists by creating, at the same time, the Spanish chemistry journal *Anales de Química*. Twenty-five years later, in 1928, the society was appointed with the distinction of Royal Society of Physics and Chemistry by the Spanish king Alfonso XIII, as a way to recognize the outstanding achievements during this time. Since then, the Spanish Royal Society of Physics and Chemistry has collaborated with well-known European scientists. To cite some examples, in 1906 the Spanish Nobel Prize winner Santiago Ramón y Cajal was appointed as an honorary member of the society as well as Mme. Curie in 1931. As proof of the international support to the society, it was admitted as a member of the International Association of Chemical Societies in 1912 and, a few years later, the IX International Congress of Chemistry was celebrated in Madrid in 1934, being the first international congress celebrated after World War I (the previous one took place in 1912), with over 1500 scientists attending this meeting; the first session was chaired by the President of the Spanish Republic Niceto Alcalá Zamora and the Minister for Public Instruction, Salvador de Madariaga.

The Spanish Royal Society of Chemistry (RSEQ) was split from the Physics Society in 1975. Since then, the society has been very active and, a few years ago, it celebrated the first centennial with several events throughout the year and a special meeting to mark the occasion of the Reunión Bienal de Química. Several Nobel Prize winning chemists were among the participants, including the first chairman of the Editorial Board of *Chemistry—A European Journal*, Jean-Marie Lehn.

Today the society is composed of 20 different specialized groups covering all the fields in chemistry and it is organized in local sections spread all over the country. The RSEQ has excellent relationships with different European and American Societies with which they share joint awards to distinguish the top quality research. It also participates actively in the more recently created European journals, of which *Chemistry—A European Journal* is doubtless the flagship. Our sincere congratulations for this successful ten years!

Sweden: Svenska Kemistsamfundet (The Swedish Chemical Society)

In November 1883, Werner Cronquist, an engineer at the Technological Institute, called for a meeting in Stockholm. In this first meeting, which took place on November 22nd, 21 people attended and *Kemiska Samfundet i Stockholm* was founded (later changed to *Kemistsamfundet*). At that time the association was merely a discussion club with a focus on chemistry and its applications. The first issue

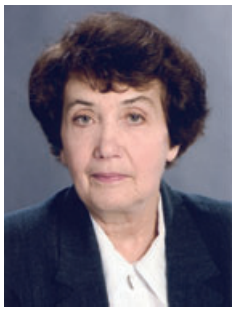
of the journal *Kemiska Notiser* was published 1887 (later renamed to *Svensk Kemisk Tidskrift*). It was a risky project to start a journal for an association with only 90 members. The organization grew slowly during the first few years and by 1900 the membership had risen to 460.

During the 1950s, under the leadership of Professor Sven Brohult, *Svenska Kemistsamfundet* started its progress to the national learned society of today. Local sections and divisions were founded and the membership increased constantly. Today, in 2005, the society has about 3600 individual members, 19 sections, and 8 divisions. The activities range from open lectures to international conferences of various sizes. The society still has its monthly journal *Kemivärlden/ Kemisk Tidskrift*, which is now complemented with *Kemivärlden BioTech*.

Editorial Board

Chairman: Jan-Erling Bäckvall is Professor of Organic Chemistry at Stockholm University, where he is Head of Research. He is renowned for his contribution to organopalladium chemistry and catalytic oxidation reactions for which he has done mechanistic work and developed new reactions. More recently efficient systems for dynamic kinetic resolution of alcohols based on combined ruthenium and enzyme catalysis were developed in his laboratory. He has published more than 300 papers. For his contribution to research he was elected a Member of the Royal Swedish Academy of Sciences, a Fellow of the Royal Society of Sciences (Sweden), a Member of the Royal Physiographic Society (Sweden), and a Foreign Member of the Finnish Academy of Science and Letters and has received many prizes, awards, and honors. He is also member of a number of Editorial Boards of Journals and currently he is the Chairman of the Editorial Board of *Chemistry—A European Journal* (see p. 2327 in this issue for his latest contribution to *Chemistry*)

Vincenzo Balzani is Professor of Chemistry at the University of Bologna (Italy). He has received several awards, including the Canizzarro Gold Medal of the Italian Chemical Society (1988), the Italgas European Prize for Research and Innovation (1994), and the Porter Medal on Photochemistry (2000). He has also been a finalist of the Descartes Prize (2004). He is a fellow of the American Association for the Advancement of Science (USA) and the Accademia Nazionale dei Lincei, and a member of the Editorial Boards of several international journals. His scientific activity is documented by three monographs and about 500 papers in the fields of photochemistry, photophysics, electron-transfer reactions, supramoloecular chemistry, dendrimers, molecular-level devices and machines, and solar energy conversion.



Irina Beletskaya studied at Moscow State University, where she received her Ph.D. in 1958 and the degree of Doctor of Chemistry in 1963. She became a full Professor in 1970 and in 1974 a Corresponding Member of the Academy of Sciences (USSR), of which she became a full member (Academician) in 1992. She is currently Head of the Laboratory of Organoelement Compounds, Department of Chemistry at Moscow State University. From 1989 to 1991 she was President of the Organic Division of IUPAC. She is the author of over 500 articles and four monographs, and the recipient of the Lomsonov, Mendeleev, and Nesmeyanov Prizes. Her current research interests are transition-metal catalysis in organic synthesis, organic derivatives of lanthanides, carbanions, and nucleophilic aromatic substitution. She is currently Editor-in-Chief of the *Russian Journal of Organic Chemistry*.

Ernesto Carmona gained his Ph.D. at the University of Sevilla (1974), after which he spent three years doing postdoctoral work under the guidance of (the late) Professor Sir Geoffrey Wilkinson (Imperial College, London). He started his career as an Assistant Professor at the University of Sevilla, where he was made full Professor in 1983. His research interests lie mainly in the area of organometallic chemistry and homogeneous catalysis. More specifically: the activation of small, unsaturated molecules (N_2, CO, CO_2, C_2H_4, etc.) by transition-metal compounds; C–H bond activation, and C–C bond-forming reactions induced by transition-metal compounds; and metallocenes of non-transition elements (f and main group metals). He is a member of the Editorial Boards of several international journals.

Chi-Ming Che received his B.Sc. and Ph.D. from the University of Hong Kong. In 1980–1983, he studied at the California Institute of Technology under Professor Harry B. Gray. He currently holds the Dr. Hui Wai-Haan Chair of Chemistry at The University of Hong Kong. He is a full member (Academician) of the Chinese Academy of Sciences (CAS) and holds guest, invited, and honorary Professorships at a number of Universities in Mainland China; he is also the Director of HKU-CAS Joint Laboratory on New Materials. His research interests encompass diverse areas of chemistry, such as metal-catalyzed organic transformations, photoinduced electron- and atom-transfer reactions, and luminescent materials for molecular devices and biomolecular recognition. Professor Che has more than 460 publications in leading chemistry journals and two US patents. He is a member of the Editorial Boards of several international journals and has received several prizes and awards, which include the National Outstanding Young Scholar Award from The National Science Foundation of China (2000–2003), and the Federation of Asian Chemical Societies (FACS) Foundation Lectureship Award 2003 (see p. 2405 in this issue for his latest contribution to *Chemistry*).

François Diederich, born in 1952 in the Grand-Duchy of Luxemburg, studied chemistry at the University of Heidelberg (1971–1977), and received his Ph.D. there in 1979 for work on the synthesis of kekulene in the group of Professor Heinz A. Staab. Following postdoctoral studies with Professor Orville L. Chapman at UCLA (1979–1981), he returned to Heidelberg for his Habilitation at the Max Planck Institute for Medical Research (1981–1985). Subsequently, he joined the faculty in the Department of Chemistry and Biochemistry at UCLA, where he became full Professor of Organic and Bioorganic Chemistry in 1989. In 1992, he returned to Europe, joining the Department of Chemistry and Applied Biosciences at the ETH Zürich (see p. 2284 in this issue for his latest contribution to *Chemistry*).

Gerhard Ertl received his Ph.D. (1965) and went on to do his habilitation in physical organic chemistry at the Technical University of Munich. His further academic career took him to Hannover, the Ludwig–Maximilian University of Munich, and in 1986 he became the Director of the Department of Physical Chemistry, Fritz–Haber Institute of the Max Planck Society in Berlin. He has received many honors and awards, the most recent of which include the Spiers Memorial Medal and Lectureship (RSC). His main research interests are the structure and reactivity of solid surfaces, including oscillating reactions and spatio-temporal pattern formation (nonlinear dynamics), dynamics of surface processes, heterogeneous catalysis, and electrochemistry. He has published over 500 articles.

Makoto Fujita graduated at the Faculty of Engineering at Chiba University and received his Ph.D. from the Tokyo Institute of Technology in 1987. He went on to become an Assistant Professor, Lecturer, and Associate Professor at the Faculty of Engineering, Chiba University. After some time as Associate Professor at the Institute of Molecular Science, he was made a full Professor at the Graduate School of Engineering, Nagoya University. He is currently a Professor at the School of Engineering, University of Tokyo. He has received several awards for his research, the most recent of which include the Nagoya Silver Medal and the Izatt-Christensen Award. His main fields of research include transition-metal-directed self-assembly of molecular systems, nanosized particles, and coordination polymers (see p. 2519 in this issue for his latest contribution to *Chemistry*).

Sue E. Gibson did her first degree in Cambridge and her D. Phil. in Oxford under the supervision of Professor S. G. Davies. She was then awarded a Royal Society European Fellowship to study at the ETH, Zürich, with Professor A. Eschenmoser. In 1985, she returned to the UK to a lectureship in organic chemistry at the University of Warwick and in 1990 she was appointed to a lectureship at Imperial College, London. In 1999 she took up the Daniell Chair of Chemistry at King's College London, returning to Imperial College London and a Chair of Chemistry in 2003. Her research interests revolve around the application of transition metals in organic synthesis. Current projects include the development and application of new catalysts of the Pauson–Khand reaction, the synthesis and applications of novel chiral macrocycles, and the use of chiral–base chemistry and tricarbonylchromium(0) complexes of arenes in the design of new asymmetric catalysts (see p. 2566 in this issue for her latest contribution to *Chemistry*).

Pavel Hobza attained an M.Sc. in Chemistry at the University of Prague and a Ph.D. at the Czechoslovak Academy of Sciences, Prague. He then spent time in Canada at the University of Montreal, both as a postdoctoral fellow and as a visiting professor, as well as in Germany (Erlangen and Munich) as a research associate. He is currently the head of the Research Center for Complex Molecular Systems and Biomolecules and is also a professor at the Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague. He has won several prizes, which include the Prize of Ministry of Education of the Czech Republic (2000) and the Prize of the Academy of Sciences of the Czech Republic (2003). His research interests cover quantum chemistry and computational chemistry, structure and dynamics of molecular and biomolecular clusters and biomolecules, hydrogen-bonds, and improper blue-shifting hydrogen-bonds. He has published over 240 papers in refereed journals and two books, and is the most cited scientist in the Czech Republic.

Kendall N. Houk is Professor of Organic and Theoretical Chemistry at UCLA. He studied at Harvard with R. B. Woodward, and has been on the faculty at the Louisiana State University, the University of Pittsburgh, and UCLA. He served as Director of the Chemistry Division of the NSF from 1988–1990, and as department chair from 1991–1994. He was recipient of the ACS James Flack Norris Award in Physical Organic Chemistry (1991) and the Award for Computers in Chemical and Pharmaceutical Sciences (2003). He was winner of the Schrödinger Medal of the World Association of Theoretically Oriented Chemists (1998) and he was elected to the American Academy of Arts and Sciences in 2002. Professor Houk is an authority on theoretical and computational organic chemistry, and his group is involved in developments of rules to understand reactivity, computer modeling of complex organic reactions, and experimental tests of the predictions of theory. He has published nearly 600 articles.

Barbara Imperiali is the Class of 1922 Professor of Chemistry and Professor of Biology at the Massachusetts Institute of Technology (MIT). She received her B.Sc. at University College London, and studied for her Ph.D. at MIT under Professor S. Masamune. She carried out postdoctoral studies at Brandeis University with the late Professor R. Abeles. She began her professional career as an assistant professor at Carnegie Mellon University; in 1989 she joined the faculty at the California Institute of Technology, where she was made Professor of Chemistry in 1997. In 1999 she assumed her current position at MIT. She has received many awards; these include the ACS Cope Scholar Award, the Caltech Feynman Prize for Excellence in Teaching, and at MIT she has recently been named a Margaret MacVicar Fellow. She is a member of the American Academy of Arts and Sciences, and a Fellow of the Royal Society of Chemistry. Her research interests concern diverse aspects of protein structure, function, and design. One area of investigation focuses on co-translational protein glycosylation; another is targeted at the design and implementation of new chemical probes into the study of complex biological systems.

Jesús Jiménez-Barbero is a professor at the Center for Biological Research of the Higher Council for Scientific Research of Spain (C.S.I.C.), and is presently serving as General Secretary of the Royal Society of Chemistry of Spain. He obtained his Ph.D. in 1987 under M. Bernabé and M. Martín-Lomas. Following postdoctoral training at C.E.R.M.A.V.-C.N.R.S. (Grenoble), the University of Zürich, and the National Institute for Medical Research at Mill Hill, he received tenure in the C.S.I.C. in 1988. He also spent two years at Carnegie Mellon University, Pittsburgh, returning afterwards to Madrid. He was promoted to Senior Research Scientist in 1996 and to full Professor in 2002, when he moved to the Center for Biological Research of the C.S.I.C. His main research interest is in obtaining a 3D view on the molecular recognition processes in which carbohydrates are involved, especially by the application of NMR and modeling methods. He is a member of the editorial boards of several international journals and has published over 200 scientific papers, reviews, and book chapters. He was awarded the 2003 Prize of Organic Chemistry of the Royal Society of Chemistry of Spain.

Brian F. G. Johnson obtained his first degree and Ph.D. with Professor C. C. Addison at the University of Nottingham (UK). He completed postdoctoral work with Professor F. A. Cotton at the Massachusetts Institute of Technology and with Professor Lord Lewis at Manchester University. He has been on the faculties of the University of Manchester, University College London, Cambridge University, and the University of Edinburgh. He currently holds the 1970 Chair of Inorganic Chemistry at Cambridge University and

is Master of Fitzwilliam College. His research group has designed and characterized numerous new transition-metal clusters, carbonyls, nitrosyls, and metal particles in the colloidal regime. More recently he has developed an interest in the commercial production of carbon nanotubes and the development of new catalysts for the formation of nanotubes in devices. He has published almost 900 papers and articles and serves or has served on the Editorial Boards of many international journals. He has received many honors during his career, the most recent of which is the Edward Frankland Medal and Prize in 2003, and has been Visiting Professor at numerous Universities throughout the world.

Karl-Anker Jørgensen is professor at Aarhus University (Denmark). After a postdoctoral stay with Professor Roald Hoffmann, Cornell University, in 1985 he joined the faculty of Department of Chemistry, Aarhus. He was promoted to full professor 1992 and since 1997 has been Director of Danish National Research Foundation: Center for Catalysis. His research interests are mainly in the field of catalysis with focus on asymmetric reactions. Over the years he has contributed to the development of chiral Lewis acid catalyzed reactions and more recently to the application of organocatalysis in asymmetric catalysis.

Gerard van Koten has been Professor of Organic Synthesis and Catalysis at the Debye Institute of the Utrecht University since 1986. In 2004 he became Distinguished Professor of the Utrecht University. Recently, he has been appointed by the Minister of Education, Culture and Science as chairman of the committee responsible for the renewal of the Chemistry Educational Program at the Secondary School level in the Netherlands. His research interests comprise the study of fundamental processes in organometallic chemistry and the application of organometallic complexes as homogeneous catalysts. The preparation and use of the first examples of homogeneous metallodendrimer catalysts demonstrate his interest in supramolecular systems with (organometallic) catalytically active functionalities.

Bernhard Kräutler, born in Dornbirn (Austria), studied chemistry at the ETH in Zürich, where he also carried out a Dissertation with Professor A. Eschenmoser. After postdoctoral studies with Professor A. J. Bard (Austin, Texas) and Professor N. J. Turro (Columbia University) he returned to the ETH and obtained his habilitation in organic chemistry in 1985. In 1991 he was appointed as a full Professor of Organic Chemistry at the University of Innsbruck, and is currently Dean of the Faculty of Chemistry and Pharmacy. He is also a corresponding member of the Austrian Academy of Science. His main research interests, bioorganic chemistry, porphyrinoid compounds, coenzyme B_{12}, chlorophyll, fullerenes, structure/function of biomacromolecules, and supramolecular chemistry, are documented in over 150 publications.

Steve Ley is the BP (1702) Professor of Organic Chemistry at the University of Cambridge, and Fellow of Trinity College. He was President of the Royal Society of Chemistry (2002–2003) and was made a CBE in January 2002. He was appointed to the staff at Imperial College in 1975 and became head of department in 1989. He was elected to the Royal Society (London) in 1990, and moved to Cambridge in 1992. His group has published extensively on the synthesis of natural products and more than 110 target compounds have been synthesized. His work on iron chemistry, encapsulated reagents, microbial oxidation, spiroketals, and microwave chemistry has been ground-breaking. He has pioneered the use of immobilized reagents in multistep organic synthesis to make compounds in a cleaner and more effective way. He has devised many practical and useful protecting groups using acetal chemistry. He has done significant work in the area of organic catalysis and was the inventor of TPAP, a catalytic oxidant that is now used world-wide and cited extensively. He has published 560 papers and has received 29 major prizes and awards for his work.

Tien-Yau Luh obtained his Ph.D. from the University of Chicago (with L. M. Stock) in 1974. After spending two years of postdoctoral research at the University of Minnesota (with P. G. Gassman), he began his independent research at the Chinese University of Hong Kong in 1976. He moved back in 1988 to his alma mater, National Taiwan Uni-

versity, where he is now Professor of Chemistry. He has published 200 papers and has received numerous awards in Taiwan. Besides *Chemistry—A European Journal*, he also serves as a member of the advisory board for *Journal of Organometallic Chemistry* and *Bulletin of the Chemical Society of Japan*. His current research interests include organometallic chemistry directed towards organic synthesis, synthesis of regioregular polymers for optoelectronic interests, and the chemistry of materials.

Mieczyslaw Makosza studied chemistry at the University of Rostow and then Leningrad (now: St. Petersburg). After graduating with distinction in 1956, he joined the staff of the Department of Chemistry of the Warsaw University of Technology (Politechnika Warszawska). In 1963 he was awarded a Ph.D. and in 1967 he received a D.Sc. In 1971 he spent a sabbatical working with G. A. Russel in Iowa State University (USA). From 1975–1977 he was the Director of the Institute of Organic Chemistry and Technology of the Warsaw University of Technology. In 1979 he was appointed the Director of the Institute of Organic Chemistry of the Polish Academy of Sciences (PAN). His is well-known for his work on phase-transfer catalysis and nucleophile aromatic substitution and has received many awards. He is the author of over 325 original scientific publications, more than 50 review articles, and 70 patents.

István E. Markó received his Ph.D. from the Catholic University of Louvain, and undertook postdoctoral studies at the the Catholic University of Louvain, the University of Vermont, Burlington (USA), and the Massachusetts Institute of Technology, Cambridge, (USA). He then went on to be a Grade A and then Grade B lecturer at the University of Sheffield (UK). Currently he is Professor of the Catholic University of Louvain (Belgium) and Chairman of the European Chemical Society. His main research interests are in the field of short, efficient, and stereocontrolled total synthesis of natural products. His is also interested in the study of new organometallic reagents, anionic polycyclization reactions, electroorganic synthesis, and development of ecological processes.

François Mathey received a doctoral degree in chemistry from the University of Paris VI in 1971. He worked for the chemical industry until 1986 and then moved to Ecole Polytechnique. He is now distinguished professor at the University of California Riverside. He has published more than 500 papers in the fields of phosphorus–carbon heterocyclic chemistry, low-coordinate phosphorus chemistry, transition-metal chemistry, and homogeneous catalysis. He has received several awards including the Silver Medal of the CNRS, the Alexander von Humboldt research prize, a JSPS fellowship, the Main Group Chemistry award, and the Arbuzov prize. He is member of the French Academy of Sciences and several other Academies. He was President of the French Chemical Society from 2000 to 2003.

Armin de Meijere received his Ph.D. in chemistry from the University of Göttingen. After doing postdoctoral work with Professor K. B. Wiberg at Yale University, he returned to the University Göttingen to complete his habilitation. In 1977 he moved to the University of Hamburg where he took up the position of full professor, before returning once again to the University of Göttingen as Professor of Organic Chemistry in 1989. He has held the position of visiting Professor at many universities around the world. His main research areas include the development of new small-ring building blocks and their application in the syntheses of natural and non-natural compounds, total synthesis of natural products and other biologically active compounds, applications of organometallic complexes and catalysts in organic synthesis, palladium-catalyzed sequential reactions, and titanium-mediated cyclopropanation and other transformations of carbonyl compounds. He was won many awards, has published over 570 original papers, review articles and chapters in books, and has more than 20 patents (see p. 2471 in this issue for his latest contribution to *Chemistry*).

Joel S. Miller is a Distinguished Professor of Chemistry at the University of Utah. He received his B.Sc. in Chemistry from Wayne State University, his Ph.D. from the University of California, Los Angeles, and was a postdoctoral associate at Stanford University. After two decades of research at Industrial Laboratories, he joined the University of Utah in 1993. His group's research focuses on the magnetic, electrical, and optical properties of molecule-based materials, and fundamental aspects of chemistry that

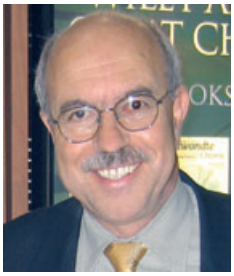
range from "what is a chemical bond?" to ligand field theory. He is also currently a visiting Professor at the University of Barcelona. He has received many awards, which include the 2000 American Chemical Society Award for Chemistry of Materials for his discovery of organic-based magnets. In addition to *Chemistry—A European Journal*, he is currently on the International Advisory Board of *Advanced Materials*.

David Milstein received his Ph.D. under the supervision of Professor J. Blum from the Hebrew University of Jerusalem. Following postdoctoral work with the late Professor J. K. Stille at Colorado State University, he joined the Central Research & Development Department of the Dupont Company, where he became a group leader in 1983. In 1986 he joined the Weizmann Institute of Science in Israel, where he currently holds the Israel Matz Professorial Chair in Organic Chemistry and is Head of the Department of Organic Chemistry. He is also the Director of the Kimmel Center for Molecular design. His research interests include the design of electron-rich complexes of the late transition metals capable of insertion and activation of some of the strongest bonds, and the development of new homogeneous catalysis based on these processes. He is the recipient of the I. M. Kolthoff prize in chemistry for 2002 (see p. 2319 in this issue for his latest contribution to *Chemistry*).

Chad A. Mirkin is the Director of the Institute for Nanotechnology, the George B. Rathmann Professor of Chemistry, Professor of Medicine and Professor of Materials Science. He received his Ph.D. degree in chemistry from the Pennsylvania State University (1989). He was an NSF Postdoctoral Fellow at the Massachusetts Institute of Technology prior to becoming a chemistry professor at Northwestern University in 1991. Professor Mirkin is a chemist and nanoscience expert, who is known for his development of nanoparticle-based biodetection schemes, the invention of dip-pen nanolithography, and contributions to supramolecular chemistry. He is the author of over 200 manuscripts and over 50 patents. He is the founder of two companies, Nanosphere and NanoInk, which are commercializing nanotechnology applications in the life science and semiconductor industries. Professor Mirkin has been recognized for his accomplishments with many awards. He is a Fellow of the American Association for the Advancement of Science and serves on the Editorial Advisory Boards of several international journals.

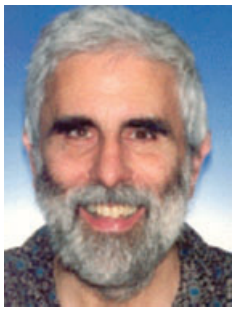
Teruaki Mukaiyama was born in 1927. He received his B.Sc. from the Tokyo Institute of Technology (T.I.T.) in 1948, and Ph.D. from the University of Tokyo in 1957. He first became Assistant Professor at Gakusyuin University in 1953 and then at T.I.T. in 1958. He was appointed full Professor at T.I.T. in 1963 and moved to the University of Tokyo in 1974. In 1987 he became Professor of Chemistry at the Science University of Tokyo. Since 2002 he has been Professor at the Kitasato Institute. He has been the recipient of many major awards and is currently a member of the Japan Academy as well as a foreign member of the Academy of Sciences in France and Poland.

Klaus Müller is an organic chemist by training (ETH Zurich), but has also got involved in theoretical, physical organic, and biostructural chemistry. In 1982, he joined F. Hoffmann-La Roche AG, Basel, where he set up and further developed molecular modeling, biostructural research, bioinformatics, and was involved in the development of automated and miniaturized key technologies in discovery research. In 1998, he was appointed the head of "Science and Technology Relations", acting as liaison person to both academic and nonacademic external groups, as well as internally between different discovery research disciplines. He is a board member and acts as Secretary-General of the Roche Research Foundation and is on the board of several other scientific foundations. In 1990 he was made extraordinary professor at the University of Basel, teaching structural chemistry as well as chemistry- and bioinformatics.



K. C. Nicolaou was born in Cyprus and educated in England and the USA. He is currently Chairman of the Department of Chemistry at The Scripps Research Institute, and is also Professor of Chemistry at the University of California, San Diego. His impact on chemistry, biology, and medicine is reflected in nearly 600 publications and 57 patents, and he has trained hundreds of graduate students and postdoctoral fellows. His *Classics in Total Synthesis* series, co-authored with Erik J. Sorensen and Scott A. Snyder, is a source of inspiration for students and organic chemists around the world.

Dieter Oesterhelt received his Ph.D. from the Institute of Biochemistry, University of Munich (supervisor: F. Lynen) and then became a Research Assistant, Max Planck Institute of Cell Chemistry, Munich, working on fatty acid synthetase. He spent a sabbatical year at the University of California, San Francisco, where he discovered vitamin A aldehyde and a rhodopsin-like protein (bacteriorhodopsin) in the cell membrane of Halobacterium halobium. He then returned to University of Munich as a lecturer doing research on the structure, function, and biosynthesis of the purple membrane of halobacteria. In 1973 he was appointed as Head of a research group at the Friedrich Miescher Laboratorium of the Max Planck Society, Tübingen and then in 1975 Professor of Biochemistry, University of Würzburg. He is currently the Director of the Max Planck Institute of Biochemisty, Martinsried.



Michael Paddon-Row received his Ph.D. in medical chemistry from the Australian National University (John Curtin School of Medical Research) in 1967. Following Postdoctoral Research Fellowships at Princeton University and the ANU, and ten years at UTS (1974–1984) he joined the University of New South Wales in 1985, where he is now a Professor of Chemistry and UNSW Scientia Professor. He has held visiting professorships at universities throughout the world. His research interests span synthetic chemistry, physical organic chemistry, and computational quantum chemistry, with emphasis on their combined application to mechanistic problems, especially those involving long-range electron-transfer reactions. He is an elected Fellow of the Australian Academy of Science. His research awards include the Birch Medal and the Craig Medal of the Australian Academy of Science (see p. 2525 in this issue for his latest contribution to *Chemistry*).

Alexander Pines was born in 1945. He received his degree in Chemistry from the Hebrew University of Jerusalem and went to study for his Ph.D. at the Massachusetts Institute of Technology. He then took up a position as Professor of Chemistry at the University of California in Berkeley, where he is currently Glenn T. Seaborg Professor. His main research interests are the development of novel theory and experiment in magnetic resonance spectroscopy, with applications to fundamental problems in physics, chemistry, materials science, biomedicine, and microanalytical techniques. He was recently awarded a Faraday Lectureship for his work on NMR spectroscopy.

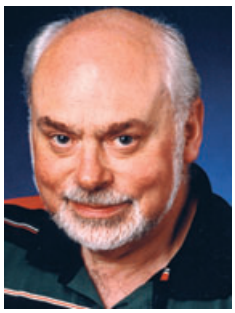
Pekka Pyykkö was born in 1941 in Hinnerjoki (Finland) and received his Ph.D. in 1967 at the University of Turku. After working at several institutes until 1974, he became Associate Professor of Quantum Chemistry at Åbo Akademi in Turku. Since 1984 he has held the Swedish Chair of Chemistry at the University of Helsinki, with a five-year stint (1995–2000) as Research Professor of The Academy of Finland. With Jean-Paul Desclaux, he identified the chemical differences between silver and gold as being a relativistic effect in 1976 and with Yongfang Zhao (and others) the aurophilic attraction as being a correlation effect in 1991. He predicted the existence of several gold-containing species, notably the covalently bonded $[AuXe]^+$ and $[XeAuXe]^+$, the triple-bonded $[C{\equiv}Au]^+$ (with Maria Barysz), and the gold fullerene $[WAu_{12}]$ (with Nino Runeberg), all of which were later synthesized.

C. N. R. Rao obtained his Ph.D. from Purdue University and a D.Sc. from Mysore University. He carried out postdoctoral work at the University of California, Berkeley. He is currently the Linus Pauling Research Professor and Honorary President of the Jawaharlal Nehru Centre for Advanced Scientific Research and Honorary Professor at the India Institute of Science (both at Bangalore). His research interests are mainly in solid-state and materials chemistry (e.g., transition-metal oxides, open-framework structures, and nanomaterials). He has authored nearly 1200 research papers and edited or written 37 books. A member of several academies, including the Royal Society, US National Academy of Sciences, and the French Academy, he is currently Distinguished Visiting Professor at the University of California, Santa Barbara. He recently received the Somiya Award of the International Union of Materials Research Societies (IUMRS) and has also been awarded the Einstein Gold Medal of UNESCO and Hughes Medal of the Royal Society (see p. 2433 in this issue for his latest contribution to *Chemistry*).

David Reinhoudt worked at Shell on the crown ether research program Between 1970 and 975. In 1975 he became professor of SMCT at the University of Twente. His research is focused on supramolecular chemistry and technology, and nanofabrication. He is the scientific director of the MESA$^+$ Research Institute. In 2002 he was made chairman of the Board of NanoNed, the Dutch Network for Nanotechnology. He is a member of the Royal Dutch Academy of Sciences, a Fellow of the American Association for the Advancement of Science, and a Fellow of the Institute of Physics. He is the author of more than 750 scientific publications and patents (see p. 2426 in this issue for his latest contribution to *Chemistry*).

Masakatsu Shibasaki was born in 1947 in Saitama (Japan), and received his Ph.D. from the University of Tokyo in 1974 under the direction of the late Professor S.-i. Yamada, before doing postdoctoral work with Professor E. J. Corey at Harvard University. In 1977 he returned to Japan and joined Teikyo University as an associate professor. In 1983 he moved to Sagami Chemical Research Center as a group leader, and in 1986 took up a professorship at Hokkaido University, before returning to the University of Tokyo as a professor in 1991. He has received many prizes, the most recent of which are the Arthur C. Cope Senior Scholar Award (2002), the National Prize of Purple Ribbon (2003), and the Toray Science Award (2004). Moreover, he is a Fellow of the Royal Society of Chemistry and an Honorary Fellow of Chemical Research Society of India. His research interests cover asymmetric catalysis, including asymmetric Heck reactions and reactions promoted by asymmetric bifunctional complexes, and also the medicinal chemistry of biologically significant compounds.

Pierre Sinaÿ was born in 1938 in Aulnay-sous-Bois (France). He received his Ph.D. from the University of Nancy under the supervision Serge David. He went on to become a research fellow at Harvard University (with Roger W. Jeanloz) before returning to France to take up the position of Research Fellow of the CNRS (National Centre of Scientific Research), University of Paris. In 1968 he went as an Associate Professor of Biochemistry to the University of Orléans, where he was subsequently appointed as a full Professor. In 1975 he became the Director of a laboratory sponsored by CNRS (National Centre of Scientific Research). In 1986 he became Professor of Organic Chemistry at the University of Paris and at Ecole Normale Supérieure. His main fields of research include carbohydrate chemistry, synthesis of natural products from carbohydrates, chemistry of the anomeric carbon of sugars, and the stereoselective synthesis of biologically important oligosaccharides. This research activity has resulted in about 250 publications in international journals, 30 patents and more than 200 communications.



J. Fraser Stoddart received his B.Sc., Ph.D., and D.Sc. degrees in 1964, 1966, and 1980, respectively, from the University of Edinburgh. He carried out postdoctoral research at Queen's University (Canada) for three years before joining the academic staff at the University of Sheffield in 1970. There he remained, aside from a three-year secondment to the ICI Corporate Laboratory in Runcorn, for 20 years. After seven years as the Professor of Organic Chemistry at the University of Birmingham, he moved to UCLA in 1997, to take up the Saul Winstein Chair of Organic Chemistry. In 2002, he became the Acting Co-Director of the California NanoSystems Institute (CNSI) and became the Director in 2003. He also currently holds the Fred Kavli Chair of NanoSystems Science. He has published over 700 scientific papers. He has pioneered the development of molecular recognition-cum-self-assembly processes and template-directed protocols for the syntheses of mechanically interlocked compounds (catenanes and rotaxanes) that have been employed as molecular switches and as motor molecules, respectively, in the fabrication of nanoelectronic devices and nanoelectromechanical systems (NEMS). His work has been recognized by many awards, one of the most recent being the Nagoya Gold Medal in Organic Chemistry (2004).

Claudio Toniolo received his degree from the University of Padova (Italy) in 1965 under the supervision of Professor E. Scoffone. He obtained the Libera Docenza title in Pharmaceutical Chemistry in 1969. Following a postdoctoral stay with Professor M. Goodman at Polytechnic Institute of Brooklyn, New York (1967–1968), he joined the Faculty of Sciences, University of Padova, where he has been Professor of Organic Chemistry since 1980. He has been a visiting Scholar or Professor at many universities throughout the world. He

is a member of the Editorial board of several peptide science, chemistry, and bioorganic chemistry journals, and author or co-author of over 660 publications on synthesis and conformation of peptides and their applications as rigidified templates or spacers. He was also a co-editor of the *Houben-Weyl, Methods of Organic Chemistry, E22* volume series on "Synthesis of Peptides and Peptidomimetics" (see p. 2395 in this issue for his latest contribution to *Chemistry*).

Barry M. Trost obtained a Ph.D. in Chemistry at the Massachusetts Institute of Technology (1965). He moved directly to the University of Wisconsin where he was promoted to Professor of Chemistry in 1969 and subsequently became the Vilas Research Professor in 1982. He joined the faculty at Stanford as Professor of Chemistry in 1987 and became Tamaki Professor of Humanities and Sciences in 1990. In addition, he has been Visiting Professor of Chemistry at many other universities. His research has ranged over the entire field of organic synthesis, with emphasis on simplification of syntheses leading to natural products of high biological activity. Among the areas which he has pioneered are the use of sulfur-based reagents and transition-metal catalysts in complex settings. He has received a number of awards, the most recent including the ACS Nobel Laureate Signature Award for Graduate Education in Chemistry (2002), the ACS Cope Award (2004), and the City of Philadelphia John Scott Award. He has served as editor and on the editorial board of many books and journals and has published two books and over 750 scientific articles (see p. 2577 in this issue for his latest contribution to *Chemistry*).

Gerhard Wegner is a Director at the Max Planck Institute for Polymer Research (MPI-P) in Mainz (Germany). He received his degree from the University of Mainz in 1965. After postdoctoral work in the USA and further research work at the University of Mainz, he joined the University of Freiburg in 1974 as a professor of polymer chemistry and Director of the Institute for Macromolecular Chemistry, before moving to his present position in 1984 as one of the founders of the MPI-P. Between 1996 and 2002 he was the Vice President of the Max Planck Society. His contributions to the field of polymers, solid-state organic chemistry, and polymer materials science, have been recognized by many awards, including the ACS Award in Polymer Chemistry (1998), FEMs—European Materials Medal (2003), Federal Cross of Merit (Bundesverdienstkreuz) Germany (2003), and the Marin-Drinov Medal of Bulgarian Academy of Science (2004). His main research interest is currently centered on the design of novel polymer materials in the context of advanced technologies.

Karl Wieghardt received both his degree in chemistry and his Ph.D from the University of Heidelberg. He then went to do postdoctoral studies at the University of Leeds (UK) with Professor A. G. Sykes. He completed his habilitation at the University of Heidelberg in 1974 and subsequently became an Associate Professor in Inorganic Chemistry at the University of Hannover (1975–1981). In 1981 he became a Professor of Inorganic Chemistry at the University of Bochum and in 1994 he was made Honorary Professor. He also became a Scientific Member of the Max Planck Society and was made Director of the Max Planck Institute for Bioinorganic Chemistry in 1994. His research group has two main focuses, namely coordination chemistry of transition-metal ions and bioinorganic chemistry.