

Meeting of Presidents of regional chemical societies

Research Triangle Park, North Carolina, USA,
29–30 January 1998

Minutes

Attendees

Prof. J. Jortner, President, International Union of Pure and Applied Chemistry

Prof. L. Niinistö, President, Federation of European Chemical Societies

Prof. H. Ohtaki, President, Federation of Asian Chemical Societies

Prof. B. Rivas, President, Federación Latinoamericana de Asociaciones Químicas

Prof. P.H.L. Walter, President, American Chemical Society

Prof. L. Weiler, President, Canadian Society for Chemistry

Dr D.H.M. Bowen, Former Chairman of IUPAC Committee on Print & Electronic Publications

Dr J. Malin, Administrator, International Activities, American Chemical Society

Prof. P. Reyes, General Secretary, Federación Latinoamericana de Asociaciones Químicas

Secretary: Dr J.W. Jost

1. Welcome and Introduction

Prof. Jortner extended a warm welcome to the Presidents of the Regional Chemical Societies at the first meeting of the group. He noted that this meeting was the first of its kind. The initiative for this meeting came from some of the Presidents of the regional Chemical Societies during the IUPAC Geneva Congress and General Assembly last August. IUPAC is honored to provide its good services to convene this important meeting. IUPAC represents and acts for the entire world chemistry community and the Presidents of the

regional Chemical Societies represent almost the entire world of chemistry. We regret that Prof. Bekoe, the President of the African Association of Pure and Applied Chemistry, could not join us.

The purpose of the meeting was to share information and determine areas in which the group could cooperate. The agenda was intended to be flexible and lead to an open interchange of ideas. Each President gave a brief overview of his society's activities and areas of special interest or concern. Subsequently each President led the discussion on one of the Agenda topics.

2. Review of the activities of regional chemical societies

Prof. Rivas and Prof. Reyes presented the general aspects of financial support, publications, chemical education and PhD programs for the Societies that are members of FLAQ. It was noted that only two Journals published in Latin America are indexed in ISI, *Anales de la Asociación Química Argentina* and *Boletín de la Sociedad Chilena de Química*. As an example of the situation in one member of FLAQ, Prof. Reyes described the economic and social environment in Chile. He noted the concern of the Chilean Chemical Society that fewer students were studying chemistry in secondary school or University. Some University degree programs are underutilized, graduating only a few advanced degree recipients each year. These concerns are shared by many of the other member societies of FLAQ.

Prof. Ohtaki reviewed the structure of FACS. FACS sponsors a conference each year. He described the dif-

faculties in operating a regional society that includes an advanced industrial nation, Japan, whose chemists interact mainly with their counterparts in Europe and North America, and a number of developing nations whose chemical industry is small and underdeveloped.

Prof. Weiler noted that the Canadian Society has excellent relations with the ACS and cooperates closely with it. Some problems are unique to Canada. One current issue that is of concern is the move to license those who provide chemical services through groups other than chemical societies. This could lead to the situation where only engineers or certain kinds of other professionals could legally carry out certain activities which were traditionally done by chemists. This situation exists in other parts of the world, such as Europe, but seems to be moving further forward in Canada. The Society has only recently become aware that these licensing proposals could prevent chemists from practising in many traditional areas such as environmental analysis. Prof. Niinistö noted that similar actions are being contemplated in Europe as a result of the desire to set European Union-wide standards for chemists and other technical professionals.

Prof. Niinistö discussed the effects of the ongoing economic, social and political integration of the member states of the European Union. This has led to the need for chemical societies to speak to the EU administrators in Brussels in addition to the ongoing discussions with governments at the national level. He also noted the consolidation of scientific publication, a topic he would address in more detail when the subject of cooperation in publications was discussed.

Prof. Walter reviewed the structure and function of the ACS. International activities involving education and the public understanding of science are centred in the International Activities Office. Recent important activity will be the Chemistry Week in 1999 during the ACS celebrations. Other important international activities focus on human Rights, the exchange of scientists and the donation of scientific material to developing countries. Prof. Walter noted that while each society focuses on national issues, many issues that seem to be national have an effect on chemists in other countries. He planned to address this issue in more detail when the agenda item on cooperation in legislative issues was discussed.

Prof. Jortner reviewed the current changes being discussed in the organization and management of IUPAC's scientific work.

Prof. Jortner emphasized four principles:

- Globalization of the Science and Technology Endeavour
- Interdisciplinary nature of scientific activities
- Expanding boundaries of the chemical sciences
- Mission-oriented service of chemistry

Prof. Jortner noted that IUPAC represents the global chemical science community, while the regional societies represent chemists in the national chemical societies. He then noted the meetings held by IUPAC to seek input from leaders of the chemical communities on the role of IUPAC. Meetings have already been held in North America, Europe and Asia, with meetings planned for Africa and Latin America later in 1998. He reviewed the membership of IUPAC, including the Company Associates and the Union's structure of Divisions and Commissions. Prof. Jortner pointed out disciplinary gaps, particularly for Material Science and Biomolecular Chemistry, and the difficulty of establishing interdisciplinary activities. He noted that the current funding of IUPAC projects is tied to people, Titular Members, not projects.

Prof. Jortner then briefly reviewed the charge of the Strategy Development and Implementation Committee and its membership. He reviewed the Goals the Committee had developed as the basis for the Union's strategy. The principles on which the Union's work are based are quality, relevance and global dimension. The next planned steps are to obtain approval of the Strategic Plan and its distribution, followed by its implementation.

Prof. Jortner discussed the 'Future Message of IUPAC', noting the importance of capacity building, the infrastructure of science, global communication and the commitment of the world's chemical societies to information transfer and global activities. Prof. Jortner concluded his remarks by noting that administrative changes are important but that new content is the most important. IUPAC needs and desires input from the global chemical community and in particular from this group.

3. Cooperation on legislative and governmental issues

Prof. Walter expanded on his earlier comments by noting that chemists work in a global environment. They often work for companies that do business in many parts of the world and must be able to practice in those countries. This is related directly to the issue raised by Prof. Weiler, of who controls the licensing of professionals who do chemistry. Chemistry is affected by legislation, environmental regulations and regulations controlling the licensing of drugs and agricultural chemicals have effects beyond national borders.

The issue of intellectual property also has global implications. This issue has also been dominated by nonchemists, often lawyers and the entertainment industry. The harmonization of patent and trademark regulations and the protection of patents and copyrights are issues of great importance to many chemists. The

protection of intellectual property and the preservation of the ability of academic researchers to use public domain information are often in conflict, with chemists concerned on both sides of the issue.

The group agreed that it was important for regional and national chemical societies to be aware of new laws and regulations in other parts of the world. The group agreed that a series of international workshops and seminars on chemical regulatory matters and risk/benefit analysis would be beneficial. Prof. Jortner volunteered the IUPAC Secretariat as a resource to act as a clearinghouse for this information, possibly by the use of the internet. A list server could be set up on the IUPAC web site to facilitate information exchange among those concerned with legislation and regulation in the regional and national societies.

4. Chemical education

Prof. Rivas opened the discussion of this topic by noting the differences in chemical education world-wide. Some countries would like information that helps them decide what are the 'best' centers for teacher training. He also noted the value of short stays by PhD students in advanced programs. This is often best done in places other than North America or Europe. He gave the example of Peruvian students spending part of a year doing research at a Chilean or Argentinean University.

Prof. Reyes emphasized the importance of sharing experiences on how to increase the enrollment of students in chemistry in high schools. He noted that the number of students in Chile studying chemistry is decreasing, while law, business, and medicine attract the brightest students.

Prof. Weiler commented that simply increasing the salaries of high school teachers is not the answer to improving chemistry education. He stressed the importance of setting requirements for chemistry teachers.

Prof. Jortner noted that chemistry can be viewed as the basis of a scientific education and agreed that international guidelines should be set for chemical education.

Prof. Walter observed that dissatisfaction with chemical education is 'global'. The students in all of the countries represented at this meeting compete globally. He proposed that the staff members responsible for chemical education at each society meet to discuss education standards. Prof. Jortner pointed out the possible value of a workshop on this issue.

Prof. Ohtaki noted that one possible area of cooperation is in the translation of textbooks into other languages.

The suggestion was made that a workshop could be organized to set the agenda for a CHEMRAWN Confer-

ence on Chemistry Education. Dr Malin agreed to organize the workshop.

5. Public understanding of science

Prof. Niinistö introduced this topic by noting that the ACS National Chemistry Week program seemed to be the kind of program other societies should institute. He asked the ACS representatives present how successful the program had been.

Dr Malin noted the importance of local section involvement. The program seems to bring chemistry to the attention of the public. The program has been built up over the years as local sections learn what works—and what doesn't—in bringing chemistry to the public. He pointed out that for the last two years National Chemistry Week had been featured on the Today TV program.

Prof. Weiler commented on the Canadian experience with National Chemistry Week by noting that academic chemists tend to do 'gee whiz' demonstrations that attract younger children while industrial chemists do programs that attract older children and adults.

6. Cooperation in publications

Prof. Weiler introduced the topic by describing some of the changes occurring in journal publication, in the means of submission, distribution and storage of information. He noted that we need to consider the proliferation of information. What is the role of the learned societies *vis-à-vis* commercial publishers? What is the role of international organizations? How do we evaluate the value of information?

Prof. Niinistö described the changes taking place in the European journal market. A number of national journals are being consolidated into three journals to be published for the national societies by Wiley-VCH. The journals of the Royal Society of Chemistry, those of the Elsevier Group and some journals by independent learned societies constitute the rest of the market, but consolidation and regrouping is also taking place. Thus, all European journals will be published by one of three large groups and a few small societies.

Prof. Walter commented that journals would continue to exist only as long as they provide added value. The new modes of electronic publication offer efficiencies in the distribution of information, but the low cost and ease of distribution of information on the web leads to a proliferation of unreviewed publications. There is still a need for the traditional functions of the peer-reviewed publication, the issue is how to charge for that function. He also noted that the new environment of the world-wide web had undetermined implications for secondary and tertiary publications such as *Chemical Abstracts*.

The group concluded that there was no obvious need for a cooperation forum or mechanism in the publications area.

7. Cooperation in membership

Prof. Ohtaki noted that IUPAC must expand its membership to include Asian and African Societies. Prof. Jortner described the steps that IUPAC was taking to recruit more of these societies into the Union. Prof. Walter commented that demonstrating the value of membership was the key issue.

Discussion of this topic had to be cut short due to a lack of time, despite its interest.

8. Conclusions

Prof. Jortner reviewed the main points of the discussions, the need to cooperate on education issues, the public image of chemistry and global chemical legislation and government issues. Prof. Jortner pointed out that the role of IUPAC in regional collaboration will be:

- Catalysis of regional collaboration
- Supplement regional collaboration by global international activities
- Assistance in information flow
- Enhance (but not mediate) direct interregional interaction

The participants agreed that the meeting had been extremely useful. The group will meet again at the occasion of the IUPAC General Assembly (at Berlin in 1999). The time and location of meetings in the non-General Assembly years will be determined at a later date.