

## Organization and Management of IUPAC's Scientific Work

In September 1998, the Bureau approved an integrated program to (i) establish a uniform system for evaluating and funding projects, and (ii) assign to greatly strengthened Division Committees the responsibility for overseeing the initiation, approval and management of such projects. The program was developed from recommendations by the Strategy Development and Implementation Committee (SDIC) and the Committee on Project Evaluation Criteria (CPEC), together with proposals from the Division Presidents and from many individuals at all levels in IUPAC bodies. The Bureau vote of 20-0, with two abstentions, indicated the consensus that had been reached after two years of discussions of the need for such changes.

*The program approved by the Bureau is designed to improve the quality, relevance, international impact and effectiveness of the Union's scientific work by*

- revitalizing long-range planning within the Divisions
- ensuring the selection of only high quality projects to bear the IUPAC label,
- encouraging participation by the worldwide chemistry community,
- optimizing the use of IUPAC's limited financial resources, and
- simplifying management and accountability.

### Action Requested by Council

Most aspects of the new program have been underway for almost a year, as described below. The Council is being asked to take two important steps:

1. *Under Bylaw 4.302, decide to continue each of the current Commissions for the next biennium only, with termination at the end of 2001.* This action will permit each Division to make an objective judgment on the scope of its activities and to determine how best to allocate financial resources between the formation of new continuing bodies and the support of travel and other expenses related to specific projects.
2. *Amend Bylaw 4.307 to eliminate the "right" of Titular Members of Commissions to receive travel expenses.* This change will remove an ambiguous phrase and clarify the intent of the Union to provide travel expenses as needed for carrying out its work, not as an entitlement of an appointment to an IUPAC body.

### Current Status

During the last year all seven Divisions have taken very significant steps to strengthen their Division Committees, to plan for expanded or redirected programs, and to organize in anticipation that the current Commissions will be terminated in 2001. For example:

- All seven Divisions have made provision for including in their Division Committees during the next biennium the chairman or other representative from each of their current Commissions. (In the past some Division Committees included Commission chairmen, and others have had

regular meetings with Commission chairmen, but there has been no uniform policy.) This action ensures that each Division Committee has immediately encompassed the breadth of expertise represented by its current Commissions, and the composition of the Committee will facilitate the generation and approval of project proposals from Commission members.

- Some Divisions have appointed nominating committees with “outside” members, as specified by the Bureau, in the election of new members of the Division Committee this year. Other Divisions will have no vacancies this year on the Committees that have been expanded to include Commission chairmen. These Divisions will adopt the nomination procedure in 2001.
- Each Division President has met individually with current Commission chairmen and/or has convened a meeting of the Division Committee with Commission officers in order to discuss future directions of the Division. Several Divisions have reported favorable outcomes in terms of the scientific opportunities that arose in these discussions, with sharing of information and ideas across disciplines sometimes resulting in proposals for new projects.
- All Division Presidents report continuing concern on the part of their Committees and Commissions in phasing in a new system while maintaining high levels of productivity and enthusiasm among existing members, and later assuring adequate continuity and “training” of new members in the absence of a more extensive Commission structure. Without minimizing the reality of these concerns or the extent of the efforts to be made during the next two years, it seems fair to state that most Division Presidents are now optimistic that the problems can be overcome and that the flexibility and benefits of the new system will prove advantageous.

A system has been put in place for proposing, evaluating and funding new projects. Some highlights are:

- The Secretariat has set up procedures and forms for project proposals, for assisting Divisions in soliciting opinions from outside referees, and for tracking the progress and fiscal aspects of each project. More than ten proposals have already been submitted. Information on current Commission projects will be fed into this system to give a coordinated database of project information. Over the next two years it is anticipated that a number of new proposals will be made by members of IUPAC bodies, as well as those outside IUPAC, for projects that will continue after the anticipated phaseout of the current Commissions.
- Several Division Committees have responded to proposals sent to them for review, decision and funding.
- A Project Committee has been set up under the Bureau to handle interdisciplinary projects and those requiring larger financial resources than are available within a single Division. This Committee, too, is functioning well and has made decisions on individual projects.
- An Evaluation Committee has been formed under the Bureau to provide retrospective evaluation of projects in terms of their impact and cost effectiveness. This long-range effort is expected to provide information that will be helpful in assessing future proposals and will

be valuable in demonstrating the influence of IUPAC projects in the world of chemistry.

### **Future Actions Needed**

As experience is gained with the new system, there will undoubtedly be a number of policy decisions and procedural changes required to facilitate smooth operation. Among these issues are the following:

- Bylaw 4.102 defines the membership of a Division in terms of Titular and Associate Members of Commissions and of the Division Committee. As Divisions move to short-term Task Groups to carry out projects, it may well be desirable to redefine this membership, which constitutes the electorate for Division Committees. During the next two years this subject must be discussed by the Bureau, Division Committees and others in light of the anticipated composition of each Division after 2001. Suitable amendments to the Bylaws can be considered by the Council in 2001.
- The new system that emphasizes Task Groups and provides more flexibility in funding travel may make it easier for some scientists in small countries to participate actively in IUPAC projects. In addition, the program approved by the Bureau allows up to six National Representatives to each Division Committee. Nevertheless, if the number of Commissions is drastically reduced, the loss of National Representatives to Commissions may present a problem. Discussions are underway with countries that currently have a large number of National Representatives to ascertain the extent to which there may be a problem and to develop suggestions of ways to broaden participation in the Union's work.
- The new IUPAC Fellows Program has been successful in maintaining contact with nearly 200 individuals whose terms on IUPAC bodies expired in 1997, and the number of potential Fellows will increase substantially in future years. Particularly as Task Groups are phased in, this "pool" of talent needs to be nurtured as a source of ideas for new projects and as a source of experienced volunteers for new projects. The Secretariat maintains an on-line database of addresses of Fellows, and consideration should be given to incorporating searchable fields related to their past IUPAC service and expertise.