### 4<sup>th</sup> Evaluation Committee (EvC) Meeting 10-11 February 2001, Research Triangle Park, NC, USA Minutes

Present: Prof. G.M. Schneider (Chairman), Prof. J. Corish, Prof. E. Grzywa

, Prof. U.K. Pandit, Prof. G.S. Wilson, Dr. F. Meyers (IUPAC Secretariat)

Absent: Prof. O. M. Nefedov

Secretary: Dr. J. W. Jost

#### 1. INTRODUCTION AND FINALIZATION OF THE AGENDA

Prof. Schneider, EvC Chairman, and Dr. Jost, Executive Director of IUPAC, welcomed the other EvC members present.

Shortly before the meeting, Prof. Nefedov had sent his apologies for absence because of illness and announced his support for the recommendations to be made by the EvC at the present meeting; he had submitted his draft evaluations already earlier (see EvC website). The Chairman said that on behalf of the EvC he had already expressed their deep regrets for his absence and sent their best wishes for a rapid and complete recovery.

The Chairman then thanked Dr. Jost for the invitation of the EvC to meet in the IUPAC offices at Research Triangle Park; for most members it was the first visit to IUPAC's new home. On behalf of all EvC members he expressed warm thanks to Dr. Jost, Dr. Meyers and Linda Tapp for the excellent preparation of the meeting. The outstanding EvC website (with plenty of most instructive links) had been extremely helpful to all EvC members for the preparation of the present meeting as it will be for the future work

The Draft Agenda (see EvC website) of the present meeting was unanimously approved without change.

# 2. APPROVAL OF THE MINUTES OF THE 3<sup>RD</sup> EVC MEETING AT GUILDFORD, UK, ON 24 SEPTEMBER 2000.

The Draft Minutes (see EvC website) were unanimously approved.

#### 3. REPORTS OF THE COMMITTEE CHAIRMAN AND SECRETARY

The Chairman reported that since the Guildford Meeting predominantly preparative work for the present meeting was done.

In particular, he had asked all EvC members to submit draft pre-evaluations by 26 January 2001 of the projects that had been selected and distributed to them at the Guildford Meeting. All members reacted and their reports are on the EvC website.

In addition, a report on the EvC activities was submitted to the IUPAC Vice-President on his request (see EvC website).

The Secretary gave comments with respect to the preparation of the present meeting and the development and organization of the IUPAC Secretariat.

## 4. PROJECTS SELECTED FOR DRAFT EVALUATION AT THE 3<sup>RD</sup> EVC MEETING: DISCUSSION AND FINAL DECISION AND

### 5. GENERAL RULES AND CRITERIA FOR EVALUATION (AS DERIVED FROM ITEM 4.)

Items 4 and 5 were combined in the discussion.

At the 3<sup>rd</sup> EvC Meeting at Guildford, UK, 18 projects completed in 1999/2000 had been chosen for draft pre-evaluation by the EvC members. The 18 projects and the respective pre-evaluators are listed up on the EvC website.

First it was discussed how the individual draft pre-evaluations (all on the EvC website) could be made documents of the EvC. Amongst others two main possibilities were discussed

- i) to make an evaluation of each of the 18 projects resulting in a final individual statement (eventually with marks) for each of them, or
- ii) to make a detailed discussion of each project resulting, however, in general summarizing statements and some rules, recommendations, comments or hints for the future retrospective evaluations of completed projects by the EvC as well as for the work of the Divisions, the Standing Committees, the Project Committee (PC), and eventually others.

Since only 18 projects (from a total of about 300) - some of them having been proposed by the Division Presidents or the Standing Committee Chairmen - were considered in the present test evaluation on real examples, the EvC finally agreed on the alternative ii).

The extensive and detailed discussion of the 18 projects and their pre-evaluations demonstrated that topics, quality and impact differed very much, among the best being 141/3/89 and 770/1/97.

It was agreed upon that the fundamental criteria for all evaluations must be:

- 1) Why is this project important for the advancement of science?
- 2) Why should IUPAC do this?
- 3) Does the project have a product? Has the project been completed successfully and what is its quality?
- 4) How was the conformance to plan (including timing) and the use of the budget?
- 5) Is there evidence of impact on the relevant scientific community? Does the project increase the visibility of IUPAC?
- 6) How was the dissemination of the results organized and how successful was it? For future EvC evaluations it was proposed
- A) to write an individual evaluation of each completed project considering the fundamental criteria given above, the information from items B) and C) and if applicable the post-completion reviews of external experts,
- B) to fill in a form concerning the technical details of each project (so-called "Information Sheet"; for a draft of such a form see attachment 1), and
- C) to collect in a separate list additional general comments, remarks, recommendations, hints etc. that might be useful for the future work of the EvC, the Divisions, the Standing Committees, the Project Committee, and others.

At the meeting, many general points were discussed in more or less detail. Some of the comments of the EvC are briefly summarized in the following:

### a) *Status report(s):*

For the EvC work it is most important to receive:

- a status report of the coordinator of the present project or of the President of the responsible Division six months after completion at the latest and
- an additional report one or two years after publication of the results.

Here as many as possible of the points mentioned above should be considered, especially the conformance to plan with an accent on timing since (too) often the duration of projects is much longer than scheduled. Forms to be filled in by the project coordinators have to be out-lined at a future EvC meeting.

It is important that on the Division level at least one person continues to be informed about the present status of a project even years after completion or files that have to be actualized continuously must exist for retrospective information. Such a service <u>must</u> be installed at the Secretariat if the retrospective information is to be available.

### b) Quality:

Evaluation includes check for quality. This aspect is not mentioned in the Terms of Reference of the EvC. However, quality is the central requirement of a completed project. It must be discussed in more detail how quality can be "measured" and what "milestones" are after the successful completion of a project. Unfortunately, most items of the evaluation scheme (e.g., those given on the Information Sheets) are not suitable to do so. Probably additional external expert reviewers in the special field will be necessary in many or even most cases (see item c)).

### c) Impact, visibility of IUPAC:

Another accent of evaluation is a check for impact on the scientific community, impact and visibility of IUPAC being somewhat related. Some knowledge about these points can be obtained from the items of the Information Sheet. However, additional activities will be necessary to find other criteria. In addition, here, external reviewers might often be necessary. In summary IUPAC must be seen as "a global umbrella" for universal problems. The Committee concluded that publication in PAC is not always sufficient as a means for dissemination of IUPAC recommendations and products.

### d) Task Groups

The number of workers on a project should be neither too small nor too large. As a rule, one single person working on a project should not be accepted; even two workers can be problematic. At least a minimum of geographic diversity will normally be desirable. The question that should be asked is: "Does this project incorporate top quality experts from around the world?"

### e) External reviewers:

Sometimes external reviewers will be necessary for the retrospective evaluation of a project, e.g., with respect to its quality or impact (see items a) and c)). It has still to be decided who will officially invite external reviewers, the EvC or the Divisions at the request of the EvC.

The EvC would like to accentuate that the search for expert reviewers can become difficult because many of the competent referees in the special field have already been involved in this or similar projects (e.g., as members of IUPAC Commissions or

Committees) or want to join IUPAC in the future. However, this must be done to maintain the credibility of the system. Here the responsibility and the self-assessment of the Division is crucial and will become even increasingly important in the future.

### f) Citations:

The number of citations of a completed IUPAC project in the citation databases is often small and even sometimes zero. This might be a consequence of shortages in the publication (mostly only in *PAC*) and advertising (mostly only in *CI*) system (see item g)).

### g) Dissemination:

Normally IUPAC documents are published in *PAC* and publication is announced in *CI*. This practice is not adequate and sufficient. The EvC discussed the following points and alternatives for a better dissemination of the results of IUPAC projects:

- Dissemination must be considered as one of the tasks of the project.
- Full text of *PAC* must be on the website as soon as possible.
- Reprint from *PAC* in relevant specialty journals is highly desirable.
- If co-publication in PAC and in a specialty journal is not possible, then links to PAC should be given in the relevant specialty journals or even better on their websites.
- If there is publication in relevant specialty journals only, IUPAC should reference that publication on the web site and in *CI*.

### h) Budget:

There was discussion in the EvC about considering budget information. Without exaggerating the importance of budget for the successful completion of a project, it is of interest for a retrospective evaluation what amounts of funding came from IUPAC and external sources, respectively. Add to this that even small amounts of seed money from IUPAC can be very useful, especially in the initial stage of a project, to find additional and even more important funds outside IUPAC (e.g., from UNESCO).

It was, however, well understood that the EvC should not make recommendations for continuing or stopping the funding of a project. This decision is one of the most important tasks of the respective Division.

#### i) Databases:

Such projects exhibit special problems with respect to accessibility, safety, critical evaluation, permanent up-dating, continuity, copyright, etc. This discussion is, however, the task of other IUPAC bodies. We, however, urge that clear policies be established as soon as possible.

### j) Nomenclature projects:

General problems are the management of such projects and the acceptance in the scientific community. This discussion, however, has again to be done by other IUPAC bodies.

### k) Reviews:

Reviews are another general problem. Many IUPAC activities consist in reviews or collections of data or references in sometimes very special fields. In the time of

computer-assisted literature and data research, it becomes increasingly doubtful whether this will be still an adequate task for IUPAC projects in the future. Review articles that could just as well be written by 2-3 individuals outside of IUPAC are not suitable projects. Published collections of data can make an acceptable project provided that the data are <u>critically evaluated</u>.

1) Workshops, seminars:

A special problem is how to spread the benefits of workshops, seminars, practical courses etc., especially in the developing countries, to non-attendees.

### 6. FUTURE WORK OF THE EVC

The next task of the Committee will be the preparation of the EvC Report to be submitted to the Bureau at the IUPAC General Assembly in Brisbane.

The Chairman and the Secretary will make a Draft Report which will contain (amongst other points) a short description of the EvC activities up to now and the essentials of items 4 and 5 of these minutes. It will be distributed to the EvC members on the EvC website probably by beginning of April 2001; the EvC members will be informed by e-mail about the availability on the website. All EvC members will be invited to make corrections, changes, additions etc. that they might find necessary or advantageous, best by e-mail to both, the Chairman and the Secretary as soon as possible after installation of the Draft Report on the EvC website.

On the basis of these comments, the Chairman and the Secretary will prepare the final version of the EvC Report for the Bureau Meeting at Brisbane; it will also be installed on the EvC website and replace there the Draft Report mentioned above.

#### 7. MISCELLANEOUS

The Secretary gave some information concerning the IUPAC General Assembly to be held in Brisbane concerning places of meetings, hotel accommodation, excursions, air transport etc

He also explained the new sets of subsistence levels tables, a. o.

It might be of interest that the Secretary will be absent from RTP till 19 March and the Chairman from Bochum from 7 to 12 March, from 8 to 12 April and from 19 May to 3 June 2001.

### 8. DATE AND PLACE OF THE NEXT EVC MEETING

The next EvC Meeting has been scheduled for 5 July 2001 (AM) during the IUPAC General Assembly to be held in Brisbane, Australia. The Chairman of the Project Committee will be invited.

There will probably also be a general discussion meeting on the new project-driven system. It is not yet cleared up how the EvC could officially participate in this meeting.