



## Minutes of the meeting of members of IUPAC Commission V.7 during the IUPAC General Assembly in Brisbane, June 30 – July 1, 2001

Attendance (9 persons): V. Kolotov (Chairman), P. Benes (Secretary), Chifang Chai, J.V. Kratz, Carol H. Collins, A.R. Ware, S.W. Yates, N.E. Holden, B.F. Myasoedov

1. The meeting was opened on June 30 at 9 a.m. by the Chairman of the Commission, V. Kolotov, who welcomed the members of the Commission present for its last regular meeting. He emphasized the importance of the meeting for finishing the tasks of the Commission before its activity would be formally terminated.
2. The Commission then accepted the following agenda of the meeting, prepared and distributed prior to the meeting:

### **Agenda**

- 1. Discussion and acceptance of agenda.**
- 2. Approval of the Minutes of the Commission meeting in Pontresina.**
- 3. Information on the meeting of Division V Committee with chairs and secretaries of the Commissions held on June 29, 2001.**
- 4. Discussion of the database of experts prepared by the Commission.**
- 5. Discussion of the current status and finishing of the Commission projects.**
- 6. Information by A.Ware on the proposal of the project “Uncertainty in Radiochemical Measurement”**
- 7. Discussion of the proposals for new projects submitted by B.F.Myasoedov and Ch.Chai, consideration of other new projects.**

- 8. Development of recommendations for ACD on the future activity in the field of Radiochemistry and Nuclear Techniques.**
- 9. Termination of existence of our Commission, formation of informal advisory group, its role and activities.**
- 10. Miscellaneous.**
- 11. Summary of the meeting and its closing.**

### **3. Approval of the Minutes of the Commission meeting in Pontresina**

Minutes of the meeting of members of Commission V.7 in Pontresina (Switzerland, September 3, 2000) were approved in the form presented at the Commission web site <http://www.geokhi.ru/~iupacV7> . C. Collins and S. Yates helped to amend the text.

### **4 . Information on the meeting of Division V Committee with chairs and secretaries of the Commissions held on June 29, 2001.**

V. Kolotov presented concise information on the Division V Committee meetings with Commissions chairs in December, 2000, and with Commissions chairs and secretaries on June 29, 2001 (Minutes of these meetings are on the IUPAC web site). In the lively discussion which evolved, C. Collins and A. Ware questioned the system of evaluation of new projects, structure and function of Interdivisional Working Parties. P. Benes asked whether the Parties would also initiate new projects. C. Collins argued in favor of further existence of nomenclature commissions and discussed the possibility of translation of the Orange Book to other languages.

### **5. Discussion of the database of experts prepared by the Commission.**

On the basis of recommendations from the ADC meeting in Manchester (May, 2000) and of the discussion at the Commission meeting in Pontresina, the Commission agreed (see previous Minutes) that a list of active nuclear- and radiochemists will be prepared which can serve as the source of experts for future IUPAC activities (advisory groups members, task groups leaders, projects participants, referees etc.). Establishment of a Division Database of Expertise was also urged in the letter by Prof. Powell in April. Before the General Assembly of IUPAC, lists of experts from 9 countries were prepared by the members of the Commission: Brazil, China, Czech

Republic, Hungary, Japan, Russia, Slovakia, USA and United Kingdom. The lists were pooled by V.Kolotov into one database which was put on CD and submitted to Division V. (It was the only database submitted in time.) The Commission discussed the present state of the database and its possible amendments. In some countries, the database is in preparation or it will probably be established (France – P.Vitorge, Germany – J.V.Kratz, the Netherlands – J.de Goeij). H.Gaggeler had expressed doubts that such a database can be set up in Switzerland. The need for involving other countries was discussed but no solution has yet been found (Canada, Denmark, Finland, Poland, Sweden...). Possible use of the database in the establishment of a nuclear- and radiochemistry advisory group was also discussed (Kolotov, Benes, Collins).

## **6. Discussion of the current status and finishing of the Commission projects.**

Only six old projects of the Commission were considered:

Project 18/93 – the project was completed in 1999 and has been at the Division since 2000. It was positively accepted by three referees, but one reviewer's comments, received later, were rather critical. The Division Secretary asked the project coordinator (J.V.Kratz) for response and the Commission for resolution. J.V.Kratz explained to the Commission, in detail, why he sees the critical comments as unacceptable. After a long discussion he agreed to formulate his principal position in concise written form and to carry out minor changes in the manuscript, which would then be sent by V.Kolotov to the Division Committee with recommendation of the Commission.

Project 19/93 – the coordinator (N.Holden) suggested cancellation of the project due to problems with the coauthor.

Project 21/93 – report is prepared, it will be sent to the Commission members soon for comments. Reviewers: F. de Corte, M.Zucchetti.

Project 22/95 – report is completed, passed the Division step. It received three positive reviews.

Project 24/95 – report completed, Division step is running. Received two positive reviews.

Project 26/95 – report was distributed at the meeting for comments of the Commission. Referees: N.Holden, G.Molnar.

#### **7. Information by A.Ware on the proposal of the project “Uncertainty in Radiochemical Measurement”**

A.Ware presented a written summary (1 page, entitled IUPAC Project on QA in Radiochemical Analysis) which he had done in the preparation of the project, discussed in two previous meetings of the Commission, and commented on it. This field is already partially covered by existing publications and there is running project of the IAEA on similar topic. It is not clear what should be specifically treated in the IUPAC project. From the ensuing discussion (C.Collins, V.Kolotov, N.Holden, Ch.Chai, P.Benes, J.Kratz) it was concluded that the project should be pursued even in a limited scope, if a significant window (not yet covered, e.g. bench radiochemistry, small number of atoms) can be found. A.Ware agreed to watch the development of the topic from his position as a member of the Interdivisional Working Party on Quality Assurance Schemes for Analytical Laboratories (IUPAC) and to prepare proposal for the project, if considered feasible.

#### **8. Discussion with Dr. D.Moore, Vice President of the Analytical Chemistry Division**

Dr. Moore presented new project submission form for projects that will not finish before 31 Dec 2001 and will not need money to finish, discussed competences of Division Committee (DC) and IDCNS in the new IUPAC system and answered several questions of the Commission members: Referees for the project proposals will be selected by DC, who decided to send the proposals to 3-7 referees (C.Collins). Electorate for DC is not yet firmly determined (A.Ware). Advisory group(s) will be established for DC, not for its individual members (V.Kolotov). Number of task group members is not limited, but should be kept to an operationable size (Ch.Chai). DC intends to use less than 25% of its budget for its meetings, the rest will be available for the Division projects. C.Collins commented that the geographical diversity of IUPAC organs is not adequate to IUPAC's scope and role. Dr. Moore agreed and

noted that ACD will include this aspect among criteria for selection of DC members. He also informed that Fabienne Meyers was working on the ADC database of experts, a similar database would be prepared for organic chemistry. A.Ware proposed that keywords in the database should be unified, S.Yates promised to send V.Kolotov the ACS codification list in the field of radiochemistry for use in the IUPAC database. V.Kolotov asked that the database not be placed on the web as it contains some personal data. The Commission promised to the compilers of the database to limit access to the data.

**9. Discussion of the proposals for new projects submitted by B.F.Myasoedov and Ch.Chai, consideration of other new projects.**

Two proposals for new projects were presented at the meeting: “Critical evaluation of speciation and migration of artificial radionuclides in the environment” (proposed by B.F.Myasoedov) and “Chemical speciation study of essential and toxic elements by nuclear analytical techniques” (Ch.Chai). The first proposal was submitted to ACD in December 2000, but was not circulated in the Commission. The only comment at the meeting was that by P.Benes, who saw the scope of the proposal rather broad. B.F.Myasoedov replied that emphasis will be placed on speciation. The project was then recommended by the Commission. P.Benes expressed his willingness to serve as the referee for the outcomes of the project.

The second proposal was dated 27 September 2000 but was first presented to the Commission in the spring of 2001. Several comments were made at the meeting (A.Ware, C.Collins, V.Kolotov, P.Benes): the author of the proposal did not speak with the proposed task group members, the project could include speciation of radionuclides, some radioanalytical methods are not suitable for direct speciation analysis. The second comment was opposed by Ch.Chai for suggesting too broad a scope to the project. The author specified a number of radioanalytical methods with direct application for speciation. It was agreed that he will focus on the comparison of nuclear analytical methods, will change the title of the project (“Critical evaluation of nuclear analytical techniques for chemical speciation study of essential and toxic elements”) and will contact task group members before submitting the proposal.

### **Discussion continued on the next day, July 1.**

P.Benes reported on his continuing effort to find potential contributors for the long discussed project(s) on the effect of humic substances on the speciation and migration of radionuclides in the environment. He contacted Prof. G. Choppin (USA), who was interested in the project but was not sure about the extent of his possible involvement in it. A further person contacted was P.Vitorge who, on the contrary, was sceptical about the project and did not want to participate. It was agreed that P.Benes will try further to find participants at the forthcoming conference MIGRATION 01 (Bregenz, September 2001). C.Collins recommended that the scope of the project should be extended to nonradioactive metals, which was opposed by J.Kratz (different concentrations) and P.Benes (too broad scope).

P.Benes informed that he contacted P.Vitorge concerning the fate of his project proposal (cf. Minutes from Berlin and Pontresina) and received answer that the proposal was withdrawn.

P.Benes also presented information on the present state of preparation of the new project dealing with nomenclature for production of radionuclides and radiopharmaceuticals. J.J. de Goeij, who was preparing the proposal, has suffered serious health problems and has been slowly convalescing. In his e-mail of June 6 to V.Kolotov and P.Benes he expressed hope to be able to resume his activity soon. He also commented on several items of the present meeting agenda, his comments were presented at the meeting.

J.V.Kratz reported on his contact with Prof. Michel, who was asked to prepare a new project on nuclear dating. Prof. Michel has considered the project, but was too busy to advance as yet. Also N.Holden promised to reconsider the proposal for the project on Critical evaluation of half-lives of naturally occurring long-lived radionuclides.

## **10. Development of recommendations for ACD on the future activity in the field of Radiochemistry and Nuclear Techniques**

V.Kolotov recalled the last amended version of the recommendations prepared by the Commission (see Minutes of the previous Commission meeting in Pontresins, 2000). C.Collins suggested publishing the recommendations in Chemistry International.

#### **11. Termination of existence of our Commission, formation of informal advisory group, its role and activities**

The Commission expressed unanimous satisfaction that its Chairman, V.Kolotov, was elected member of the future ACD Committee. Nevertheless, several members of the Commission (S.Yates, P.Benes and J.V.Kratz) argued that termination of its work for IUPAC would be detrimental for the role of nuclear- and radiochemistry in the future activities of IUPAC and that an informal group of radiochemists should be established to support V.Kolotov. Form of the group and its activities would evolve from the future practice of the new ACD Committee. A.Ware considered formation of such a group unnecessary, as V.Kolotov would get the support of members of the Commission at his request anyway. The individual present members then expressed their willingness to cooperate. V.Kolotov will ask absent members by e-mail.

#### **12. Closing of the meeting**

The Chairman of the Commission, V.Kolotov, thanked to all the Commission members for their long-term work for the Commission and for their activity at the present meeting. He expressed his wish that contacts between the Commission members continue after the Commission ceases to exist and that the position of nuclear- and radiochemistry in IUPAC will be aided by the effort of the respective scientific communities. The last meeting of the Commission V.7 was closed at 1.30 P.M., on 1 July 2001.

Vladimir Kolotov, Chairman

Petr Benes, Secretary