

Minutes of the Meetings of the IUPAC Commission on Photochemistry (III. 3) at the 40th IUPAC Assembly Berlin, Germany, 7-11 August 1999

I. In attendance: J.R. Bolton (Chairman), R.G. Weiss (Secretary), H. Bouas-Laurent (TM), J. Wirz (TM), H. Masuhara (AM), and R. Chun-Chen Liao from the Chemical Society of Taipei (Observer)

II. The minutes of the meeting of the Commission in Sitges (Barcelona, Spain) during the XVII IUPAC Symposium on Photochemistry, 19-24 July 1998, were adopted without modification.

III. The Glossary of Photochemical Terms. Based upon comments in e-mails from A.U. AcuZa, it is clear that the Glossary is not internally consistent nor is it with the Green Book on nomenclature that is the IUPAC standard. Ways of making the two documents compatible, of updating the current Glossary, and of having the most important terms in the "Glossary" accepted as IUPAC standards in a shortened version were discussed. The current documents is a technical report. Jan Verhoeven was contacted to revise the Glossary and has declined. Others will be contacted. A short discussion of the proper IUPAC format for documents submitted to IUPAC ensued. The format is available from the IUPAC Secretariat and from the IUPAC web site (www.iupac.org/projects/form_guide.html).

IV. Future of the Photochemistry Commission. The IUPAC Council has approved the plan forwarded by President Jortner and Secretary General Becker, to abolish all commissions, including Photochemistry, as of the end of 2001. The new IUPAC structure will have very few reconstituted Commissions. Proposed projects will be submitted to the Secretariat on forms available at the web site.

Any scientist can (and is encouraged to) submit a proposal; it is not necessary to be associated with IUPAC to be awarded funds to conduct an approved project.

The elimination of the Commission should have no deleterious effect on continued IUPAC sponsorship of our Photochemistry Symposia. During 2000 and 2001, a mixture of the old and new systems will be in place. The Commissions will continue to function as before while the Organic Division Committee will have a photochemistry representative, Dr. Silvia Braslavsky. After 2001, Dr. Braslavsky will have a very heavy responsibility to perform the duties of a quasi program manager as well as be the liaison to the photochemistry community. We wish her well and offer our cooperation.

The Commission discussed the possibility of coordinating the perceived needs of the photochemistry community for projects and perhaps, other activities through the Divisional Representative. In one scenario, the Presidents or their designates from EPA, IAPS, and JPS (as well as some other societies interested in aspects of the photosciences) could meet with Dr. Braslavsky at IUPAC Symposia, Gordon Conferences, etc. to map out consolidated strategies and priorities of action. If these interactions are successful, they may be broadened to include subjects relevant not only to IUPAC.

The role of National Representatives (NRs) in the new structure is unclear at this time.

V. Membership of the Commission during 2000-2001. R.G. Weiss was selected to be the new chairman due to J.R. Bolton's decision to step down. Jim will remain on the Commission as a TM. The post of Secretary has not been filled as of this time.

Other TMs: H. Masuhara, J. Wirz (our webmeister).

AMs: H. Bouas-Laurent, A.U. Acuza

NRs: C. Wertrup (Australia), F.H. Quina (Brazil), C.-H. Tung (China), A. Horvath (Hungary), G. Pandey (India), Y. Eichen (Israel), S.C. Shim (South Korea), S.J. Formosinho (Portugal), P. Hrdlovic (Slovakia), B.S. Martincigh (S. Africa).

Members who will no longer serve after 1999: H. Durr (AM), N. Serpone (AM), F.C. de Schryver (NR, Belgium), V.G. Toscano (NR, Brazil), I. Willner (NR, Israel). The IUPAC affiliated chemical organization of Belgium must nominate a replacement for Dr. de Schryver.

VI. Project Reports.

Photochromism. An excellent draft document has been produced (Bouas-Laurent, Durr). A version suitable for submission to IUPAC (and dissemination to the community for comment) should be ready before the end of 1999.

Highly Resolved Photochemistry in Space and Time. Dr. Masuhara presented a zero version draft that will serve as a basis for more complete documents. He hopes to have a working version ready by the time of the Dresden Symposium in 2000.

Ultraviolet Disinfection. Dr. Bolton presented a version that should be ready for submission to IUPAC before the end of 1999. This working group carried out all of its interactions by e-mail.

Article on Ultraviolet Principles and Applications. Dr. Bolton has prepared a wonderful primer which he is making available (free of charge) on request. It will appear in the newsletters of the three photochemistry societies.

Figures-of-Merit for the Technical Development and Application of Advanced Oxidation Technologies for both Electric- and Solar-Driven Systems (Bolton, Bircher, Tumas, Tolman). This document is already accepted as a technical report by IUPAC. It will be submitted for inclusion as a standard, after the approval of 15 experts has been received.

Other ideas for future projects. The Commission will contact experts in the fields below to determine the need and possibility of producing reports on the following topics:

1. Revision of actinometry report (now ca. 10 years old).

2. Photodynamic therapies (possibly with the biotechnology committee within the Organic Division)

3. Photolithography

4. Photopolymers and Photopolymerizations

5. Single Molecule Detection

6. Glossary revision

7. Supramolecular Photochemistry

8. Glossary of Terms in Photocatalysis (with Commission I. 6 on Colloid and Surface Chemistry)

VII. Meetings with other Commissions. The Photochemistry Commission met with Physical Organic Chemistry (III.2), Colloid and Surface Chemistry (I.6) and Chemical Kinetics (I.4). All three expressed interests in cooperative projects (see Photocatalysis project with I.6, above).

VIII. Next Commission Meeting will occur at the XVIII IUPAC Symposium on Photochemistry, Dresden, Germany, during 22-27 July 2000. We hope that as many Commission members as possible will attend. The Commission may cease to exist, but photochemistry within IUPAC should not.

Richard Weiss
Secretary, Commission III.3