

**Minutes of Meeting of the Division of Organic and Biomolecular Chemistry,
29 June -3 July 2001 Brisbane**

Members of the Division Committee present: T. Norin (President), T. T. Tidwell (Vice President), U. K. Pandit (Past President), A. D. McNaught, D. StC. Black (Secretary), V. T. Ivanov, G.-J. Koomen, L. K. Sydnes, N. Nudelman, W. H. Powell, S. Braslavsky, G. M. Blackburn.

Apologies: H. Sakurai. R. Breslow, C. Gennari, M. Makosza, C.-K. Sha. M. Hearn was unavailable for the meetings on 29 June.

Others: H. Favre (Commission III.1), E. Baciocchi (Commission III.2), and R. G. Weiss (Commission III.3) were also present for the meetings of the Division Committee with the Chairs and Secretaries of the Commissions. R. G. Kerr, F. E. McDonald and J. A. Cowan (USA), E. Juaristi (Mexico), and B. Sener (Turkey) attended Division, Commission and Sub-committee meetings as observers. Members of the Sub-committees and Commissions and others attended the Open Meeting of the Division.

Friday 29 June, 10:00 - 13:00

The President welcomed members and observers, and made some general remarks about the development of the IUPAC project system, and invited all to attend a series of meetings about projects held during the General Assembly. He explained that all Sub-committees would cease at the end of 2001, so any continuations or initiatives would need to be agreed formally. Any inter-divisional Sub-committees must lie within the framework of a Division.

1. *Consideration of the minutes.* The minutes of the previous meetings in Berlin and Copenhagen were approved.
2. *Presidential Report.* The President's report had been circulated previously and was endorsed.
3. *Report on PAC.* Professor Black reported that the proposed meeting of the Editorial Board had been cancelled, as changes are being made at this time. There was considerable discussion about the popularity and success of *PAC*. Professor James Bull, who as Special Projects Coordinator has been given the task of overseeing changes in *PAC*, joined the meeting, and reported on the publication of special projects, such as those on nanotechnology and green chemistry. Unfortunately, although there are many ideas for future topics, there has been difficulty in getting authoritative authors. The issue of adequate refereeing was also discussed. The Division Committee suggested that the planned project on Post-genomic Chemistry should be published as a special project.
4. *Report on Chemistry International.* There is no longer an Editorial Board so the Division has no representative. The value of the magazine was discussed and it was noted that more attractive presentation is proposed.

5. *Report of the Nominating Committee.* The Nominating Committee consisted of Professors Jean-Marie Lehn, Steven Ley, Michinori Oki, Ronald Breslow and Dr Alan McNaught. The aim was to cover the breadth of organic chemistry and also a wide geographical distribution. This is reflected in the list of proposed nominees (see item 6) which had been circulated by the President.

6. *Nomination of officers for 2002-2003 (discussion)*

New Members proposed for 2002-2003

Michael Blackburn (Sheffield)
Minoru Isobe (Nagoya)
Gerrit-Jan Koomen (Amsterdam)
Guo Qiang Lin (Shanghai)
Lisa McElwee White (Gainesville)
Charles Perrin (San Diego)
Atta-ur-Rahman (Karachi)

Present and continuing members for 2002-2003

Tom Tidwell (Toronto)
David Black (Sydney)
Torbjörn Norin (Stockholm)
Silvia Braslavsky (Mülheim)
Milton Hearn (Melbourne)
Vadim Ivanov (Moscow)
Norma Nudelman (Buenos Aires)

The membership list was formally proposed by the President, seconded by the Past President and endorsed unanimously by the Committee. The issue of nomenclature was also discussed, with particular reference to the crucial position of Dr McNaught, who will chair the new Division of Systematic Nomenclature and Structural Representations.

7. *Membership for 2002-2003 (discussion).*

Associate membership: It was proposed that Dr McNaught become an Associate Member of the Division. Dr Powell will continue for two further years. Members were asked to make suggestions at the meeting continuation under item 31.

National Representatives: It was agreed that National Adhering Organisations be made aware of the Committee membership and encouraged to nominate suitable national representatives who would add balance in terms of geography and chemical expertise.

8. *Interdivisional matters: nomenclature, biotechnology, interdivisional projects.* It was agreed that Drs McNaught and Powell, as Associate Members, would liaise between the Division and the new Nomenclature Division. It was re-affirmed that an Interdisciplinary Committee on Biotechnology should be established after the Biotechnology Commission ceases at the end of 2001. Professor Braslavsky reported on the strategic plan for the Interdisciplinary Committee on

Photochemistry, and also the initiation of projects. Upendra Pandit summarised the report of the Interdivisional Committee on Biomolecular Chemistry, which had been circulated.

Friday 29 June, 14:30 - 18:00

Division Committee with Chairs & Secretaries of Commissions and Sub-committees

9. *Remarks by the President*. The President welcomed Chairs and representatives of the various Commissions.

10. *Report on IDCNS*. Professor Henri Favre commented on the initiative relating to italicised symbols in nomenclature. Concern was expressed about the lack of coordination with the Division of Physical Chemistry in regard to publication of the Green Book.

11. *Report from Commission III.1 (Nomenclature of Organic Chemistry)*. Professor Favre tabled a report which detailed progress on six projects.

12. *Report from Commission III.2 (Physical Organic Chemistry)*. Professor Baciocchi presented the report, which outlined forthcoming IUPAC conferences, the current and future situation on projects, and the recommendation to form a Sub-committee on Structural and Mechanistic Organic Chemistry. There was some discussion about the suggested name, and possible implications of overlap with the sub-committee on Bioorganic Chemistry.

13. *Report from Commission III.3 (Photochemistry)*. Professor Weiss reported that the next conference would be held in Budapest. A variety of projects are continuing, with those on photoluminescence and supramolecular chemistry nearing completion. An Inter-society Committee on the Practice of Photosciences has been established, and goes beyond the traditional IUPAC boundaries.

14. *Report from Commission III.4 (Biotechnology)*. Professor Hearn briefly summarised his report, previously circulated.

15. *Report from the Sub-committee on Biomolecular Chemistry*. Professor Ivanov presented the report, and noted that there would be a future Natural Products conference in Florence, a Biodiversity conference in Antalya, and Bio-organic conferences in Toronto and Sheffield. A project on post-genomic chemistry is being prepared. Planned future membership changes were proposed.

16. *Report from the Sub-committee on Organic Synthesis*. Professor Black reported that the Symposium in Print on Green Chemistry has been completed. The project on acronyms for protecting groups has also been completed and will be submitted very soon. The initiative to put forward nominees for the Thieme/IUPAC Prize was warmly accepted by Thieme. Future conferences will be held in Christchurch (2002) and Nagoya (2004).

17. *Report from the Sub-committee on Scientific Aspects of Chemical Warfare Agents*. There was no formal report, but the project is continuing successfully and with important implications.

18. *Report from the ad hoc Committee on Chemical Identity and Nomenclature Systems.* The report was presented by Dr. McNaught, who highlighted the evolution of the committee structure leading to the proposed formation of a new Division of Systematic Nomenclature and Structure Representation. He also drew attention to the currently available online naming services.

19. *Report on Teaching in Chemistry.* Professor Tidwell reported that there were no known developments, but the committee meeting would be held soon. Professor Nudelman would represent the Division on this committee. Professor Sydnes said that the committee would be re-organised and the transition would be discussed at the Council meeting.

20. *General Discussion.* The Chairman outlined the structure of the future sessions of the Division meeting.

Saturday 30 June, 17:00 - 19:00 Open Meeting

21. *Introduction by the President.* The President welcomed those present (approximately thirty), briefly outlined the important aspects of organic chemistry to which IUPAC could contribute, and reviewed the current work of the Division and its recent committee discussions. He also clarified the official IUPAC committee structure, especially in relation to interdisciplinary areas.

22. *Nomination procedure and report from the Nomination Committee.* The President explained the nomination procedure and presented the list of nominations agreed by the nominating committee (see item 6 above).

23. *Election of Division Committee members.* The new officers nominated for 2002-2003 as noted in item 6 were endorsed by the meeting.

24. *Election of Associate Members.* There are five positions for Associate Members. Dr Powell's current membership is valid for a further two years, and furthermore, the Division Committee proposed that Dr McNaught should also become an Associate Member, so that aspects of organic nomenclature and structure representation might be facilitated. This was agreed. Therefore three Associate Members remain to be elected, and this election will be carried out by an email ballot following the nomination of candidates.

25. *Election of Officers.* The proposals from the nominating committee were endorsed as follows:

Division Past President: Professor T. Norin
Division President: Professor T. T. Tidwell
Division Vice-President: Professor D. StC. Black
Division Secretary: Professor G. M. Blackburn

Monday 2 July, 14:00 - 16:30

Division Committee with Chairs & Secretaries of Commissions

26. *Critical Assessments of Reports of Commissions.* A variety of new projects under consideration by the Commissions and Sub-committees were presented and discussed. In view of the fact that the terms of all Commissions and Sub-committees ceases at the end of the year, each of these was considered with respect to renewal. The previous meeting in Copenhagen had re-affirmed the general desire for existing Sub-committees to continue, and for Commissions to become Sub-committees. One exception is the Nomenclature Commission, which will become a separate Division, but retain links with Division III through Associate Members Drs McNaught and Powell. An expression of thanks for the very active, expert and productive contribution of Professor Favre as Commission chair was warmly endorsed. There were discussions about the development of an Inter-divisional Sub-committee on Biotechnology, with the expectation that it would emerge as a Division III sub-committee. The previous Physical Organic Commission would emerge as a Sub-committee on Structural and Mechanistic Chemistry. Membership of the Biomolecular Sub-committee is essentially complete and those for other sub-committees are to be completed by August.

27. *Budget Allocations.* The Divisional budget for 2002-2003 was increased by 10%, and totalled \$52,900. There is a general requirement that 25% should be allocated to organisation matters and 75% to project funding. The budget allocations were therefore approved as follows:

Division:	\$2000
President:	\$1000
Biomolecular Chemistry:	\$2,000
Synthesis:	\$2,000
Biotechnology:	\$2,000
Structure and Mechanism:	\$2,000
Photochemistry:	\$2,000
Project Fund:	\$39,900
 Total:	 \$52,900

Funding for projects will be approved electronically by committee members.

28. *Consideration of Symposia.* Future Symposia involving the Division would be held during the 39th Congress in Ottawa in 2003. Symposia sponsored by the Division for 2000-2002 are given below.

10th Int. Conf. on Ge, Sn and Pb	Talence, France	8-12 July 2001
OMCOS-11	Taipei, Taiwan	22-26 July 2001
15th Int. Conf. on Phosphorus Chem	Sendai, Japan	29 July - 3 Aug 2001
ICOB-3	Antalya, Turkey	3-8 Nov 2001
3rd Florida Heterocyclic Conf	Gainesville, USA	6-8 March 2002
XX Int. Conf. on Organometallic Chem	Corfu, Greece	7-12 July 2002
ICOS-14	Christchurch, NZ	14-19 July 2002
XIX Symposium on Photochemistry	Budapest, Hungary	14-19 July 2002
ICPOC-16	San Diego, USA	4-9 August 2002
6th Int. Symp. on Bio-organic Chem	Toronto, Canada	11-14 August 2002

Tuesday 3 July, 14:00 - 18:00

Division Committee with Chairs & Secretaries of Commissions

29. *Discussion of projects and future activities of the Division* . The Division President outlined discussions with the IUPAC Secretary-General and President-Elect about the nature and types of projects. The Committee was attracted to the suggestion of having fixed deadlines (eg 30 March and 31 September) for project applications, but accepted that this would be difficult to enforce, as flexibility would be essential. It was agreed that all submitted project applications should be sent to the Executive and Chairs of sub-committees for comment.

30. *Appointments of representatives to IUPAC bodies*. The following representative appointments were made:

PAC: Professor D StC Black

CTC and its corresponding new format : Professor N Nudelman

IDCNS: No representative was nominated at this time in view of the impending activities to the structure of the new nomenclature Division.

31. *Approval of new members of Committees and Sub-committees* . A list of new members of the Biomolecular Sub-committee had been circulated earlier, and the membership was approved (with the abstention of Professor Weiss). Membership of other sub-committees remain to be finalised, and must be completed by mid-August, for publication in the Blue Book. Various sub-committees had tabled mission statements, which are attached to the minutes. There was discussion about the content of these statements, but it was agreed that these were descriptive and informative and that overlap was inevitable.

32. *Final remarks*. Professor Norin thanked Professor Pandit for his considerable mentoring, and other committee members for their contributions. The meeting unanimously passed a vote of thanks and appreciation to Professor Norin for his distinguished tenure as President. The President-Elect suggested that a meeting of the Committee be held in 2002, in association with a IUPAC conference. It was agreed that the most appropriate arrangement would be to hold the meeting within the context of the 6th International Conference on Bio-organic Chemistry to be held in Toronto from 11-14 August 2002.

David Black, Secretary

APPENDIX

Sub-committee Mission Statements

1. Sub-Committee on Biomolecular Chemistry

The Sub-Committee for Biomolecular Chemistry of Division-III will seek to deliver the long-range goals of IUPAC, particularly within the vital interfacial area of molecular science that lies between organic chemistry and biology. It will support the application of the powerful methods of chemistry to current and emerging problems in biology to achieve understanding and, where appropriate, modification of the systems of living organisms at a molecular level.

To that end, the Sub-Committee will provide a focus for the dissemination of current knowledge and the development of future directions in the following fields.

- Structure, function, and applications of biomolecules and their analogues
- Molecular mechanisms of biological processes and their modulation
- Molecular engineering *via* chemo-enzymatic processes
- Analysis, manipulation, and application of biomolecular information systems.

V.Ivanov,	Chairman
G.M.Blackburn	Secretary
Brisbane	1.07.01

2. Sub-Committee on Organic Synthesis

The mission of the Sub-committee on Organic Synthesis is to provide a focus for the dissemination of current knowledge and the development of future directions in all aspects of organic synthesis, including:

1. The development of new molecular transformations
2. The development of new reagents
3. The development of environmentally benign synthetic processes
4. The synthesis of new types of organic structures
5. The synthesis of target molecules for specific applications
6. The total synthesis of natural products
7. Combinatorial and high throughput techniques

David Black
Chair
2.7.01

3. Sub-Committee on Structural and Mechanistic Organic Chemistry

Aims and Objectives

Implementation of the overall goals and objectives of IUPAC in the area of Structural and Mechanistic Organic Chemistry can be obtained by summing up the competences of a broad spectrum of experts in the field, also taking in account that such field can heavily impinge into other research areas.

In order to accomplish such a task, a Sub-Committee on Structural and Mechanistic Organic Chemistry should be established which should handle problems concerning the many aspects of the structural and mechanistic organic chemistry. Some specific examples can be the following

- Environmentally friendly chemical processes and the degradation pathways of organic contaminants.
- Reactions in solution, gas phase and solid state.
- Chemistry and structure of materials.
- Solvents for organic reactions.
- Acidity and basicity of organic compounds.
- Supramolecular chemistry.

In this respect, the function of the subcommittee should particularly be the one of evaluating projects concerning the areas related to structural and mechanistic organic chemistry, to suggest experts who would act as members and leaders for the approved projects, to monitor the progress of approved projects and to provide reviewers for the evaluation of finalized reports. Moreover, the subcommittee should help to identify those topics which need normalization, standardization, and explanations of procedures.

Enrico Baciocchi,
Secretary, Commission III.2
July 3, 2001

4. Sub-Committee on Photochemistry

Aims and Objectives

Implementation of the overall goals and objectives of IUPAC in the multidisciplinary area of photochemistry and its links to the photosciences (e.g., material sciences, photobiology, photolithography, photography) can be accomplished only with the inputs of a broad spectrum

of experts in the field, including those with ancillary interests in areas covered by all Divisions within IUPAC.

It is unreasonable to assume that one scientist, alone, is capable of providing at the Divisional level the needed expertise and effort necessary to accomplish the many tasks involved. To assure that the tasks be performed effectively and in a timely fashion, a Sub-Committee on Photochemistry should be established. In the future, in addition to the historic areas of chemistry (such as photoreaction mechanisms and photochemically-based synthesis), the Sub-Committee will be required to handle problems related to

- >> renewable energy sources
- >> green chemistry
- >> atmospheric photochemistry
- >> new analytical methods in the biosciences including trace analyses of proteins, nucleic acids, and small bioregulators, both *in vivo* and *in vitro*.
- >> industrial photochemistry
- >> advanced spectroscopic methods in ultra-fast time and ultra-small space resolution
- >> methods for assessing material fatigue and temporal changes

Therefore, the functions of the Sub-Committee should be:

1. To help identify topics needing normalization, standardization, and explanations of procedures.
2. To identify and contact experts who would act as task force members and leaders for needed projects.
3. To suggest additional referees (if necessary) for submitted projects.
4. To recommend approval, modifications and/or disapproval of submitted projects, taking into consideration the previous documents produced by IUPAC and other international organizations in the field. In the event that modifications are recommended, the sub-committee will provide both written and direct consultations with the task force leader.
5. To monitor the progress of approved projects and to provide reviewers for the evaluation of finalized reports.
6. To make recommendations to the Division regarding the fate of the final submitted versions of reports.

In order to guarantee the acceptance of the possible final recommendations within the photosciences community, the Sub-Committee will work in close contact with the three major Photochemical Societies of the world, i.e., the Inter-American Photochemical Society, IAPS, The European Photochemical Association, EPA, and the Japanese Photochemical Association, JPA (in the future JPA will be integrated into the new Asian Photochemical Association, APA).

Richard Weiss, Chairman, Commission III.3

Silvia E. Braslavsky, member Comm III.3, Tit. Member Division III

July 3, 2001