[*]IUPAC General Assembly of the Division of Physical and Biophysical Chemistry (Division I)

Ottawa, August 10 and 11 2003

Present: J. Ralston (JR, president), D. Buckingham (DB, vice president), M. J. Rossi * (MJR, secretary), G. Atkinson (GA), C. Brett (CB), R. Fernandez-Prini (RFP), J. Frey (JF), L. Koopal (LK), R. Lynden-Bell (RLB), J. Maier (JM), R. Weir (RW), G. Wilson (GW, past president).

Guests: R. A. Cox, G. della Gatta, P. E. Laibinis, Z. Q. Tian.

The GA was called to order by JR at 9 a.m., RW and RLB moved to approve the proposed agenda attached at the end of this document.

Election report by JR: GW and DB were thanked for their efforts in coordinating the Divison election process (biennium 2002-2003), especially their efforts to present a credible roster of candidates. In order to deflect the criticism of some arbitrariness in assembling the nominating committee voiced in the past JR presented the following considerations for defining a strategy for nominations in the upcoming Division elections (see details below): (1) Strengthen the representation of biophysical chemistry, (2) geographical distribution of candidates for TM. Concerning this latter point it is not desirable to fix quotas. At present the composition of the Division Committee (DC) is: 10 members from Western Europe, 4 from North America, 2 from South America, 3 from Asia, 1 from Middle East. Of special concern is the lack of representation from Japan and China. It is admittedly impossible to represent all areas of Physical and Biophysical Chemistry in the DC. However, it is incumbent on the DC to control the outcome of the elections to a certain degree in order to ascertain a fair representation across the fields of Physical and Biophysical Chemistry as well as geographical distribution. GW expressed his disappointment regarding the involvement of the DC in the nomination process. Currently there are 29 nominees for 4 TM positions, 16 nominees for NAO's for this year's election. Preselection of these led to 4 TM candidates, out of which one nomination came from NAO's. The total electorate for Div I amounts to 40 which is about half compared to the 2002/2003 elections. September 2003 will be election month (details to be discussed below).

Specifically, the candidates for the 4 open TM positions are: S. Califano, Z. Q. Tian, W. Baumeister (Biophys. Chem.), T. Yanagida (Biophys. Chem.). The procedure will fill TM, then AM slots, followed by NAO representatives. The pool of AM's have to be regarded as potential candidates for DC officers whereas the Advisory Group to the DC does not currently have a voice in the DC elections. GW and DB suggest to put together a protocol of the Div I election process such that future Div I officers may orient themselves appropriately.

JR subsequently gave an overview of the Biennium Division Report that may be found on the IUPAC website, www.iupac.org and commented upon several points. The **workload** on the Division president is substantial as he is the interface to the community of physical chemists at large. JR estimates that 20% of his time is devoted to IUPAC activities. He points out that in some instances division presidents enjoy institutional support to the tune of 25 to 50%, which is presently not the case for Division I. A persistent problem within Division I is the **lack of activities in Biophysical Chemistry (BioP)**. JR maintains that Division I needs to be active in BioP in order to appeal to a younger generation of physical chemists. Except for the support and sponsorship of two biophysically-oriented conferences one of which took place in Southampton and was attended by Jeremy Frey, and organized by George Attard, whilst the second will be held in Adelaide in May 2004, sponsored by IUPAC (International Conference and Workshop on Physical Chemistry of BioInterfaces, ICWPCBI). For the latter, there will be a special section on potential new IUPAC projects no other major activities in BioP are currently planned owing to lack of input. JR estimates that Div I

[*] Draft of December 12 2003 sent out by M. J. Rossi, Secretary of Div I.

probably needs between 2 to 4 years to strengthen BioP within Division I, however, everything that was decided at the Morges 2002 off-year meeting in this regard has been done according to plan, under the watchful eye of the Secretariat. RLB suggested to poll advisory members active in BioP, CB proposed to get in touch with former Commission members in order to harvest ideas. GA suggested to initiate and/or sponsor a conference on the nomenclature of enzymes in regards to bioterrorism. Finally, the perennial discussion with regards to **Data Bases** arose. The IUPAC Secretariat at the Research Triangle Park will provide basic operational support, however, the maintenance is the task of the Division, identifying the need for appropriate funding at the outset of the project. with the help of centrally allocated money. It is still not clear who has the responsibility of mirror sites which are important in the process of setting up the data base. JR pointed out that this policy decision was taken at the Paris Bureau meeting in September 2002. Concerning the new data base on ionic liquids (2003-020-2-100) it was felt that these issues must be considered at the outset of the project.

On the occasion of a visit of the DC by E. D. Becker (executive director), J. Bull (publications committee) and F. Meyers (IUPAC Secretariat) several topics were raised and discussed with the DC. Concerning the source of new IUPAC sponsored projects E. D. Becker encourages everybody on the DC to be on the lookout for new ideas. In terms of IUPAC sponsorship of Conferences only those dealing with new directions and trends will be supported whereas well-established Conferences do not receive financial support from IUPAC. The IUPAC Secretariat is always on the lookout for Press Releases, with Laura Abernathy being the responsible person at the IUPAC Secretariat. She needs information from the DC. The significance of a news item needs to be assessed or reinterpreted by a professional whereas the content needs to be formulated in simple terms accessible to the general public: no "scientific" abstracts, please! J. Bull stated that "Pure and Applied Chemistry" (PAC) needs to be regarded as a peer-reviewed scientific journal whose editorial board is being restored to full functionality. A document has been sent out to all division presidents. Short and concise presentations in PAC will be given preference. RW reminded J. Bull that in connection with IUPAC sponsored conferences, plenary as well as keynote lectures should be the subject of full articles in PAC. J. Bull mentioned that contributed papers will also be accepted. LK proposes that special issues of PAC reporting on IUPAC-sponsored Conferences should be available to the general public free of charge because of the limited distribution of PAC in public libraries. However, PAC represents 3-400k$ of annual income to the organization, such that such gratuity cannot be an issue at this time. E. D. Becker states that reprints of PAC dealing with technical recommendations are already free of charge. In addition, the authors of PAC articles obtain one free issue each. In relation to soliciting support from ICSU, (International Council of Scientific Unions) IUPAC is the interface. The yearly deadline for submission of proposals is April 1, which needs to be strictly observed, however IUPAC needs to review any proposal beforehand. Interunion projects are preferred such as CODATA, IGU, Biology Union. Commenting on reserve funding for IUPAC-sponsored projects, E. D. Becker stated that it is preferable to submit a proposal at once because of the present availability of funding. JR touched on the subject of the financial consequences of data base maintenance and updating. E. D. Becker states that the financial burden of the maintenance is the duty of the respective divisions which may therefore mortgage their own future to a certain extent. However, divisions that are active in this respect may obtain a budget increase to meet increased budget demands. Another solution may be that a division seek outside support for a project. When challenged in regard to the limited electorate for the division elections E. D. Becker stated that a large electorate may not necessarily be a better electorate. This is an issue which GW and DB may consider when preparing their protocol document.

Review of Existing Projects. Total present proposal volume is 120k$, compared with 55k$ Div I budget for the current biennium which means that the difference is coming from sources other than the Div I budget, mostly from the IUPAC Projects Committee budget. What follows is an update on the progress of Div I sponsored projects performed by project monitors who were appointed by the DC.

AFM (Atomic Force Microscopy, (1999-016-3-100) (JR). A second draft of a manuscript of 20 pages is being circulated and should be ready by year's end. It is a technical report containing a brief history of AFM and a protocol for measuring colloidal forces. A meeting will be held in Adelaide in December and a short report has been submitted to Chemistry International. Reports for the other projects will be similarly submitted to CI by the Project Monitors.

Evaluation of kinetic Data for Atmospheric Chemistry (1999-037-2-100) (MJR). MJR and R. A. Cox report on the recent progress. The current effort of putting the existing data base for the kinetics of

atmospheric reactions on the Web is running parallel to the on-going task of updating the kinetic data for atmospheric chemistry. December 2003 is the target date for putting that part of the data sheets on the Web that were updated during the current year and that were discussed in June 2003 in Montreux (Switzerland). This will bring the data sheets that are available on the Web to approximately two thirds of all existing data sheets. Note that the summary data sheets are already on the Web and address thermal, photochemical and heterogeneous reactions of atmospheric interest. The Web (master) site (http://www.iupac-kinetic.ch.cam.ac.uk) currently enjoys approximately 2500 visits each week and has about 300 users that may be reached via e-mail in order to bring them up to date when new additions and/or corrections are being implemented. As far as the completion of the Web project is concerned it is estimated that it will take another biennium, resulting in a probable completion date by the end of 2005. The implementation work is occurring at the main site in Cambridge whereas the mirror Web site is housed at the Web server of the IUPAC Secretariat in Research Triangle Park (North Carolina, USA) at the URL address http://www.ibiblio.org/iupac-ki/. After completion of the project the IUPAC Web server will most probably become the master site. In addition, the updating of the data sheets already posted on the Web site as well as those not yet posted, is an on-going effort. The Subcommittee has decided to publish a "snapshot" in Atmospheric Chemistry and Physics in the near future in order to have an accessible hard copy for the community of atmospheric scientists.

Standardization Methods for the Characterization of Inorganic Membranes (2000-002-2-100) (JM). This project presents a wide-ranging collection of subjects dealing with solid-state properties of membranes. Some of the details may be viewed on the Web page of the project (chaired by Ed Yi Hua). A workshop was held in Montpellier on June 25 2003 which, however, did nothing to focus or narrow down the scope of the project. A few of the serious shortcomings of the project raised by JM is that despite its importance the field of inorganic membranes is scientifically still wide-open leading to lack of consensus. Key solid-state properties of membranes have not been dealt with properly. It therefore seems premature to propose standardization procedures and to survey the essential features of inorganic membranes at this time. JM is pessimistic that a planned second workshop may improve things unless a significant change in scientific perspective occurs.

Selected free Radicals and critical Intermediates: Thermodynamic Properties from Theory and Experiment (2000-013-1-100) (RW). This project chaired by T. Berces is right on target with data sheets for 11 free radicals submitted to J. Phys. Chem. Ref. Data. The project dealing with 36 free radicals overall is planned to be terminated on time by the end of the current biennium by the submission of two additional publications. RW concludes that the project coordinator has done everything he said he would do.

Thermodynamics of Ionic Liquids (2003-020-2-100, supersedes 2002-005-1-100) (RW). There are no updated news on this project. This project hopefully will become a major effort in setting up and managing a physical-chemistry data base that will be accessible on the Web in view of the anticipated importance of the field.

Chemical Thermodynamics in Industry (2002-063-1-100) (RW). Progress is on track. A book summarizing the effort is planned for edition in spring 2004 which may be a topic for a news item in Chemistry International (CI).

Viscosity of Molten Iron and Aluminum (2003-005-1-100) (RW). The corresponding workshop is expected to settle an important debate on the numerical values of viscosities under the leadership of Bill Wakeham. Seems to be a critical evaluation rather than a consensus report. Potential topic for CI.

Thermochemistry of Chemical Reactions: Nomenclature, Symbols and experimental Methods for Bond Energies (120/15/95) (RW). Project report has been submitted and project is finished.

Experimental Thermodynamics, Vol. II (120/16/97) (RW). New edition will be published shortly, however it will proceed without a planned contribution by a Dutch author who shall remain nameless. A book contract with Elsevier is ready to be signed.

International Thermodynamic Tables, Vol. 14 (121/13/89) (RW). With funding of 8k$ manuscript should be submitted by the end of 2004. There is a large consensus within the DC to support this request to enable completion of the project.

Spectroscopy under Extreme Conditions (150/24/95) (RW). This project had been submitted four years ago by D. Breet but has never been funded. It will be taken off the books.

Critical Compilations of Vapor Liquid Critical Properties (2000-026-1-100) (RW). Project is finished and resulted in 4 publications.

Standard Reduction Potentials of Free Radicals (2001-015-1-100) (RW). 250 standard potentials were investigated so far. It is planned to develop an internal website to facilitate communication. A lingering scientific question regarding the definition of the standard states of free radicals remains to be treated. Good progress, project seems on track. A short written summary for CI is very strongly recommended.

Electrochemical Impedance Spectroscopy, Terminology, Nomenclature and Data Exchange Formats (2001-028-1-100) (CB). Project approved on 9-2001, funds committed in 2002. Planned meeting took place on 4-2003. Draft should be available by end of 2003. Project is said to be roughly six months behind schedule. According to GW electrochemical model building is of prime importance to the field. Short announcement to CI would be desirable.

Recommendations regarding Biological Substances/Titration Calorimetry (2001-30-1-100) (GW). This project deals with isothermal titration calorimetry. One of the main problems in dealing with biological materials is the unknown purity and contamination of the biological substrates at hand, and in this regard the present project is no exception. Completion of this project is anticipated by the end of 2003. The final report should be flagged in CI as the results should be of some interest to instrument manufacturers.

Measurement and Interpretation of Electrokinetic Phenomena (2001-035-1-100) (LK). Project started in 4-1999 with second draft of final report submitted at the GA in Brisbane 2001. A semi-final draft was submitted on July 4 2003 which stressed the simultaneous measurement of the surface conductivity and the "Zeta" potential. The anticipated completion date will be the beginning of 2004, accompanied by a scientific publication in Langmuir or the Journal of Colloid and Interface Science, as well as in PAC.

NMR Chemical Shifts (2003-006-1-100) (DB). Project was submitted in February 2003 and proposed a unified scale of chemical shifts for different nuclei. First meeting was held in April 2003. No report as of this date, but DB stressed the participation of good people, project seems to make steady progress. Possible extension to solid NMR/magic angle spinning NMR technique.

Single Molecule Spectroscopy Project (2000-012-1-300) (DB). Submitted in May 2000 as an interdivisional project with Division III (Organic photochemistry) who did not meet at this GA. Project chairman De Schryver shows disappointing performance, no financial activity, no progress report available. This project needs to be followed up closely.

Glossary of Terms used in Photocatalysis and Radiation Catalysis (2001-036-1-300) and Glossary of Terms used in Photochemistry (2002-024-1-300, supersedes 2001-036-1-300) (RLB). Project is partially published in the International Journal of Photochemistry, however, report to IUPAC is still outstanding. This project coordinated by J. Bolton and V~~N~~. Parmon has a complicated history outlined by LK who reported events since the Brisbane GA in 2001. N. Serpone sent a competitive paper to Int. J. Photonenergy that prompted LK to create a small committee of specialists (Palmisano, Braslavsky, Litter, Braun, Cassano, Parmon) overseeing the coordination of both documents. It is hoped to submit a final report to IUPAC within two years (end 2005). RLB asked LK to take over as coordinator of both projects, since he is more closely involved.

A general question regarding the last few projects that are interdivisional with Div III is the identity of the contact person/project monitor coming from within Div III serving as interface with Div I. It is not clear who that person currently is and the issue must be resolved.

Green Book Project (JF) and beyond. This project does not seem to have progressed since the 2001 GA. The project is completed except for some editorial matters and the index. The cover of the book is a matter of some discussion. According to M. Quack the project should soon be completed. It is suggested that M. Quack should get in touch with F. Meyers. JR expressed his anxiety regarding probing questions from the IUPAC Council in relation to the status of this high-visibility project. JF claims that the LaTeX files will be donated by M. Quack to IUPAC such that there will be no issue as to the ownership. The anticipated producer of the Green Book, the Royal Society of Chemistry (RSC) underwent some important changes in their management which explains a certain lack of eagerness on their part to produce the book. The third edition of the green book will be put on the Web (RSC and IUPAC) after the appearance of the printed version, that is 50% after six months and 100% after one year of the appearance of the printed version. In addition, an interactive web-version specifically catering to undergraduates may be a potential project of Commission 1.1 that should be supported by 1500$. After the appearance of the third version a fourth version should be planned. A search for a coordinator should be initiated during JF's tenure as the chairman of Commission 1.1 (end of 2005).

No news regarding projects monitored by GA (Projects 2002-008-1-300, 2002-024-1-300). Hope to obtain updates via e-mail in the near future.

A discussion regarding the involvement of the IUPAC Secretariat regarding "maintenance" in the long term was initiated by GW. The IUPAC Secretariat is of the opinion that this is incumbent on the Divisions. File maintenance should be a continuing process according to RLB with hard copies produced form time to time as snapshots (MJR) as will be done for the atmospheric chemistry project. It is planned to initiate a discussion between JF and RW with F. Meyers on this topic of Green Book maintenance.

Future Projects.

Thermodynamic Properties of Selected Free Radicals (2003-024-1-100). A continuation proposal has been submitted by T. Berces, extending the original set of 36 free radicals by 60 in the time frame 2004-2005. T. Berces will pass on the leadership of the project to B. Ruscic but will remain in the task group. After presentation by MJR the DC urges support and wants to get the refereeing process under way at once. Regarding financial support 5k$ will come from Div I, 17k$ from Projects Committee. JR will speed up refereeing process with RW and H. Hippler chosen as referees. Possible links to ICSU are discussed. Tian is inquiring if chinese scientists may get involved in this project at this stage. JR suggested to get in touch with F. Meyers about this.

Study of Low Volatility Compounds, Glass to Crystal transitions and **Supplemented Phase Diagrams** (by kinetics, likely proposer is H. A. Corti, Buenos Aires) suggested by RFP as potential future projects. RFP specifically suggests study of glass transition temperatures and time scales: 12 k$ to be spent on two workshops with start date in March 2004 over two years. This could be carried out as an interdivisional project in conjunction with Div III with Div I as prime.

Data Base on Aqueous Systems such as standard molar properties close to critical point (350°C): this may be useful in Geosciences applications according to JM and reflects the recent change in measurement technology.

Electrochemistry in immiscible electrolyte systems. Proposal went to ICSU and got shelved there for 9 months according to CB. In addition, a proposal dealing with **Environmental Electrochemistry** may be in preparation.

Crystallization Issues in relation to Proteomics was suggested by GW. Biocompatibility, protein adsorption, interaction of cellular with interfacial/surface engineering aspects may be of interest. JR points out that the ICWPCBI dealing with protein/surface interaction will be held in Adelaide in May 2004. This event may trigger some activity in biophysics within Div I and may hopefully be accompanied by the submission of relevant proposals.

LK suggests several future projects aimed at the interest of the pharmaceutical industry in the field of **drug delivery** (mechanistic aspects, fundamental understanding), **pharmacokinetics, nanotechnology in relation to soft interfaces**. LK points out that nobody on DC has relevant expertise in these areas and a need for recruiting colleagues in these fields is expressed. RW suggested he attend the Adelaide meeting in 2004 with Baumeister or Yanagida. Financial support for this activity should be forthcoming from Div I.

According to JR Div I needs to keep abreast of the following projects of Div V (Analytical Chemistry): 2001-038-2-500; 2002-002-2-500 and 2002-003-2-500. Matsumoto (Div V) will develop a project application on preconcentration/pre-treatment methods for proteomics/GMO analysis.

Election Issues (GW). The following slate will have to be approved by the bureau before being official:

TM(10): Atkinson (US), Brett (Portugal), Frey (UK), Lynden-Bell (UK), Maier (Germany), Prini (Argentina), Rossi (Switzerland), Weir (Canada).

Candidates for two slots: Califano (Italy) or Tian (China), Baumeister (Germany) or Yanagida (Japan).

AM(6): Cabral de Menezes* (Brazil), McQuillan* (NZ), Platikanov* (Bulgaria), Royer (France), Tasumi (Japan) drops out upon intervention of Div I Committee, Baumeister or Yanagida, Califano or Tian.

NR(6): Aldoshin* (Russia), Breet (S Africa), Oivanen* (Finland), Park* (Korea), Smith* (Australia), Vesnaver (Slowenia).

People who do not win TM election are put on as AM's. JM asks the DC for representation of solid state chemistry and physical properties of condensed phase (ion conductors, electron conductors,

superconductors) as this field should remain in Div I and should not be relegated to materials science or experimental physics.
There are three external members of the DC nominating committee (NC) who serve once. The chairman of the NC is the VP of Div I. The NAOs should not hold up the process of selection of nominees and will be asked to disclose the slate of nominees by 1-12-2004 in the interest of a timely election process in 2005. The elections should be held in September of 2003 and 2005.
CB is the Div I representative to the Green Chemistry Subcommittee of Div III and to the CCE (Committee on Chemical Education,P. Atkins) whose focus is twofold: reputation of chemistry, chemistry in developing countries.
Off-year Meeting in 2004: 10 TM's are funded to attend, invitations to AM's and NR's. Italy (Califano) has been chosen as a front runner, Switzerland (MJR) is in fall-back position. It will be held on April 3/4 2004 in a location to be disclosed later.
Meeting with P.Atkins, chairman of the Committee on Chemical Education: Education and Chemical Understanding whose task it is to put an educational dimension on IUPAC activities. CB suggested to further education in green chemistry within IUPAC whereas JR and JM stressed the importance of solid state chemistry in practical applications. MJR proposed an IUPAC-sponsored initiative in relation to chemical transformation and global change. GW proposed educational material in the field of nanoparticles and the problem of GM organisms in relation to the security of the food source.

JR suggested keeping the advisory membership posted on our deliberations during the GA. All get CI, are registered but are not listed in the blue IUPAC handbook. The first replacements may have to be done by the end of 2005 as they have been asked on 11-2002 to join. It is incumbent on the DC members to monitor projects as well as initiate. JR solicited short reports for CI in terms of contributions of 600 words or so and suggests that ionic liquids would be an appropriate topic next, following on from the AFM report. GW is unofficially continuing as a project monitor for the project on the redox potential of free radicals whereas LK is proposed as advisory group member. LK strongly supports to set up a roadmap to encourage and handle interdivisional projects as he claims that they fall in between the cracks at the moment for lack of an appropriate mechanism to properly handle and follow through such proposals.

At the end the DC expressed their appreciation to JR, GW, DB and LK for the leadership, excellent work accomplished and diligence in furthering the cause of physical and biophysical chemistry. These colleagues have immensely helped the DC and the members at large of Div I to keep afloat during the dramatic changes that IUPAC underwent in the present first biennium after the abolition of the old Commission structure. Congratulations for a job well done and our best wishes for a successful continuation of your professional activities both within and outside IUPAC. The DC proposes to retain the expertise of these four members by inviting them to join the Div I advisory group. In addition, The Australian NAO has chosen JR to be the NR for Division 1.

DIVISION OF PHYSICAL AND BIOPHYSICAL CHEMISTRY

Provisional Division Committee Agenda

42nd IUPAC General Assembly

9-17 August, Ottawa, Canada

http://www.iupac.org/divisions/I/index.html

Saturday 9 August

9.00	Introduction	Ralston
9.15	Approval of Agenda and Minutes of Off-Year Meeting Morges, Switzerland, April 19-20, 2002	
9.30	Finances (Ralston) and Elections (Wilson)	
10.00	Biennium Division Report	Ralston
10.15	Progress Reports on Current Projects (15 minutes each, with half page written report from the Project Monitors)	

Project Number	Project Title	Project Monitor
1999-016-3-100	Recommendation for the use of AFM in the direct measurements of colloidal forces	John Ralston
1999-037-2-100	Evaluation kinetic data for atmospheric chemistry	Michel Rossi
2000-002-2-100	Standardization of methods for the characterization of inorganic membranes*	Joachim Maier
2000-013-1-100	Selected free radicals and critical intermediates: thermodynamic properties from theory and experiment	Ron Weir
2001-015-1-100	Standard potentials of radicals*	George Wilson
2001-028-1-100	Electrochemical impedance spectroscopy - terminology, nomenclature and data exchange formats	Chris Brett

2001-030-1-100	Recommendations on the measurement and analysis of results obtained on biological substances with isothermal titration calorimetry	George Wilson
2001-035-1-100	Measurement and interpretation of electrokinetic phenomena	Luuk Koopal
2002-005-1-100	Thermodynamics of ionic liquids, ionic liquid mixtures, and the development of standardized systems	Ron Weir
2002-063-1-100	Chemical thermodynamics in industry	Ron Weir
2003-005-1-100	Recommended values of the viscosity of molten iron and aluminum	Ron Weir
2003-006-1-100	NMR chemical shifts: updated conventions*	David Buckingham
2000-012-1-300	Single molecule spectroscopy	George Atkinson/ David Buckhingham
2001-036-1-300	Glossary of terms in photocatalysis and radiation catalysis	Ruth Lynden-Bell
2002-008-1-300	Chemical actinometry	George Atkinson
2002-024-1-300	Glossary of terms used in photochemistry (3rd version)	George Atkinson

* Interdivisional project

12.00 Visit by Ted Becker, Fabienne Meyers and Laura Abernathy
13.00 Lunch

14.00 Progress Reports on Current Projects and Projects -Near Completion or in Press (5 mins each)

Project Number	Project Title	Project Monitor
110/2/81	Revision of "Quantities, Units and Symbols in Physical Chemistry" and the Appendices (3rd edition)	Jeremy Frey
120/15/95	Thermochemistry of chemical reactions: nomenclature, symbols and experimental methods for bond energies	Ron Weir
120/16/97	New Edition of Experimental Thermodynamics Vol II	Ron Weir
121/13/89	International Thermodynamic Tables of the Fluid State, Volume 14 : Benzene	Ron Weir
150/24/95	Spectroscopy under extreme conditions of temperature and pressure	Ron Weir
150/25/98	Quantities, terminology and symbols in photothermal and related spectroscopies	David Buckingham
2000-026-1-100	Critical compilation of vapour liquid critical properties	Ron Weir

14.40 New Projects and the Future

17.00 Role of Division in Biophysical Chemistry
18.00 Adjourn

Sunday 10 August (timing to be decided)
Election Update (Wilson)
Date and place for Off-Year meeting (Weir)
Responsibilities of Division Committee Members
Interdivisional Activities eg environment, materials, teaching
Further actions.

PHYSICAL AND BIOPHYSICAL CHEMISTRY DIVISION COMMITTEE

2002-2003 Biennium

President: Prof John Ralston, Ian Wark Research Institute, University of South Australia **
Email: john.Ralston@unisa.edu.au

Vice-President: Prof A David Buckingham, University of Cambridge, UK**
Email: adb1000@cam.ac.uk

Secretary: Prof Michel Rossi, EPFL, Lausanne, Switzerland*
Email: michel.rossi@epfl.ch

Past-President: Prof George S Wilson, University of Kansas, USA**
Email: Gwilson@ku.edu

Chairman of Commission I.I: Commission on Physicochemical Symbols, Terminology & Units
Prof Jeremy Frey, University of Southampton, UK*
Email: j.g.frey@soton.ac.uk

Titular Members

Prof George H. Atkinson, University of Arizona, USA*
Email: Atkinson@u.arizona.edu

Prof Ruth M. Lynden-Bell, Queen's University, Belfasts, UK*
Email: R.Lynden-Bell@qub.ac.uk

Prof Christopher M.A. Brett, Universidade de Coimbra, Portugal**
Email: brett@ci.uc.pt

Prof Luuk Koopal, Wageningen University, The Netherlands**
Email: koopal@fenk.wau.nl

Prof Joachim Maier, Max Planck Institut fuer Festkörperforschung, Stuttgart, Germany*
Email: weiglein@chemix.mpi-stuttgart.mpg.de

Prof Roberto Fernandez Prini, Universidad de Buenos Aires, Argentina*
Email: rfprini@cnea.gov.ar

Prof Ron D. Weir, Royal Military College of Canada, Canada**
Email: weir@rmc.ca

*Four-year term
**Two-year term (re-election)

Associate Members

Prof Salvatore Califano, European Laboratory for Non-Linear Spectroscopy, Florence, Italy
Email: califano@lens.unifi.it

Prof. Tetsuya Osaka, Waseda University, Tokyo, Japan
Email: osakatet@mn.waseda.ac.jp

Prof Michael Ottolenghi, Hebrew University, Jerusalem, Israel
Email: micott@chem.ch.huji.il

Prof Marcal Pires, Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, Brazil
Email: mpires@pucrs.br

Dr Catherine Royer, Centre de Biochemie Structurale, Montpellier, France
Email: royer@cbs.cnrs.fr

Prof Mitsuo Tasumi, Saitama University, Saitama, Japan
Email: tasumi@chem.saitama-u.ac.jp

National Representatives

Prof Ernst L.J. Breet, Potchefstroom University, Potchefstroom, South Africa
Email: cheeljb@puknet.puk.ac.za

Prof Claudio Gutierrez de la Fe, Institute of Physical Chemistry "Rocasolano", CSIC, Madrid, Spain
Email: Claudio@iqfr.csic.es

Dr A.J. (Jim) McQuillan, University of Otago, Dunedin, New Zealand
Email: jmcquillan@alkali.otago.ac.nz

Prof Dimo Platikanov, University of Sofia, Sofia, Bulgaria
Email: platikanov@chem.uni-sofia.bg

Prof Zhong-Qun Tian, Xiamen University, Xiamen, People's Republic of China
Email: zqtian@xmu.edu.cn

Prof Gorad Vesnaver, University of Ljubljana, Ljubljana, Slovenia
Email: gorazd.vesnaver@uni-lj.si