International Union of Pure and Applied Physics Meeting of Executive Council and Commission Chairs, The Suryaa Hotel, New Delhi, India 5–6 November 2010

Present:

Sukekatsu Ushioda (President)), Robert Kirby-Harris (Secretary General), Rudzani Nemutudi (Associate Secretary General), Williamina Lazaro (Administrator);

Vice-Presidents at large: Alexander Kaminskii, Marcia Barbosa, Mustanair Barma;

Vice-Presidents/Commission Chairs: Henri Orland, Sadamichi Maekawa, Klaus von Klitzing, Samuel Bader, Patricia McBride;

Commission Chairs: Peter Mohr, **Suresh Tonwar**, Kamitoshi Kono (for Robert Hallock), **Jose N Onuchic**, Dan-Olof Riska, Kennedy Reed, **Pratibha Jolly**, Burkhard Fricke, Padma Kant Shukla, Kailash Rustagi (for Alan Shore), Maria Victoria Fonseca, James Gurbenatis, **Malcolm MacCallum**, Samir N.Y. Gerges, Fridtjof Nüsslin, Asao Arai (for Hebert Sohn)

Apologies

Apologies received from: Alan Astbury (Past President) and Cecilia Jarlskog (President-Designate).

1. Welcome and introductions

President Sukekatsu Ushioda welcomed everyone to the meeting. All commission and council members were requested to introduce themselves.

- 2. Minutes of the Meeting held on 23 & 24 October 2009, Chicago, USA
- 2.1 The minutes of the C&CC meeting held in Chicago, USA on 23 & 24 October 2009 were approved.
- 3. Report from Secretary General: Robert-Kirby Harris

3.1.1 Finance

3.1.1.1 The 2009 financial statement was presented alongside the performance against the 2010 budget together with the proposed 2011 budget forecast. Details of the finances to be covered under a separate agenda item on Financial Statement Year end 2009 and 1 Jan – 21 Feb 2010.

3.1.2 Administration

- 3.1.2.1 The transfer of the website to the IOP had been completed last year, with all systems currently in place to service commission websites as well. Commission chairs should forward approvals of nominees who will serve as website contacts for their respective commissions.
- 3.1.2.2 Robert Kirby-Harris reported that the IUPAP is now registered as a British non-profit charity organization, which legal status exempts us from paying British corporation tax on any investment income. Liability insurance cover has also been obtained for IUPAP operations.

3.1.3 IUPAP Membership

3.1.3.1 Formal application has been received from the president of the Iranian Physical Society for Iran to join the IUPAP as a full member. Brazil has requested to increase their shares from 4 to 8. As routine, the two matters of Iranian membership application and the request by Brazil for an increase in shares will be referred to the IUPAP Council for approval. See items 12.1 – 12.6 for recommendations.

3.1.4 WIP Special Conference

3.1.4.1 The Women in Physics group has requested financial support for their major conference to be held in Stellenbosch, South Africa, next year (2011). The request needs special approval by Council as this is a special conference organized by the IUPAP Working Group.

3.1.5 Meetings attended by the Secretary General

3.1.5.1 The Secretary General visited the IUPAC headquarters on 24 September 2010 in North Carolina, USA where he met with the new Secretary General of IUPAC, Dr Terry Renner. Meeting focussed and agreed on the process for revising the membership of the Joint Working Group on the Discovery of Elements. Consideration needs to be given on how the two bodies could work together better at the interfaces of physics and chemistry in the future, noting that 2011 will be The International year of Chemistry.

3.1.6 ICSU

3.1.6.1 Requests have been sent for applications under the ICSU Grants Programme for 2011. Peter Melville attended the ICSU unions meeting in Paris in April 2010 on behalf of IUPAP with the particular purpose of discussing the issue of freedom of movement of scientists in the light of the IUPAP resolution at the last General Assembly. ICSU has requested information on the voting systems of adhering bodies and IUPAP has since furnished ICSU with the requested information. An electronic survey has also been completed on the review of the ICSU Regional Office for Asia and the Pacific. The next ICSU General Assembly is scheduled to take place in Rome from 27 to 30 September 2011.

3.1.7 International Year of Light

3.1.7.1 The Secretary General met with John Dudley, chair of the Optics Division of EPS, to discuss the proposal for 2015/16 to be declared the International Year of Light. The matter is to be tabled for discussion at the IUPAP Council. The matter needs to be approved by a resolution of the 2011 IUPAP General Assembly, which approval should then pave the way for a request to be made to ICSU and a submission of a formal application to UNESCO.

4. Financial Statements Year end 2009 and 1 January – 21 February 2010

4.1 Year end 2009 and 1 Jan - 21 Feb 2010

- **4.1.1** Financial Audit has been carried out which showed that for the period under review, the expenditure was much in line with the budget. The statement of account is presented in British pounds for audit purposes.
- **4.1.2** The presented balance sheet indicates that virtually all funds have been transferred to the UK. A total of £721, 458 has been transferred from the US. The figure will also have to be reflected in Euros.
- **4.1.3** It was noted that the financial statements have thus far been presented following a so-called cash accounting system, but in future the accrual accounting system will be used.
- **4.1.4** The Women in Physics Account is currently operated from the USA, under the management of Jackie Beaumont. The plan is to have it dealt with as a special fund with appropriate signatories from APS and additional the Secretary General.

4.2 Year end 2010 Income & Expenditure year to date and Year End forecast 2009 and 1 Jan – 21 Feb 2010

4.2.1 Income forecast for 2010 reflects a surplus of €53 300 compared to the original forecast deficit of €-35 500 which is largely a result of some payments of back-dues. IUPAP has just under one million Euros in assets.

4.3 Overdue Membership Payments

- **4.3.1** It has become an onerous task to chase countries to pay up their dues in time. A list was tabled showing countries with outstanding dues for 2010, the deadline of which (year) has already passed.
- 4.3.2 Katsu Ushioda indicated that a rigid payment date could be problematic as different countries will have different dates of financial year ends. It was suggested that a statement should be written to the effect that "generally IUPAP membership fees should be paid in September, but people should advise Council as to when their financial cycles end/begin, and what would be suitable for their respective countries".
- **4.3.3** Alexandr Kaminsky suggested that Williamina should send two invoices for two consecutive years. Meeting agreed that this idea will be tried and those countries that are comfortable with such arrangement could then make advanced payments.

4.4 Proposed budget for 2011

- 4.4.1 The presentation highlighted that a closer look at the individual line items on the proposed budget for 2011shows that the budget is markedly squeezed. One of the problems in this respect is that there has not been an increase in IUPAP dues in the past six years. Bob Kirby-Harris felt that for IUPAP to function efficiently, it needs an extra €80k. One way to solve the problem is to ask the General Assembly to raise dues or bill in an inflation related increase. Katsu Ushioda reminded the meeting that there was in effect an increase in dues in 2005 when IUPAP financials were switched from dollars to €uros.
- **4.4.2** Peter Mohr suggested that in the case of inflationary related increases, there should be a line item which takes account of inflation.
- 4.4.3 Another strategy would be to convince other countries to increase their shares. Katsu Ushioda suggested that the number of representation per share could also be revised. Meeting noted that the IUPAP constitution does not explicitly state that number of shares guaranteed more representation. It was also noted that the industrialized countries are currently paying low membership fees in relation to their level of funding of physics.
- **4.4.4** The Meeting decided that Council should work out a proper proposal, which proposal should take into account all suggestions made, in order to have something concrete to present to the 2011 General Assembly.
- **4.4.5** The "ICPE Newsletter" line item on the proposed budget for 2011 to be corrected from €2 000 to €3 000, leaving the revised total expenditure at €440 000 with an anticipated deficit of €-42 000. Meeting noted the special increase in the proposed budget of the Women in Physics working group (€17k + €15k) to enable the working group to carry out financial obligations related to the International Women in Physics Conference due in April 2011 in South Africa.
- 5.0 Report on Young Scientists Prize medal and certificates from Commissions that have awarded the prize over the last year
- 5.1 Oral reports were given by chairs of commissions that have awarded IUPAP Young Scientists Prizes.
- 5.1.1 C3: Young Scientist Prize given at a Conference in Australia in July 2010. C4 gives two prizes once in two years at the Cosmic Rays Conference. Last two Prizes given in 2009. C5 prize is awarded once every three years. Process currently underway to shortlist for candidates for the next award which will be given at the LT6 conference in 2011.
- 5.1.2 C8 awards the prize once every two years. At the last C8 award ceremony the presentation of the prize was in the form of a piece of paper as the medal still had to be printed. It was suggested that in the future an attractive 'branded' certificate envelope could be presented at the award if

- the real medal was yet to be printed. C9 awarded the prize at the ICM conference which is held once every two years.
- 5.1.3 C10 only launched the IUPAP Young Scientist Prize Award last year, and is thus only awarding its second prize. The 2010-11 prize winner, from the US, was awarded at the last APS meeting. It was pointed out that C10 had done a commendable job in implementing the YSP award, but there must now be put in place a process to have the prize ceremony move somewhere else instead of confining it to the APS as was the case in the past two years.
- 5.1.4 C11 awards are given at the ICHEP conference, the last one of which was held in Paris. This year the winners of the C11 prize were also invited to give talks.
- 5.1.5 In line with its past practice, C12 gives three prizes one every three years.
- 5.1.6 C13 did not give a prize at its meeting held in Paris in August 2010. Rather the YSP award will be given at the next conference in Mexico in 2011.
- 5.1.7 C 14 proposed and it was agreed that the work for which this prize is awarded should not be confined o to Physics Education Research. Work, for example, on development of instructional materials will also be considered for C14 YSP award.
- 5.1.8 C15 has thus far given a total of four prizes. By April 2010, nominees were already known after 31 applications have been received. C15 would like to propose that two prizes be given every year.
- 5.1.9 C16 has been giving the YSP award every year in the past four years. The Low Temperature Plasma Physics is awarded every even year, and the one for High Temperature Physics is awarded every odd year. A ten member jury decides on the winner using a 10 point scoring system. Next C16 meeting will be held in Belfast where in the next prize will be awarded.
- 5.1.10 C17 does not have an A level conference, and has thus never given a YSP award. Development of a mechanism for C17 to award the Young Scientist Prize remains a challenge. It was pointed out that C17 could also consider awarding the YSP at a B conference.
- 5.1.11 C18 awards the YSP once every three years in a special Young Researcher Symposium initiated in 2003. The last three prizes were given in 2009. The next three prizes will be awarded in 2012 in Aarhus, Denmark.
- 5.1.12 C19 will present two young scientists' prizes in astrophysics for 2009 and 2010 at the 25th 'Texas' Symposium on Relativistic Astrophysics in Heidelberg in December 2010.
- 5.1.13 C20 has thus far awarded a total of four Young Scientist Prizes. Last Prize was awarded in 2009.
- 5.1.14 AC1 not represented. AC2 has not asked to award the IUPAP Young Scientist Prize since it already awards another prize. The selection process for the AC4 Young Scientist Prize has not yet started, but the commission plans to award the IUPAP-YSP at the ICMP conference in 2011 in Brazil.

6.0 Approval of Proposed 2011 Conferences

- 6.1 Meeting made special note of the following three conferences:
- 6.1.1 The C14-ICPE 2010 conference that was originally scheduled for August 2010in Mexico had to be postponed to 2011. Commitment to support this conference has been agreed in advance.
- 6.1.2 2011 Conference. This is the (type B) Conference on Tracing the Ancestry of Galaxies on the Land of Our Ancestors, to be held on 13 17 December 2010 in Ouagadougou, Burkina Faso. Permission granted through E-mail consultation for C19 to mortgage the conference using the projected 2011 budget as collateral.

- 6.1.3 AC1 requested endorsement of the 22nd ICO General Congress to held on 15 19 August 2011, Puebla, Mexico. This congress is held every three years to address a new emerging subject of global importance. The 2011 congress will focus on economic, technological and scientific activities in Bio-Medical Optics, Fabrication, Design, Instrumentation, Nanotechnology and Optics. No financial support is requested.
- 6.2 Rudzani Nematodi gave a presentation of all 2010 conference applications which have been endorsed for IUPAP funding by various relevant commissions.
- A total of 27 2011 conference (7 type A, 13 type B, 3 type C, and 4 type D) were approved for IUPAP funding or endorsement. Each type A conferences will receive a conference grant of €10,000 together with a travel grant of €6,000. The type B conferences will each receive a conference grant of €6,000. Type C conferences are endorsed by IUPAP without financial support, in line with IUPAP conference guidelines. Two type D conferences will each receive a conference grant of €7,000 while the other two type D conferences will only be endorsed without financial support.
- Three conferences scheduled for 2012 were tabled for pre-approval, namely: a C2-endorsed type A Conference on Precision Electromagnetic Measurements (CPM) to be held in Washington DC, USA; a type B C9-endorsed 19th International Conference on Magnetism (ICM 2012) to be held in Busan, Korea; and a type B C12-endorsed 20th International Conference on Few Body Problems in Physics(CFBPP) to be held in Fukuoka, Japan.
- Klaus von Klitzing expressed concern about the trend of "fixing conferences in advance". Padma Kant Shukla suggested that all 2012 conference applications should first be collated and a final decision on funding should be taken at the next C&CC meeting in London. Bob Kirby-Harris indicated that there are some conferences that are well established which may warrant an exception for pre-approval. Katsu Ushioda felt that pre-approval does help conference organizers to plan in advance. Decision: 2012 Conferences that have been tabled for pre-approval were noted, but final decision will be taken at the next C&CC meeting in London.

7. Reports from Working Groups

7.1 Meeting noted reports submitted by four Working Groups (WGs): WG1 - ICFA, WG2 - Communications, WG9 - ICNP. WG4 - PANAGIC. WG2 report included in its appendix two statements that must be considered by the IUPAP: viz (i) IUPAP should make an explicit statement emphasising the importance of sustainable peer reviewed journals as an essential part of the scientific enterprise. (ii) IUPAP should issue guide lines to its members about the minimum basic rights authors should retain when assigning copyright to publishers.

It was agreed that WG2 should formulate a statement to be circulated to the C&CC for approval prior to the GA.

- 7.2 The report from WG4-PANAGIC included a letter from the chair of the working group which listed a series of problems that required the attention of council. See item 14 for recommendations.
- 7.3 Padma Shukla asked if the working groups do publish what they have accomplished, and it was explained that the working groups do not publish but they do submit reports in accordance with their terms of reference. They are established as time-limited groups for a specific purpose which upon completion should signal either revision of the terms of reference or the dissolution of the working Group. It was agreed that the reports of the working groups should in future be submitted in a uniform format.
- **7.4** Meeting noted that working group 5 (Women in Physics) and working group 7 (ICUIL) did not submit their reports.

8. Reports from Commissions

The following commission reports were presented by commission chairs or representatives of commission chairs. See Appendix [A - to be attached] for a compilation of presented reports from the following commissions: C2, C3, C4, C5, C6, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, AC1, AC2, AC3 and AC4.

Meeting adjourned for the day and continued the following day, Saturday 6 November 2010.

9. C4 Proposal for the "IUPAP-TIFR Homi Bhabha Medal" Prize

9.1 Suresh Tonwar and Mustansia Bharma gave background of the proposed IUPAP-TIFR Homi Bhabha medal prize. Matter referred to council for final decision.

10. ICSU Singapore statement on research integrity

10.1 Alexandr Kaminsky reported that he had recently attended in Singapore the 2nd World Conference on Research Integrity held on 21 – 24 July 2010 at which conference was developed the Singapore Statement on Research Integrity. Katsu Ushioda mentioned that the statement seems to have been made under the aegis of ICSU. Bob suggested that at this stage the statement can only be noted and acknowledged as it is not yet fully adopted or ratified by ICSU. The Singapore Statement on Research Intergrity should in the meantime be communicated to the IUPAP community as a statement of good practice, and the IUPAP community should be encouraged to forward commentary to improve it before it is taken to the (IUPAP) GA for adoption. Marcia Barbosa highlighted the importance of making sure that when comments are incorporated, the final format should be what ICSU can readily ratify or adopt at its next GA.

11. International Year of Light – submission for IUPAP

11.1 Bob Kirby-Harris gave a background to the memorandum received on 28 September 2010 from the office of the Quantum Electronics & Optics Board of the European Physical Society. The memorandum in essence sought support to making a request to the United Nations General Assembly to declare either 2015 or 2016 the International Year of Light. Katsu Ushioda highlighted that the second paragraph of the memorandum specifically requests that a resolution to endorse this proposal is placed on the agenda of the next General Assembly of IUPAP. Matter referred to council for final decision.

12. New Developments - membership

- **12.1** Brazil proposal to increase their shares (from four to eight): to be approved by council.
- **12.2 New Member countries (Iran):** Meeting agreed that for a start Iran could be admitted at a membership level of one share, and like other countries it could also apply for more shares in future.
- **12.3 Update on Malaysia:** Katsu gave an update on his efforts to meet with and encourage scientists in Asia to consider joining IUPAP. Good initial progress had been made after he had contacted the presidents of the Malaysian Academy of Science and the physical society, but more efforts are needed to convert this into a formal application.
- **12.4** Subscription fees for Cuba: Meeting agreed that Cuba should have its arrears repealed and allowed to start paying afresh in 2011 at a revised fee of 50% of a share which translates to €925
- **Subscription fees for Latvia:** Latvia has been granted relief from paying their IUPAP dues in the light of their current economic conditions. They will be asked, after their economic conditions have improved (or by the time of the next GA in 2014 whichever is earlier), to pay what they owe IUPAP.
- **12.6** Countries on discretionary dues: Half rate has been agreed at the last General Assembly. Singapore will be encouraged into full share as it stands out as an affluent country. Negotiations will also be held with other countries that are deemed to afford a full share.
- **12.7 Support for application of ICIAM** (International Council of Industrial and Applied Mathematics) to ICSU: A letter has been received from Professor Rolf Jeltsch, the president of ICAIM, requesting IUPAP support for their application to become an associate member of ICSU. [Refer to council].

13. Governance/management of IUPAP commissions and working groups

13.1 Proposal for working groups membership terms and nominations procedures

13.1.1 Bob Kirby-Harris reported that the Women in Physics Working Group raised the issue of proper terms of reference together with the need for a formal arrangement for appointing and renewing membership of the working groups. It was acknowledged that by virtue of their adhoc nature, working groups do lack a properly formalized membership structure. Bob Kirby-Harris will consult with chairs/secretaries of working groups to develop a template with clear guidelines for membership of working groups.

13.2 Spending guidelines for commission budgets

13.2.1 Spending guidelines for commission budgets: Expenditure of commission budgets to be left to the discretion of the commissions, but commission chairs should approach the secretary general and ultimately council should there arise problems of a financial nature within commissions.

14. PANAGIC Working Group

14.1.1 Bob reported that the submission by PANAGIC indicated that this working group had now become effectively obsolete although there were some areas of linkage worth continuing. Decision: PANAGIC working group should either get absorbed by an IUPAP commission, or wind down and dissolve. Chairs of four commissions (C4, C11, C12 and C19) along with current chair of WG4, David Sinclair, are mandated to get together with the chair of PANAGIC and develop a strategic proposal for future IUPAP coverage of this topic. Malcolm MacCallum will be the convener of the meeting. This proposal to be circulated to Council in advance of the General Assembly.

15. Future Meetings plans for the General Assembly and the C&CC meetings in 2011

- 15.1.1 Next Council & Commission Chairs Meetings to be held on 31 October 1 November 2011 in London. IUPAP General Assembly will be held on 2 4 November 2011 in London. Dates to be confirmed after Council. A total of about 150 delegates are expected at the GA. The IOP will make its facilities available for the meetings. Banquet will be hosted by the Royal Society.
- 15.1.2 Williamina Lazaro will be communicating with liaison committees to put forward their nominations. IUPAP member countries will be encouraged to nominate more members than they have shares as there is no guarantee that their nominees will be elected. Liaison committees have until June 2011 to submit their nominations. Once nominations have been received, they will be communicated to commissions. On average, representation should be close to one representative for each share held. Secretary General to send out communications to chairs of commissions.

16. Any other business

16.1 Women in Physics Conference:

16.1.1 Samuel Bader mentioned that the US liaison committee is trying to get extra funding to send a film crew to capture (live) the conference proceedings for website archiving. Interviews are planned to be held with senior women scientists to tell their stories that highlight their turning points which made them decide to become physicists. The video will be condensed into a five minute clip which will be used to raise funds.

16.2 Possible establishment of a working group on energy:

16.2.1 Samuel Bader mentioned that a while ago there was discussion about re-establishing a working group on energy. Around 2004 there was a working group which produced a very good report on energy, which is available on the website; since then this group has been disbanded (at the 2008 GA). In the light of the subject of energy having become such an important topic, it seems worthwhile to revitalize activity in this field. Decision: Sam Bader was asked to take the lead in revitalizing our activity in energy by first contacting the original members who constituted the working group on energy. Sam Bader will contact the APS GERA in the US; Bob requested to

contact the EPS, and Ushioda asked to contact Yves Petroff, who lead the WG that disbanded after filing its report, to see if now is a good time to resurrect the WG Katsu thanked all C&CC members for their attendance. Meeting adjourns

17.