

International Union of Pure and Applied Physics Meeting of Executive Council and Commission Chairs Prague, 13-14 October 2006

Present

Alan Astbury (President), Yves Petroff (Past President), Sukekatsu Ushioda (President Designate), Judy Franz (Secretary General), Peter Melville (Associate Secretary General); Vice Presidents at Large: Carmen Cisneros, Chen Jia-Er, Bruce McKellar; Vice Presidents/Commission Chairs: Dan Dahlberg, Pavel Exner, Pratibha Jolly, Leslie Pendrill, Annick Suzor-Weiner; Commissions Chairs: David Mukamel, Simon Swordy, Mikko Paalanen, Ulrich Nienhaus, Hiroyuke Sakaki, Bruce Gaulin, Gregor Herten, Walter Henning, Joachim Burgdorfer, Ken-ichi Ueda, Padma Shukla (for Roger Weynants) Maria Victoria Fonesca González (for Alexei Fridman), Peter Borchers, Ari Friberg, Clifford Will, Peter Smith.

In attendance

Stefan Michalowski, Global Science Forum

1. Welcome

The meeting was welcomed by Professor Zdeněk Němeček, Dean of the Faculty of Mathematics and Physics, in whose building the meeting was held. He noted that the faculty had been voted the most effective and productive in the country. It had 700 staff and 2,500 students (including 600 postgraduates).

2. Minutes of the last meeting

Alan Astbury proposed and Sukekatsu Ushioda seconded the approval of the minutes of the meeting in London on 24-25 February. This was agreed.

3. Business matters

Judy Franz noted that Alexei Fridman was still ill and proposed that Maria Victoria Fonesca González be made officially acting chair of C19. This was agreed. Peter Borchers suggested that some changes to the rules may be appropriate.

A very late application had come from Greece to become a member of IUPAP with two shares. Although the adhering body would be the National Council of Research and Technology, the liaison committee would act through the Hellenic Society for the Study of High Energy Physics. There was concern that the whole of physics should be represented. Judy Franz proposed and Sukekatsu seconded that subject to these assurances and payment of the dues Greece should become a member. This was accepted.

4. Financial report

Judy Franz proposed that for the budget for 2007:

- an increase in the conference grants by 8% to increase the value of the grants for sponsored conferences;
- an increase travel grants by 10% to increase the number of participants from developing countries;
- an increase by \$5k in the amount of money available for commissions to enable more people to attend the meetings of commission members;
- a figure of \$5k to assist developing countries to become members of IUPAP.

The budget would be agreed by Council on Sunday.

5. Young Scientist Prizes

Young Scientist Prizes were approved for C4, C11, C15, C16, C18 and C20. Alan Astbury reported that he had had 15 medals made for each of the nine commissions that had requested them. It was agreed that the nomenclature should be standardised – ‘Young Scientist Medal’ on the medal and ‘Young Scientist Prize’ on the certificate. The medals will be stored at the manufacturer, who will engrave them to ensure uniformity. Requests for the medals should go to Peter Melville / Williamina Lazaro at the Institute of Physics, who will produce the certificate and order the medal. At least one month should be allowed for this.

It was agreed that the definition of ‘young’ should not be in terms of age but should be limited to ‘at most eight years post PhD, excluding career interruptions’. C3 had currently advertised the prize stating age criteria. This was accepted for the first award, but subsequently it should be brought in line with the others.

6. Election of Associate Members

Judy Franz stated that the rules limited the number of Associate Members to four per commission, but that in some cases dispensation had been given for five. Commissions were given a month’s grace to bring the total number up to four, notifying the Secretary General and the Associate Secretary General. A list of the Associate Members proposed before and during the meeting is attached to the Council minutes.

Action: Commission Chairs to propose any additional Associate Members by 13 November

7. ICSU report

Yves Petroff reported that emphasis in ICSU had drifted towards environment, but that other aspects such as nanoscience/technology were coming back. ICSU had serious budget problems a few years back because the income was in Dollars and the expenditure in Euros. Currently there is a big discrepancy in what is paid by each country and by each union – there is one country one vote independent of what is paid. Efforts are being made to agree a new system. ICSU has asked IUPAP to pay the same number of Euros as the Dollars it has been paying.

Alan Astbury attended the opening of the ICSU Asia-Pacific regional office in Kuala Lumpur (paid for largely by Malaysia). An African regional office already exists in Pretoria and a Latin American regional office will be opened in Brazil in December. There are aims for an office for the Arab Region. The aim is to increase the number of country members of ICSU. Carmen Cisneros will represent IUPAP at a Latin-American regional meeting in Panama.

Judy Franz commented on concerns expressed by the Geosciences Union, which was very critical of ICSU. Since the change of the name to ‘International Council for Science’, ICSU has largely ignored the scientific unions, e.g. it had started work on renewable energy without even notifying IUPAP. Alan Astbury noted that ICSU expected to speak to governments on important issues in a way that IUPAP could not and that this was important. The meeting expressed support for sorting out the problems with ICSU.

8. New standard of mass/weight

Leslie Pendrill spoke on potential changes to SI with a view to making changes to the definition of the kilogram. IUPAP may be asked to advise in a year or two.

9. OECD Global Science Forum report

Stefan Michalowski of the OECD Global Science Forum addressed the issues of large-scale international scientific collaboration, a large part of which is physics.

10. Talks by Czech physicists

Alice Valkárová, president of the Czech Physical Society, gave a summary of research in the Czech Republic. This is split between the institutes of the Academy of Sciences, universities and some industries. Problems are that the industrial/private funding of R&D is too low; the financing of young people, e.g. PhD students is difficult, particularly as accommodation in Prague is very expensive; a large proportion of institution funding comes from plans and grants and a substantial amount of permanent administrative work is required to acquire it.

Two young Czech physicists gave interesting and competent accounts of research in their fields – Tomáš Jungwirth on spintronic materials and nanodevices and Jaromír Fiurášek on quantum optics. The IUPAP participants were very impressed by the quality of their work and the clarity of presentation.

11. Discussion about physics in the Czech Republic

The entrepreneurial culture is young and still being developed. The social status of scientists and university professors is relatively high, but few people see the advantage of supporting research. The job market for physicists has not been good. In the past many young physics graduates have gone into banking, but there are few opportunities left there. It is expected that many students will go to other EU countries where there are better opportunities, and that many will return. Nonetheless, the spirit of physicists is upbeat because things are slowly getting better.

12. Proposal for membership from developing countries and selection of countries in different categories

Judy Franz and Alan Astbury put forward proposals for extending IUPAP membership in developing countries. These were discussed and some small changes made. The final version is appended to the Council minutes. Alan Astbury proposed target countries for the different categories as given below and various of those present volunteered to approach specific countries (shown in brackets). For definition of categories see attachment to Council minutes.

- Full membership: Greece, Singapore (Bruce McKellar & Sukekatsu Ushioda)
- Introduce via category B: Malaysia (Bruce McKellar), Venezuela, Costa Rica (Judy Franz), Thailand, Peru, Kazakhstan (Mikko Paalanen), Bulgaria (Pavel Exner), Columbia (Judy Franz), Romania (Pavel Exner).
- Category C: Bolivia, Azerbaijan, Sri Lanka, Moldova (Peter Melville), Vietnam (Annick Suzor-Weiner), Pakistan, Ghana, Senegal, Nigeria, Kenya, Belarus (Peter Melville), Philippines, Morocco (Pratibha Jolly & David Mukamel), Ukraine (Peter Melville).

Action: those listed to approach the relevant bodies

13. Approval of proposed conferences

Nine conferences were recommended for support in 2008 as category A conferences, together with a further conference from AC3, which was endorsed but not eligible for a grant, eight were recommended as category B and five as category C; twelve were rejected. Only one conference was recommended for early approval for 2008; this had been given early approval for 2007, but the date had been

changed. The full list is attached to the Council minutes. The International Conference on Physics Education, proved a problem as this had become an annual meeting. It was agreed to recommend this as an exception as it was education, but with the clear understanding that it should cease to be annual meeting. C14 was urged to bring forward a category B meeting instead for 2008.

14. Commission reports

C2 SUNAMCO

Leslie Pendrill reported. The formal representation of IUPAP in the Joint Committee for Guides in Metrology (JCGM) has been addressed. C2 has also contributed to work on the Metrology Vocabulary (VIM) and the Uncertainty Guide (GUM). The changes to the International System of Units (SI), including fundamental constants, that are being considered have been discussed. C2 has worked in identifying interest in nanostandardisation work amongst the IUPAP Commissions, Affiliated Commissions and IUPAP Working Groups. A positive response from the IUPAP Nanoscience Working Group has been obtained recently.

C3 Statistical Physics

David Mukamel reported. During the last year the C3 has been engaged in the organization of the STATPHYS 23 conference which will take place in Genova in July 2007. The steering committee of the conference, which was set up by C3, met in Rome last June and decided on the scientific aspects of the conference. The call for nominations for the Boltzmann Award resulted in a large number of nominations and the voting process is now under way. C3 has decided on the Young Scientist Prize and a call for nominations has been distributed last month. C3 also took part in the working group on nanoscience.

C4 Cosmic Rays

Simon Swordy reported. There is to be a big category-A International Cosmic Ray Conference in Merida, Mexico in 2007. The Young Scientist Prizes will be awarded at this conference. Previously conference reports were available on paper only. Now these are being scanned and will be available on the web. Substantial experiments in the cosmic ray field are coming to fruition.

C5 Low Temperature Physics

Mikko Paalanen reported. C5 has only held email meetings. The first face-to-face meeting is planned for spring 2007 in connection of either APS or EPS March meeting. One IUPAP-sponsored conference, International Symposium on Quantum Fluids and Solids (QFS 2006) was organized by Takao Mizusaki in Kyoto, Japan in August 1-5, 2006. C5 has drafted rules for Young Scientist Prize. The first prize(s) in low temperature physics will be awarded in 2008 in connection of LT5, the 25th International Conference on Low Temperature Physics.

C6 Biological Physics

Ulrich Nienhaus reported. C6 has submitted a proposal for the IUPAP Young Scientist Prize to the Council. Associate Members have been identified and suggested to the Council: Henri Orland (C3), Bruce Gaulin (C10), Fridtjof Nuesslin (AC4), Peter Laggner (IUPAB Council member). Organization of the 6th International Conference on Biological Physics, to be held in Montevideo (Uruguay) on 27-31 August 2007, has proceeded with active involvement of the commission. Sponsorship by IUPAP was applied for.

C8 Semiconductors

Hiroyoki Sakaki reported. The International Conference on Physics in Semiconductors has been held in Vienna this year. Further conferences are planned for 2008 in Brazil and 2010 in Korea. The Young Scientist Prize will be awarded in Brazil in 2008. In addition C8 has been making an IUPAP young author best paper award every two years since 1990.

C9 Magnetism

Dan Dahlberg reported. C9 met in August at the IUPAP-sponsored International Conference on Magnetism (ICM 2006) in Kyoto, where the IUPAP prize for Magnetism (and Neel medal) and the Young Scientist Prizes were awarded. Attendance was about 2000. ICM 2009 will be held in Germany, and Canada was selected for 2012. For ICM 2009, there was discussion about publishing the proceedings on the web to do away with paper and keep the cost down. There was general concern about financing. The conferences face financial risk, for which the organizers are liable, but profits go to the host institution. It would be very helpful to have a way for passing profits from one conference to the next.

C10 Structure and Dynamics of Condensed Matter

Bruce Gaulin report. C10 has conducted a series of discussions on Associate Members, sponsored conferences and Young Scientist Prizes, all via email. Recommendations have been made for C10 members to serve as Associate Members on other Commissions. There have been two applications for conference sponsorship, but the second came in very late, too late for consideration by the commission. C10 is working up proposals for Young Scientist prizes.

C11 Particles and Fields

Gregor Herton reported. The locations for the next major conferences in particle physics have been decided at the C11 meeting in Moscow in July 2006. These are Daegu (South Korea) 2007, Philadelphia 2008, Hamburg 2009 and Paris 2010. The organization of a series of an International Conference on Instrumentation in Particle Physics has been discussed. This is urgently needed. There has been a discussion in the particle physics community as to whether the start-up of the LHC at CERN should be used to move to open access publications. A working group at CERN with participation of C11 has proposed a business model based on sponsorship.

C12 Nuclear Physics

Walter Henning reported. C12 held its annual meeting in Vancouver in June, attended by 9 of the 13 full Members and 2 of the 4 Associate Members. Recommendations and priorities were agreed regarding sponsorship of conferences, and agreed on Associate Members and recommendations to other commissions for members of C10 to serve as Associate Members. Arrangements have been made for Young Scientist prizes. There was much discussion of authorship lists of publications of large collaborations in particle physics. This will be a topic for the next meeting.

C13 Physics and Development

Annick Suzor-Weiner reported. Besides active electronic communications (circular messages and discussions in November 2005 and February and June 2006) C13 held a meeting in Paris on 26 August. Conference applications and rules for new membership have been discussed. Good news about AIMS (African Institute for Mathematical Sciences) in South Africa, supported by IUPAP in 2006, was given as well as information about new projects of physics centres in Birzeit, Tunis and Dakar. It is too early for real action from IUPAP. Two actions are on the agenda: to try to improve access to physics reviews in some countries, Baltic countries in particular

(contact with the IUPAP Communications Committee) and to set up closer links with ICTP to coordinate actions for developing countries.

C14 Physics Education

Pratibha Jolly reported. C14 is concerned with more than just conferences. It met in August at ICPE 2006 in Tokyo. The World Year of Physics and the World Conference on Physics and Sustainable Development have provided opportunity to move forward. The Commission is responsible for a number of publications including an International Newsletter on Physics Education. A major issue is how to increase the participation of teachers in meetings, particularly women. A Latin American physics network is being established. Much of the activity is focused on the outcomes from the World Conferences on Physics and Sustainable Development.

C15 Atomic Physics

Joachim Burgdorfer reported. C15 met during the ICAP conference in Innsbruck on 20 July 2006 (one of the category-A conferences supported by IUPAP). This conference was remarkably successful with a record participation of more than 800 attendees including 7 Nobel Prize winners. The commission discussed and agreed on a charter for the IUPAP Young Scientist Prize in Atomic, Molecular and Optical Physics. It approved and ranked conferences to be recommended for support by IUPAP in 2007. C15 also discussed the continued difficulties with regard to visas for attending conferences in the USA by delegates from many countries including China, India, Russia and countries in the Middle East, and several members expressed their concerns.

C16 Plasma Physics

Padma Shukla reported. A board meeting was held on 24 June 2006 during the International Congress on Plasma Physics in Kiev, sponsored as a category A-conference by IUPAP (400 participants). Four Associate Members were recommended. The Young Scientist Prize will be presented to a young researcher during ICP16 in Prague in July 2007. C16 maintains its website at www.ipr.res.in/c16iupap.

C17 Quantum Electronic

Ken-ichi Ueda reported. IQEC/CLEO EU 2007 is scheduled for 17- 2 June 2007 in Munich. From C17, K. Ueda joins in the programme committee as one of programme chairs. Adjustment of the schedule of big conferences schedule in three regions North America, Europe and Asia-Pacific rim PR is under consideration. C17 members participate positively in the ICUIL Working Group activities. Ultra-high intensity lasers have a big impact in high field physics.

C18 Mathematical Physics

Pavel Exner reported. Over the last year C18 has had conferences: the category A International Congress on Mathematical Physics in Rio de Janeiro and a category B conference on Spectra Theory and Mathematical Physics at Caltech. Both meetings were successful and the reports are expected soon. The commission met during the conference in Rio, unfortunately without a quorum, due in part to the unexpected bankruptcy of VARIG. Proposals have been made for the Young Scientists Prize in Mathematical Physics. It has been agreed with IAMP that these will be awarded at the triennial congress, possibly at its young researcher symposium.

C19 Astrophysics

Maria Victoria Fonesca González reported. C19 held the first meeting with more than half its members present for at least 4 years during the General Assembly of the International Astronomical Union in Prague and compiled a list of things it might do (and urge our colleagues to do) in the lead-up to 2009, the International Year of Astronomy. Things C19 might do include a world-wide open-house night at observatories and planetariums that have any sort of visitors' program, ideally on a

night that is somehow connected with Galileo and falls near spring or autumn equinox so that weather might be decent in both hemispheres (his birth/death dates are unfortunately January and February).

C19 will support Astronomy for teachers in middle schools in developing countries and the Universe Awareness program for children 4-10 years. (Website www.UniverseAwareness.org.) C19 will support the 2009 International year of Astronomy and in 2010, the 400 years of Galileo worlds discovery. C19 sponsors this year the Texas Symposium in Melbourne and will sponsor the 2007 Venezuelan meeting on solar atmosphere. Marta Burgay will receive the first Young Scientist Medal from IUPAP next December at the Texas Symposium.

C20 Computational Physics

Peter Borchers reported. C20 met in Korea on 29 August during the CCP2006 Conference. Six members attended; there were five apologies, some explaining that they had been unable to attend funding to attend; there had been no response from two members. The web site has been updated. The venue of future conferences was discussed. The possibility of some conferences being held in Latin America or Africa was raised. Until now conferences have been organized by AAPPS, APS and EPS.

AC1 International Commission for Optics

Ari Friberg reported. AC1 (ICO) held its annual Bureau (Commission) and Topical meeting on Optoinformatics 2-7 September 2006 in St. Petersburg. The conference (<http://ysa.ifmo.ru/tmo2006/>) was the first major ICO meeting in Russia, and it was well attended. In 2006 ICO is involved in 11 conferences and schools, and so far it has given 3 Traveling Lecturer awards. The 2007 Bureau and Topical meetings will take place in November in Cape Coast, Ghana. ICO publishes a Newsletter (four issues per year, see ICO web site www.ico-optics.org).

AC2 International Commission on General Relativity and Gravitation

Clifford Will reported. AC2, the International Society on General Relativity and Gravitation, will hold its next triennial meeting on 8-14 July 2007 in Sydney jointly with the biennial 7th Edoardo Amaldi Meeting on Gravitational Waves. The Xanthopoulos Prize for a relativity theorist under the age of 40 will be awarded at that meeting. The changeover of the commission's Journal on General Relativity and Gravitation to a new publisher and new editors has been completed.

AC3 International Commission for Acoustics

Not represented

AC4 International Commission on Medical Physics

Peter Smith, Secretary AC4, reported. Prof. Azam Niroomand-Rad had unfortunately had to resign as Chair due to ill health and Prof. Barry Allen, the new President of the International Organization of Medical Physics, was now the Chair. The inaugural meeting of AC4 had been held at the World Congress of Medical Physics and Biomedical Engineering in Korea in August. The first Young Scientist prize for Medical Physics had been presented at the Congress. For further information see www.iomp.org

15. Commission affairs

There have been problems in commissions meeting. Judy Franz proposed increasing the funds for commission members travel from \$3k to \$5k over any rotating three-year period. It was also suggested that conference calls be used to involve people who cannot be present.

There was a long discussion about how to carry funds over from one conference to the next. The idea of a general fund was rejected as this could reduce the chance of gaining funding from elsewhere and reduce the pressure on organizers to keep within budget. The suggestion of IUPAP holding bank accounts for each of the commissions was rejected on account of the administrative burden (although there is an account for C8 for prizes). The idea of IUPAP taking out insurance to cover costs was also deemed expensive and impractical.

On-line only versions of conference proceedings were discussed. These were regarded as acceptable, although there needs to be a commitment for the proceedings to be accessible long term. If some people want a paper copy there is the option of making an additional charge for this (outside the maximum registration fee set by IUPAP).

16. Consideration of VIM, GUM

Leslie Pendrill introduced VIM (International Vocabulary of Basic and General Terms in Metrology), and GUM (Guide to the Expression of Uncertainty in Measurement). VIM and GUM have different definitions for uncertainty. VIM has been in existence for 20 years and the third edition is close to being approved; no action has yet been requested of IUPAP, but an opinion may be sought in the future. On the other hand IUPAP has been asked to approve supplement 1 of GUM. This has already been reviewed by an IUPAP representative.

Judy Franz proposed and Dan Dahlberg seconded that this is referred to the IUPAP representative on GUM; if he deems it acceptable IUPAP is willing to put its name on the document.

Action: Judy Franz to approach the IUPAP representative looking at GUM

17. Reports from working groups

Membership of committees comes up at different times of the year. Where the committee reports through a commission the commission should approve the membership and notify the Secretary General. Otherwise changes should go to the President and Secretary General who will notify Council if they see a problem.

Action: Commission Chairs, Alan Astbury, Judy Franz

Alan Astbury reported on ICFA (International Committee for Future Accelerators). This will change after the Linear Collider and will report through C11.

Sukekatsu Ushioda reported that the Committee on Communications is continuing.

PaNAGIC should report through C4 for new members.

Judy Franz reported on the Women in Physics Committee, of which she is the official liaison. Barbara Sandow from Germany will be taking over the chair from Marcia Barbosa and there are several other changes on the committee. Judy Franz requested sponsorship of \$10k for a conference for women in the Middle-East and Africa to attend a conference in Africa, if she and Marcia believe the conference to be worthwhile. This was agreed.

It was agreed that thought needs to be given to the lifetime of the Working Group on High Intensity Lasers. If this is to continue long term attention will need to be paid to its membership to ensure a turnover of members.

Mikko Paalanen reported on the Nanoscience Working Group. The September conference in Hungary had been run effectively, but 2/3 of the participants were from Hungary. Approval was sought for a grant of \$10k for the proposed conference on 'Ultracold Degenerate Matter' in Canada in 2008, but the name would have to be changed to something more appropriate and there was a need to look at the participants to make sure that it was international. Henceforth sponsorship would have to be sought through the most appropriate commission. Bruce Gaulin (C10) is to join the committee

Walter Henning reported on the Nuclear Physics Working Group. An extensive compilation of nuclear physics facilities/ laboratories worldwide is being prepared as a booklet or handbook. This is available in draft and will be printed before the end of the year.

18. Report on follow up to the WCPSD

Judy Franz reported that some money had been left over from that raised to enable people from developing countries to attend the WCPSD in Durban. This was being used to sponsor follow-on activities for the four themes of the conference. Money was being used for physics and health projects and for the workshop on economic development for physicists from developing countries. In addition a new project is being drawn up on energy and environment. Projects in education are doing well. Pratibha Jolly referred to two workshops under the auspices of UNESCO, low-cost equipment for developing countries and the work on mobile science.

19. Future meeting plans

The next Council and Commission Chairs meeting will be held in Rio de Janeiro on 5-6 October 2007.

The next General Assembly will be held on 13-18 October 2008 in Tsukuba, Japan. Sukekatsu Ushioda presented plans for this meeting, which included the Council and Commission Chairs meeting on the Monday and Tuesday 13-14 October, with the General Assembly running from 15-17 October, followed by an excursion on Saturday 18 October. This was agreed, and Sukekatsu Ushioda was asked to make the bookings.

Action: Sukekatsu Ushioda to make the booking

20. Inter-Union reports

Roger Elliott, the IUPAP representative on ICSTI, had written a critical report on ICSTI, but in line with his recommendation it was agreed that IUPAP remain a member for the time being.

IUPAC has set up a joint IUPAC/IUPAP working group on the discovery of elements of atomic number greater than 111. The aim is to discover whether the element has actually been discovered, by whom and to ask the discoverer to suggest a name. Bob Barber has now been appointed as the IUPAP representative. IUPAC had previously appointed a representative unknown to IUPAP.

21. Request for scientists

IUPAP has been invited to send a student to a science meeting in Lindau.

Action: Padma Shukla to find a local student to attend.

22. New business

Annick Suzor-Weiner expressed concern at the low budget for physics at UNESCO, now ~\$100k. It was agreed that Alan Astbury and Judy Franz should send a letter to

UNESCO supporting basic research.

Action: Alan Astbury & Judy Franz to prepare the letter

Yves Petroff drew attention to the fact that no one in IUPAP was doing anything on physics and the environment and suggested that a working group be set up to bring forward a proposal. There would be a need to involve other Unions.

Action: Yves Petroff to set up such a working group

Peter Melville referred to a Newsletter on IUPAP that he and Alan Astbury would be preparing and asked all present to send him any contributions.

Action: All

International Union of Pure and Applied Physics Meeting of Executive Council Prague 15 October 2006

Present

Alan Astbury (President), Yves Petroff (Past President), Sukekatsu Ushioda (President Designate), Judy Franz (Secretary General), Peter Melville (Associate Secretary General); Vice Presidents at Large: Carmen Cisneros, Chen Jia-Er, Bruce McKellar; Vice Presidents/Commission Chairs: Pavel Exner, Pratibha Jolly, Leslie Pendrill, Annick Suzor-Weiner;

Apologies were received from Carmen Cisneros and Dan Dahlberg, who had had to leave before the meeting.

Guidance on conferences

Alan Astbury stated that Council needed to remind commissions to pick the best conferences and not just add to them. They should also be sensitive to some of the smaller countries. Judy Franz was concerned that they may be confused messages about what we wanted to do. It was agreed that Alan Astbury and Peter Melville should revise the guidelines for conferences to make the goals clear and should liaise with Bob Barber.

Action: Alan Astbury & Peter Melville

Nanoscience Working Group

Alan Astbury expressed concerns that the first nanoscience conference had missed its target on the first and that the second may not succeed. Yves Petroff was concerned that there were too many speakers from North America and none from Asia. Sukekatsu Ushioda proposed that we should insist on and agree international perspectives for the conference with the chair William Wijngaarden before agreeing to the sponsorship. This was agreed.

Workshop in developing countries

It was agreed that \$15k for a workshop to be held in a developing country be included in the budget.

IUPAP Audit Report for 2005

Peter Melville moved and Bruce McKellar seconded approval of the Audit Report for 2005. This was agreed.

Approval of budget

Various changes were made to the budget, which was subsequently approved. The Approved version is attached.

Approval of Associate Members

The Associate Members in the list attached were approved. Commissions have until 13 November to add additional Associate Members to bring the total up to no more than four per commission.

Approval of sponsorship of conferences

The sponsorship of conferences as detailed in the lists attached was agreed.

Approval of plan to extend IUPAP membership

Small changes were made to the plan to extend IUPAP membership. The final version is attached to the minutes. Alan Astbury proposed and Peter Melville seconded that this be accepted. This was agreed.

Approval of new members

It was agreed that Greece be accepted as a full member subject to confirmation that it will represent the whole of physics, not just high energy physics. It was also agreed that Vietnam be accepted as a category B member.

Future meeting plans

Judy Franz and Sukekatsu Ushioda will discuss financial arrangements for the General Assembly.

Action: Judy Franz & Sukekatsu Ushioda

ICSU reform

Dan Dahlberg had left a written motion: 'We unanimously support IUPAP to resolve our outstanding issues with ICSU'. Peter Melville moved and Chen Jia-Er seconded that this be accepted. This was agreed (unanimously).

Chair of C19

Judy Franz proposed and Pavel Exner seconded that Maria Victoria Fonesca González be made Acting Chair of C19 until the Chair Alexei Fridman was healthy enough to take over. This was agreed. It was also agreed that a possible change to the statutes be considered at the next meeting to cater for this problem in the future.

Young Scientist Prizes

Judy Franz proposed and Alan Astbury seconded the following:

- a) The terms 'Young Scientist Medal' and 'Young Scientist Prize' be the terms that are used.
- b) The definition of 'young' to be used by all commissions is 'at most eight years post PhD, excluding career interruptions'. But an exception is to be allowed for C3 for the prize as this had already advertised.
- c) Young Scientist Prizes be approved for C4, C11, C15, C16, C18 and C20. I think that some of these had already been approved, but this is not critical.

This was agreed.

OECD

Judy Franz agreed to contact Stefan Michalowski to obtain his slide to attach to the minutes .

Close

Judy Franz thanked Pavel Exner for his hospitality and help in organizing the meetings.

IUPAP ASSOCIATE MEMBERS

C2 Commission on Symbols, Units, Nomenclature, Atomic Masses & Fundamental Constants (SUNAMCO)

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C4 Commission on Cosmic Rays

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Proposed IUPAP 2007 Operating Budget

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INCOME	US Dollars budgeted
Membership Dues (estimated)	430,000
Bank Interest	30,000
TOTAL INCOME	460,000
EXPENDITURES	
Conferences	168,000
Conference Travel Grants (10% increase)	75,000
ICTP for Publications for Devel. Countries	5,000
ICPE Newsletter	3,000
Commissions (5k over 3 years)	25,000
Council & Commission Chairs Meetings	35,000
New IUPAP Commission prizes	15,000
Working Groups ICFA Communication in Physics Women in Physics ICNP (new) PANAGIC ICUIL Nanoscience	50,000
Developing Country Project New Members Workshops	20,000 5,000 15,000
Newsletters/Reports	3,000
Subscriptions ICSU ICSTI	15,000 1,000
Secretariat College Park, MD Canada London	47,000 4,000 4,000
2008 General Assembly Reserve	10,000
Banking and Accounting	12,000
Liability Insurance	1,800
Contingency Fund	10,000
TOTAL EXPENDITURES	503,800
Surplus/(Deficit) anticipated	(43,800)

Plan to Extend IUPAP Membership

- I. Categories of membership: there are three categories with different dues structures. (Note: one IUPAP share currently costs 1850 Euros)
 - A. Countries of at least moderate wealth and good scientific productivity that should be able to support membership in IUPAP at a minimum of one share.
 - B. Countries of less wealth and moderate scientific productivity. They should be able to join IUPAP at one share in the near future.
 - C. Developing countries with some physics productivity. These might join IUPAP at one share if there were added incentives.

- II. Adding new members in each category
 - Category A:** These will be approached through written and personal contacts on a periodic basis.
 - Category B:** We will offer them an initial $\frac{1}{2}$ price membership for 3 years with one vote and paid travel for one person to the General Assemble if they can get an expression of interest from the national organization that would pay for their membership. At the end of 3 years they could opt to join IUPAP at full (1 share) dues and keep their vote and paid travel to the General Assembly or keep their $\frac{1}{2}$ price membership for one more 3-year period. If they have paid full dues, IUPAP would, in addition, pay up to \$1000 for a young (45 years or younger) physicist to attend an IUPAP sponsored conference each year until they became Category A.
 - Category C:** The Council will choose 5 countries and offer them a 3-year membership for 200 Euros per year with vote and paid travel for one person to the General Assembly if they can get an expression of interest from the national organization that might eventually pay for their membership. For the second 3 years, they would need to pay $\frac{1}{2}$ of one share, but in addition to the vote and travel to the General Assembly, IUPAP would pay up to \$1000 for a young (45 years or younger) physicist to attend an IUPAP sponsored conference each year. If they don't pay the $\frac{1}{2}$ share, they would be dropped and another country would be offered this membership. For the third 3 years, they could retain their $\frac{1}{2}$ price membership or pay full dues. If they pay full dues, they would get an additional trip for a young scientist (a total of 2 each year). If after 9 years they don't pay full dues, even with these special incentives, they would become non-voting and would only get one paid trip to the General Assembly.

- III. IUPAP will support, at the \$15K level, one international workshop each year in a Category B country. This will be done on a competitive basis.

- IV. Current member countries that fall into either category B or C will be eligible for a three-year period for the benefits of \$1000 for a young (45 years or younger) scientist to attend an IUPAP sponsored conference each year and for the opportunity bid to host the international workshop.