



Newsletter

APRIL 2015

Foreword by President of International Union of Pure and Applied Physics

We are celebrating the 2015 move of the IUPAP office to Singapore by producing a newsletter to keep IUPAP members and friends informed about our activities.

This first newsletter after our 2014 General Assembly concentrates on the outcomes of that GA, telling you about the important decisions made there --- the new Executive Council, the new Commissions and the Resolutions passed.

Briefly, it is the job of IUPAP to assist in the worldwide development of physics, to foster international cooperation in physics, to sponsor suitable international meetings, to foster free circulation of scientists, and to help in the application of physics toward solving problems of concern to humanity. Most of this work is done by its Commissions and its Working Groups. Commissions are particularly responsible for supporting international cooperation in physics, and suitable international meetings relating to their subset of physics. Working groups focus on topics that need international and often interdisciplinary cooperation to advance the subject.

I want to draw your attention to the resolutions creating Advisory Working Groups on Accelerator Physics and on Soft Matter Physics. It is possible that one or both of these initiatives will, in time, lead us to the creation of a new Commission. In 1996 IUPAP created C20, the Commission on Computational Physics, and no new Commission has been created since then, a gap of 18 years. However in the 18 years from 1945 to 1963, nine of our present Commissions were established, and others renamed, and reorganised as IUPAP manoeuvred to cope with the explosive development of physics and its disciplines. Are we now entering a similar period of expansion and reorganisation?

Every new President thinks about how to improve IUPAP. One of my thoughts is that we should be paying more attention to the "Applied" in our title, and improving how we represent applied physics. I discovered that this is not a new idea. In 1987 at the 19th General Assembly, the IUPAP President Larkin Kerwin said that "We are, after all, the International Union of Pure and Applied Physics, and, in the past, we have tended to forget the applied part of our mandate". That General Assembly went on to undertake various actions to give more emphasis to applied physics. Thirty seven years later little effect of those actions remains. Can we now do something more effective?

I urge you to write to me with your suggestions on this, and on any other matter connected to IUPAP.

IUPAP Office – SINGAPORE

As you will have seen on the IUPAP website, the administrative office of IUPAP moved from London to Singapore on 1st January 2015.

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IUPAP, c/o Institute of Advanced Studies, Nanyang Executive Centre #02-18, 60 Nanyang View, Singapore 639673.

Currently we are sharing the office space with the Institute of Advanced Studies but the Nanyang Technological University has agreed to provide us with our own office space in the near future.

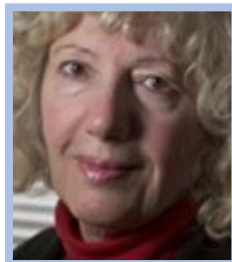
We sincerely thank the President of Nanyang Technological University, Professor Bertil Anderson and our Secretary General, Professor KK Phua, who is also the Director of the Institute of Advanced Studies for their generous support of the establishment of our Singapore office.

IUPAP Executive Council: Officers 2014-2017



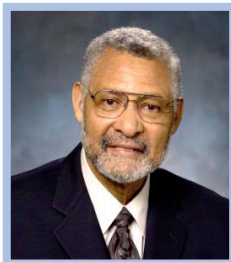
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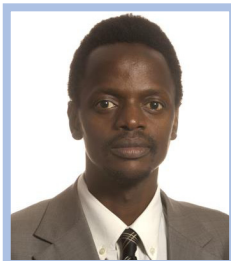
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Vice-Presidents Elected from the Commission Chairs



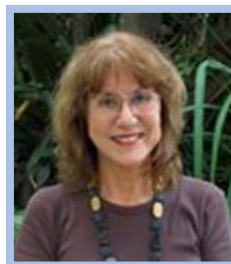
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An appreciation of the work of Alan Astbury (1934 – 2014)



Alan Astbury, the 22nd President of the International Union of Pure and Applied Physics, died on 21 July 2014 after a brief illness. Alan was our President from 2005 to 2008. Before then he had been the President Designate (2002 to 2005), and afterwards the Past President (2008 to 2011).

During his Presidency, Alan worked hard to introduce and implement new initiatives in IUPAP. He was very keen to ensure that as many countries as possible enjoyed the benefits of physics, and embraced IUPAP. Therefore he began a scheme for introducing new members gradually into IUPAP, and enlisted 11 additional members. Alan initiated the IUPAP Young Scientist Medal and Prize. 119 Young Scientist Medals have been awarded by the IUPAP Commissions and Associated Commissions from 2006 to 2014. They are an important recognition of the next generation of excellence in Physics, provide valuable publicity for IUPAP and constitute

a long-lasting tribute to Alan's memory.

Alan also worked to make sure IUPAP was using the talents of women physicists to the full. He strongly supported the work of our Working Group 5 on Women in Physics, and he pushed for an increased representation of women on our Commissions and our Executive Council.

After a PhD from Liverpool (UK) and Post-Doctoral work at Berkeley, Alan held appointments at the Rutherford Laboratory, Victoria University (Canada), and as Director of TRIUMF before returning to Victoria University. He worked extensively at CERN, as a co-spokesperson of UA1 and a contributor to the LHC and ATLAS. He was a Fellow of the Royal Society and the Royal Society of Canada. His work was further recognized by the award of the Rutherford Medal of the Institute of Physics, the Lifetime Achievement medal of the Canadian Association of Physicists, and the British Columbia Science Council Career Achievement Award.

Both the current President of IUPAP and his predecessor were persuaded to become involved with IUPAP by Alan. He set us a strong example by his commitment to the Union. And he was always willing to provide wisdom and advice to us, even after his retirement from the Executive Council in 2011. This continued until shortly before his death.

We celebrate his achievements but we will miss his wise counsel.

IUPAP Resolutions of the 28th General Assembly (Nanyang Technological University, Singapore, 5 - 7 November 2014)

For more details on each resolution go to: <http://iupap.org/wp-content/uploads/2015/04/28th-GA-Resolutions.pdf>

- Resolution 1.** IUPAP Dues for 2015 to 2017
- Resolution 2.** Increases in Shares
- Resolution 3.** Commission on Policy and Finance
- Resolution 4.** Preliminary Endorsement of Conferences
- Resolution 5.** Extension of the Mandate of Working Groups
- Resolution 6.** IUPAP Associated Organisations
- Resolution 7.** Commission C17 Laser Physics and Photonics
- Resolution 8.** Advisory Working Group on Soft Matter
- Resolution 9.** IUPAP Prize for Outstanding Contributions to the Improvement of Physics Research and/or Education in one or more Developing Countries
- Resolution 10.** Open Data resolves
- Resolution 11.** Working Group 12 on Energy
- Resolution 12.** Advisory Working Group on the Newtonian Constant of Gravitation
- Resolution 13.** Advisory Working Group on Accelerator Science
- Resolution 14.** Working Group 5 on Women in Physics

Young Scientist Award 2015

The Young Scientist Prize is granted by IUPAP Commissions. Successful candidates will have up to 8 years of research experience following Ph.D. (excluding career interruptions). Each commission can give up to three awards over three years (these can be one per year or all three awarded together). The award consists of a certificate, medal and a monetary award. A presentation will take place at an international conference sponsored through the commission.

The Commissions are currently seeking nominations for Young Scientists Prizes in Plasma Physics (closing 30th April) and Astrophysics (closing 30th June). See <http://iupap.org/news/> for up to date information.

Dr Nicolas Yunes (AC2)

For his wide-ranging and important contributions to the field of gravitational wave astrophysics.

Dr Keji Lai (C10)

For his outstanding contribution in nanoscale impedance imaging of strongly correlated and low-dimensional quantum materials.

Dr Marius V Costache (C9)

For the development of new methods to excite and detect on-chip ferromagnetic resonance and new detection schemes for the magnon-drag effect.

Dr Masamitsu Hayashi (C9)

For the pioneering work on domain wall dynamics in magnetic nanowires and contributions to the development of current controlled magnetism in magnetic heterostructures using spin orbit effects.