

## current events

This section carries events of interest to the synchrotron radiation community. Works intended for this section should be sent direct to the Current-Events Editor (s.s.hasnain@liv.ac.uk).

### The Journals' Commission celebrates 60 years of *Acta Crystallographica*

The Commission on Journals, the largest commission of the IUCr, met on 20–22 August in Osaka prior to the 21st General Assembly and Congress. This year the commission meeting was particularly special as it marked 60 years since the first volume of *Acta Crystallographica* was published and 40 years since the launch of the *Journal of Applied Crystallography*. With this issue, the *Journal of Synchrotron Radiation* also enters its 15th year since its first publication on 1 November 1994. There was a clear sense of achievement with clear goals, objectives and challenges which lie ahead for maintaining leading positions of the journals and serving the community on a very wide front of science disciplines. One obvious achievement was through the ISI impact factors of journals when, in 2007, four of the top six positions in crystallography were occupied by IUCr journals. *Journal of Applied Crystallography* was the highest ranked IUCr journal with an impact factor of 3.63, with *Journal of Synchrotron Radiation* being second with an impact factor of 2.98. *Journal of Synchrotron Radiation* also occupied second place in the Instruments and Instrumentation category behind *Applied Spectroscopy Reviews* and well ahead of *Nuclear Instruments and Methods*, whose impact factor was 1.11 in 2007. The *Journal of Synchrotron Radiation* occupied fourth place in the Optics category ahead of *Physical Review A* (2.89), *Journal of the Optical Society of America B* (2.03) and *Applied Optics* (1.7). The average publication time during this period has been reduced, falling from 6.5 months in 2004 to 5.0 months in 2007.

Denny Mills, one of the main editors of the *Journal of Synchrotron Radiation* who retired from the journal after the General Assembly, emphasized the achievements of the journal and its unique standing in the expanding synchrotron radiation community. He also described how well placed the journal was to serve the evolving communities of the fourth-generation light sources including free-electron lasers.

A detailed report on the commission meeting is given at <http://www.iucr.org/news/meeting-reports/21st-iucr-congress/commission-on-journals-satellite-meeting>.



Delegates of the Commission on Journals during their meeting in Osaka.

### Sine Larsen elected as President of the IUCr

Professor Sine Larsen became the second directly elected lady President of the IUCr at the General Assembly in Osaka on 28 August 2008. The previous directly elected female President, Dorothy Crowfoot Hodgkin, a Nobel Prize winner in Chemistry in 1964, was elected as the President at the General Assembly held in Japan in Kyoto in 1972. (Just before the Seventh General Assembly in 1966,



Sine Larsen with her husband are flanked by some of the past presidents of the IUCr. From right to left: Phillip Coppens (1993–1996), Henk Schenk (1999–2002). On the far left is Andre Authier, the President in 1990–1993 during the period where detailed discussions for the launch of *Journal of Synchrotron Radiation* took place.

the then President, J. D. Bernal, resigned for reasons of health. Vice-President Dame Kathleen Lonsdale assumed the office of President until the close of the Seventh General Assembly.) It is interesting to note that both directly elected female Presidents were appointed at the General Assemblies held in Japan.

Sine Larsen is currently a Director of Research at the ESRF in Grenoble, France, and is a Professor of Structural Chemistry at the University of Copenhagen, Denmark. Sine has served the IUCr over an extended period and is well known in the wider crystallographic community. She took over responsibilities of General Secretary and Treasurer when Asbjorn Hordvik, a strong supporter of the *Journal of Synchrotron Radiation*, died suddenly in 1995. She served the IUCr in this important capacity for ten years. Peter Colman from Australia and Sven Lidin from Sweden were elected unopposed as Vice-President and General Secretary and Treasurer, respectively.

### IUCr celebrates 60th anniversary of its first General Assembly

The 21st General Assembly in Osaka was also the occasion to celebrate the 60th anniversary of the first Congress and General Assembly that was held at Harvard University, Cambridge, MA, USA, and where its first Executive Committee was elected. At its first



Professor Yuji Ohashi, President of IUCr (2005–2008), and Michael Dacombe, Executive Secretary of IUCr, celebrating the occasion.

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**Table 1**

IUCr Commissions which impact the synchrotron radiation community.

Biological macromolecules	Synchrotron radiation	XAFS	Small-angle scattering
<b>Members</b>	<b>Members</b>	<b>Members</b>	<b>Members</b>
E. Arnold (Chair, USA) E. Garman (UK) R. C. Garratt (Brazil) P. L. Howell (Canada) M. Jaskolski (Poland) J. Martin (Australia) M. Martinez Ripoll (Spain) A. D. Podjarny (France) V. Samygina (Russia) Xiao-Dong Su (China) T. C. Terwilliger (USA) D. Turk (Slovenia) A. H.-J. Wang (Taipei)	S. Wakatsuki (Chair, Japan) S.-L. Chang (Taipei) R. Garrett (Australia) H. Graafsma (Germany) P. Grochulski (Canada) J.-L. Hodeau (France) G. N. Kulipanov (Russia) P. L. Lee (USA) C. Nave (UK)	I. Ascone (Chair, France) K. Asakura (Japan) F. Boscherini (Italy) C. T. Chantler (Australia) P. Glatzel (France) B. Hedman (USA) F. Jalilehvand (Canada) Y.-L. Soo (Taipei)	J. S. Pedersen (Chair, Germany) A. Allen (USA) A. Benedetti (Italy) P. R. Jemian (USA) R. Serimaa (Finland) J. Trehwella (USA) V. V. Volkov (Russia) N. Yagi (Japan)
<b>Consultants</b>		<b>Consultants</b>	<b>Consultants</b>
J. M. Guss (Australia) R. Hilgenfeld (Germany) K. Miki (Japan) D. M. Salunke (India)		G. Azevedo (Brazil) S. S. Hasnain (UK) M. Merz (Germany) A. M. Molenbroek (Denmark)	Y. Amemiya (Japan) G. Kostorz (Switzerland) D. I. Svergun (Germany) P. Thiyagarajan (USA) I. Torriani (Brazil)

General Assembly, Sir Lawrence Bragg was elected as the President of the Union. For detailed listing, readers are referred to <http://www.iucr.org/iucr/history/previous>.

### New memberships of the IUCr's commissions which impact the synchrotron radiation community

The General Assembly also saw much activity from its commissions including presentations to the whole community in open sessions. In addition to the Commission on Journals, there are four commissions which directly impact the synchrotron radiation community. Details of these commissions are given in Table 1 above. Our congratulations go to all the new Chairs and members of these and other commissions. We look forward to reporting their activities during the period before the next General Assembly.



Alfons Molenbroek (left), the past Chair of the XAFS Commission, handing over the Chair to Isabella Ascone (SOLEIL).

### UK agrees to contribute to the construction of an end-station at the LCLS

The agreement to collaborate was formalized by a Memorandum of Understanding (MoU), signed on 26 September by Professor John Beddington, Chief Scientific Advisor to HM Government, on his visit to the Stanford Linear Accelerator Center (SLAC). The MoU documents the intent between UK's Science and Technology Facility

Council (STFC) and SLAC to work together to enable the exploitation and expansion of the scientific capabilities of the Linac Coherent Light Source (LCLS). STFC has agreed to contribute to the construction of an end-station of the LCLS, designed to look at matter under extreme conditions, such as material at the extremes of temperature and density similar to those found in the interior of large planets. In return, research scientists from across the UK will have access to valuable research time on the LCLS. The LCLS will be the world's first hard X-ray free-electron laser, producing ultra-fast pulses of X-rays more than a billion times brighter than even the most powerful existing synchrotron sources. Of the MoU, Professor Beddington said "STFC and SLAC are both world leaders in the development and operation of user facilities for the chemical, materials and biological sciences and have made key contributions to our understanding of atoms and electrons in advanced materials. Both organizations are committed to the exploration of the extraordinary scientific capabilities that a hard X-ray free-electron laser will offer. STFC's intention to collaborate will secure UK scientists with invaluable access to LCLS, and will further allow STFC and SLAC to build on their respective strengths, paving the way for ground-breaking research on this exciting world-leading facility."



John Beddington (right) and Persis Drell (Director of SLAC) sign the Memorandum of Understanding at SLAC.

Professor Justin Wark, Chief Scientist, STFC Photon Science Research Institute, said ‘This is a particularly exciting time for STFC and research scientists across the UK and we are looking forward to working with SLAC. Our contribution to LCLS will also allow the UK to gain valuable experience in advance of the European X-ray Free-Electron Laser (XFEL) in Hamburg, which is expected to begin operation in 2014.’

### Community celebrate Max Perutz Chair of Molecular Biophysics

The structural biology community from the UK and abroad gathered on 26 September at the University of Liverpool to celebrate the establishment of the Max Perutz Chair of Molecular Biophysics. This first Chair, named after one of the most well known personalities of structural biology, brought a lot of pride among the delegates who had travelled far and wide from California to Sao Carlos to China, and also to the university and the author himself. The day’s proceedings were opened by Ole Peterson, Vice-President of the Royal Society, who, in addition to welcoming the delegates, outlined some of the biomedical research undertaken at the University of Liverpool. Robin Perutz, a Professor in Chemistry and the only son of Max Perutz, delighted the audience by sharing his upbringing *via* an engaging presentation entitled ‘Growing up with molecular structure’. This was followed by a talk by Richard Henderson, who was the Director of the MRC Laboratory of Molecular Biology (LMB) for ten years from 1996. He described how LMB was shaped by Max Perutz as a caring laboratory where he instilled the culture of taking



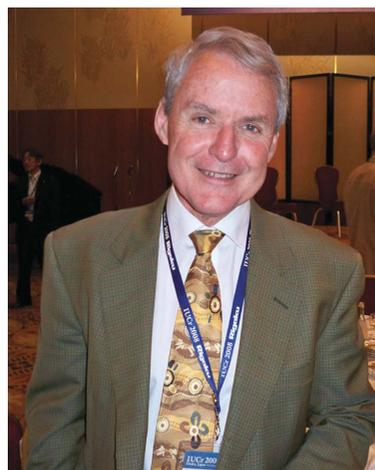
Delegates at the Max Perutz Chair of Molecular Biophysics Symposium. Robin Perutz is third from the left in the front row.

interest in other peoples’ work and surrounding oneself with high-quality people. Other speakers included Tom Blundell, Louise Johnson, Kyoshi Nagai, Robert Eady, John Collinge, Roger Fourme, Keith Hodgson and the author himself. For many of us it became an event to cherish.

### Colman wins Victoria Prize

Peter Colman, the recently elected Vice-President of IUCr, has won this year’s Victoria Prize, recognizing his structural work which led to the development of the anti-flu drug Relenza. Colman and his colleagues published the structure of neuraminidase in 1983. ‘Our very first description of the structure was done using a laboratory source of X-rays’, said Colman. It was not until he and his colleague Jose Varghese turned to the more powerful light sources offered by synchrotrons in Germany and Japan that the structure was fully solved in the mid-1980s. The synchrotron brought speed and volume. The technology to freeze crystals had not yet been developed, so researchers just had to take as many pictures as possible before the crystal dissolved. ‘We could collect more data from a single crystal on the synchrotron than in the lab, so there were fewer errors’, Colman said.

The structure of neuraminidase provided the researchers with a clear picture of the changes to the protein when the virus underwent its periodic mutations, and they realised that there was one tiny cleft in the virus that did not change from mutation to mutation. This was the catalytic site of the protein and it became the target for rational drug design.



Peter Colman celebrating his Victoria Prize and election to the Vice-President of IUCr.