Open Commission Meetings

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Overview of IUCr journals

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The end of the triennium marks 60 years of publication of IUCr Journals, and a special issue to highlight this event has been published in Acta Cryst. A. The continued success of the Journals is based on many outstanding contributions of numerous members of the large, but highly interactive community of crystallographers as authors, referees, editors and Co-editors, supported by a competent and dedicated technical staff at Chester. Currently, about 150 section editors or Co-editors and 12 technical editors work for the Journals.

The number of expert referees can only be guessed, and their confidential work deserves highest appreciation. The last triennium has seen a major increase in the number of pages published in IUCr Journals, up from 31521 in the previous triennium to 48261. This increase has largely been driven by the expansion of Acta Cryst. E and the launch of Acta Cryst. F. Online submission is now almost exclusively used and this has helped to keep publication times low across the Journals. The Journals continued to be highly cited in crystallography; the highest impact factors recorded during the triennium were 5.4 for Acta Cryst. B and 5.25 for J. Appl. Cryst.

Ethics in science publication and open access have been topics of general concern during the triennium. All submissions to Acta Cryst. C and E are now routinely checked for duplication against the crystallographic databases, and the Journals also took part in a plagiarism pilot run by CrossRef. The hybrid open-access option introduced for authors in 2004 has become increasingly popular, and at the end of the triennium Acta Cryst. E was made into a full open-access journal. Current concerns and plans will be presented, and there will be ample time for the discussion of points raised at the session.

Keywords: journals publishing, IUCr journals, Commission on Journals

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Acta Crystlographica section A: Foundations of crystallography

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Acta Crystallographica Section A reflects the gradual change of topics in crystallographic research. Classical topics such as direct methods of crystal structure determination and more recently electron crystallography, aperiodic crystals, diffuse scattering, or charge-density work gradually move to applications. Novel structure determination is now more connected with single particles and hybrid I/O methods. 40% of the papers may now be classified as mathematical, including topology and graphs for crystal chemistry, twinning and grain boundaries, and symmetry. Occasional papers on surface diffraction, nanostructures, polarized neutrons and databases complement the broad range of topics. Competing journals such as Ultramicroscopy are usually not in the domain of chemistry. This gradual change in orientation has resulted in a loss of volume of about 100 pages, or 10 research papers (510 pp. and 47 papers in 2007) with respect to the preceding triennium, but this trend now seems to have levelled off. The impact factor of 1.68 for 2006 is near the average of the past 9 years. Section A is an attractive journal, but its eclectic range of papers calls for measures to increase its visibility. To this end, Section A has published special issues on Phase Transitions I (D. Pandey, 2005), the MaThCryst Summer School on Mathematical Crystallography (M. Nespolo, 2006) and the issue 60 years of Acta Crystallographica and the IUCr (H. Schenk, 2008). Lead Articles and Topical Reviews have been published on time-resolved X-ray diffraction, ‘forbidden’ resonant reflections, and diffraction with a coherent X-ray beam.

Keywords: Acta crystallographica section A, IUCr journals

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Acta crystallographica section B: Structural science

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During the triennium 2005-2007 Section B of Acta Cryst. published 2808 pages that included 303 full Research Papers, 9 Short Communications, and 2 Feature Articles. The ratio of papers that discussed inorganic and molecular compounds rose from ca. 1:2 to 1:1 during the triennium, but that ratio has varied enough over the years that the existence of a trend is still somewhat uncertain. The widely publicized ‘impact factor’ that measures the short-term citation rate, rose rapidly (from 2.0 to 5.4) during the previous triennium because of citations to articles in the 2002 special issue on databases. That index dropped to more normal levels after citations to 2002 papers were no longer counted. The value in 2006 was 2.2. The strength of Section B is in the quality and durability of its articles rather than in their short-term impact. All those connected with the journal are very pleased with the quality of the papers being published. The average length of a full paper in Section B has remained near nine pages for years, but the amount of information included in each paper continues to rise. Papers reporting structures of more than five different compounds are not unusual. Neither are papers in which a structure is studied in detail as the crystal goes through a phase transition or undergoes a chemical reaction. Studies of incommensurately and commensurately modulated structures are common. Several methodological papers have appeared that will probably be well cited for years. The electronic links between the office in Chester and the Co-editors work so well that we take easy communication and sharing of files for granted. We are all very indebted to the Chester staff who keep improving the system and who do so much to make the page layouts attractive.

Keywords: Acta crystallographica section B, IUCr journals, structural science

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Acta crystallographica section C: Crystal structure communications

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While Acta Crystallographica Section E: Structure Reports Online, recently became an open access journal, Acta Crystallographica Section C: Crystal Structure Communications continues the tradition