

SHELX makes an impact

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The recent release of Thomson Reuters' *Journal Citation Report* for 2009, reporting an impressive impact factor of 49.9 for *Acta Crystallographica Section A: Foundations of Crystallography*, has excited much comment amongst crystallographers. The primary cause of this high impact factor is a single feature article by George Sheldrick, *A short history of SHELX* [*Acta Cryst.* (2008), **A64**, 112–122]. Published in a special issue to celebrate 60 years of *Acta Crystallographica* and the IUCr, it gives an account of the development of the *SHELX* system of computer programs from 1976 to date.

Journal impact factors

In a given year, the impact factor of a journal is the ratio of the average number of citations to those papers that were published during the two preceding years.

For *Acta Cryst. A*, the calculation was as follows:

- Total number of citations in 2009 to items published in 2007 and 2008 (*A*) = 6091
- Total number of papers published in 2007 and 2008 (*B*) = 122
- Impact factor = $A/B = 6091/122 = 49.926$

At 49.9, the impact factor of *Acta Cryst. A* is the second highest impact factor for a scientific journal for 2009, with only *CA-A Cancer Journal for Clinicians* scoring higher.

Acta Cryst. A covers theoretical and fundamental aspects of the structure of matter. It is the prime forum for research in diffraction physics and the theory of crystallographic structure determination by diffraction methods using X-rays, neutrons and electrons.

The *Journal Citation Report* showed that the other IUCr journals continue to perform strongly within the crystallography category.

The article has provided the crystallographic community with a citable reference when one or more of the programs, amongst the most widely used in structure determination, are employed in the course of a crystal structure study. Most citations have been made by small-molecule crystallographers, but citations have also come from articles reporting the structure of biological macromolecules.

Until the publication of this article, the programs in the *SHELX* package were typically referenced by citing the unpublished computer programs themselves. The total number of citations in the Thomson Reuters statistics (6653 by the end of June 2009 – by any measure a significant achievement) is, of course, dwarfed when the total number of articles that have cited the unpublished programs is considered. A search of **Crystallography Journals Online** shows that over the years more than 43 000 articles published in IUCr Journals alone have referenced *SHELX* programs.

This article and its citations will be considered in the impact-factor calculation for *Acta Crystallographica Section A* this year and next year. The journal impact factor that will be reported in 2012 is therefore likely to return to a more normal level of about 2.0–2.5.