

Principal of Stirling University, Professor Andrew Miller, both well-known fibre diffractionists. Remember not only that your poster could win a large cash prize (1st Prize - £100; 2nd Prize - £50), but also that abstracts will be included in the 1999 *Fibre Diffraction Review* - your work will automatically be available to a worldwide audience on the web. As usual, there will be bursaries available for students and young scientists to attend the 1999 Workshop. Details of all these are given at the end of the Newsletter.

CCP13, its Newsletter and its Friends Overseas

Your Contribution

Interested groups or individuals are invited to contact any of the officers of CCP13 to obtain information about CCP13 Workshops, software developments, software standards and so on. Offers of home-written software that could be incorporated into the new CCP13 suite of programs would be much appreciated and will, of course, permanently carry the author's attribution. Make sure that you are on the CCP13 mailing list and you will be kept informed.

International Cooperation

Although these CCPs are UK funded projects, there is a very strong interest in making them international

through cooperation with interested scientists in other countries. A natural link for CCP13, for example, exists with the Special Interest Group (SIG) in Fibre Diffraction of the American Crystallographic Association and possibly with some American synchrotron users (CHESS). Others exist with the ESRF at Grenoble and with the Photon Factory in Japan.

Newsletter Editorial Policy

Articles for inclusion in *Fibre Diffraction Review* are welcome by the Editor at any time, but preferably items for the December 1999 issue should arrive before the end of November 1999. It is hoped that *Fibre Diffraction Review* will become an annual 'essential' for fibre diffractionists. This is the place to advertise your fibre diffraction or NCD meetings, to report on new software or 'hot' results obtained using the CCP13 or other fibre pattern processing suites and to provide reports of meetings of interest, preferably together with one or two photographs. All technical articles will be scrutinised both for scientific content and presentational style by the Editor (or his nominee) together with at least one other member of the CCP13 Steering Panel. In this way we hope to maintain high standards. Remember that the Newsletter not only goes to other fibre diffractionists, but also to various members of the Research Council Secretariats and to other funding agencies.

Fibre Diffraction Featured on Covers of IUCr Publications

Fibre diffraction has recently received increased exposure in the crystallographic community, being featured on the covers of two IUCr (International Union of Crystallography) publications.

The May (Vol. 6, No. 2) 1998 issue of the IUCr Newsletter featured work from Keiichi Namba's laboratory (International Institute for Advanced Research, Japan) on the structure of bacterial flagellar filaments. This work (see *Nature Structural Biology*, 5, 125-129, 1998) describes X-ray fibre diffraction data from the left and right supercoiled states of the flagellar filament, and the 9Å structure

of the R-type filament. Bacteria swim using the rotating filaments, and bacterial motility involves switching between the left and right states. An editorial on fibre diffraction, as well as a report on the Third Fibre Diffraction Workshop, held in Kentucky in October 1998, appeared in the same issue.

The 1999 issues (Vol. 55) of *Acta Crystallographica Section A* feature work from Rick Millane's (Purdue University, USA) laboratory on diffraction by disordered polymer fibres. This work (see *Acta Cryst. A* 52, 812-829, 1996) describes theory and

methods for calculating fibre diffraction patterns from polycrystalline fibres in which there are quite general and complicated forms of disorder. The

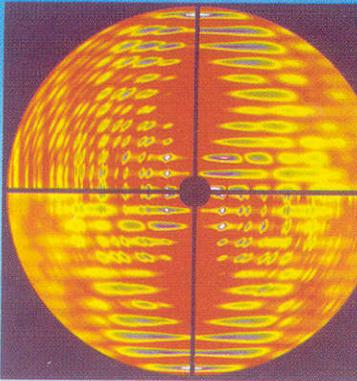
methods are used to analyse the disorder present in two polynucleotide fibres.

Rick Millane, Purdue University

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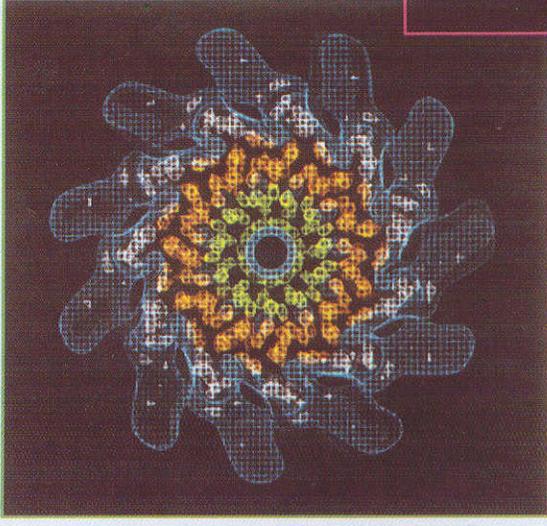
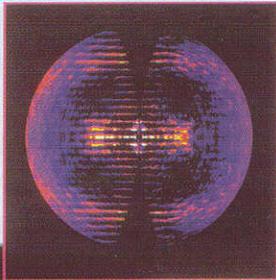


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NEWSLETTER
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**Fabulous
Flagellar
Filament
Fibers**



American Crystallographic Association Annual Meeting, Arlington, Virginia, 23rd July 1998

The Special Interest Group session, *The state of the art in fibre diffraction* was held on the final day of the ACA annual meeting in Arlington, Virginia. The session was organised and introduced by Gerald

Stubbs (Vanderbilt), who described the range of fibre diffraction experiments and current difficulties with weakly scattering samples, the short data collection times required for time-resolved experiments and the