

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.

### 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.

### Retirements and New Elections

At the 1995 Annual Meeting, Trevor Forsyth and Mike Ferenczi were re-elected as committee members and Tim Wess was elected in place of Keith Meek who retired. The services of Keith during the start up phase of CCP13 have been much appreciated and it is a pleasure to record our thanks to him for his interest and enthusiasm.

Please note that the periods of office of John Squire (Chairman), Geoff Mant (Secretary) and Manolis Pantos (committee member) will finish at the May 1996 Meeting. Any nominations for election to these posts should be sent to the CCP13 Secretary, Dr. Geoff Mant before the May meeting. All three people are willing to continue in these roles for a further 3 year period. Elections will be held at the business meeting at the CCP13/NCD Annual Workshop in May, 1996.

John Squire

**IF YOU ARE A FIBRE DIFFRACTIONIST STUDYING SYNTHETIC OR BIOLOGICAL POLYMERS. THIS CCP IS FOR YOU. PLEASE HELP TO MAKE IT WORK!**

### **ACA MEETING - MONTREAL - JULY 23-28, 1995**

The 1995 version of the annual ACA Meeting was held in the well-appointed Palais des Congres in Montreal, Canada. I was there as part of the session organised by the Fibre Diffraction 'Special Interest Group' (SIG) of the ACA. This was my first visit to Montreal and I had not realised until I got there quite how French it is. Although I soon realised that most people speak English, it obviously was diplomatic to exercise, at least initially, a little of the rather rusty schoolboy French that still remained. Fortunately I arrived in Montreal a day before the meeting started and was able to enjoy some of the splendid sites in this beautiful city, including a very pleasant, albeit short, cruise along the St. Lawrence River.

The Fibre Diffraction SIG meeting was divided into four sessions and was a good mix of synthetic and biological polymer work. Speakers or co-authors included some old friends from CCP13 meetings such as H. Zachmann, Watson Fuller, Alan Windle and Bill Stroud, together with some key US fibre diffractionists such as Gerald Stubbs, Rick Millane, Tom Hendrixson, John Blackwell, R. Chandrasekaran and Dan Kirschner. Another old

friend, Don Caspar, also appeared in the audience for some of the sessions. Although it was a relatively small meeting for fibre diffractionists, many of the talks were very interesting and useful and it was certainly good to renew old contacts and to make new ones. At the same time, some other parallel sessions (e.g. on small-angle scattering, neutron scattering and macromolecular structure) brought other friends to Montreal, including Trevor Forsyth in the neutron scattering session.

This was the centenary ACA meeting of the discovery of X-rays by Röntgen, so one of the sessions paid tribute to the importance to all of us of this discovery. It was also the first ACA meeting since the deaths of two great crystallographers, Dorothy Hodgkin and Linus Pauling, so on the Tuesday evening there was a special tribute to them and to the enormous contributions that they made to the subject. Some of the families and long time friends of these two scientific giants were there and made their own contributions, the whole session being both fascinating and, at times, very moving.

As a general comment on my assessment of the fibre diffraction part of the meeting, it was very clear that even on an international scale the fibre diffraction community is relatively small compared with, say, our macromolecular crystallography colleagues. On the other hand, we still have a great deal to learn about getting our act together, about cooperating and informing each other of what is going on and in making sure that internationally we really are a community. Of key importance for the good of our subject is

therefore the need not only to advertise organisations such as CCP13 as widely as possible, something that I tried to do, of course, in Montreal, but also for CCP13, the ACA SIG and other groups in other countries to coordinate their efforts in some way in order to promote as fully as possible what is a very important area of study.

John Squire

### 4th Annual CCP13/NCD Workshop

The fourth annual workshop for the collaborative computational project for fibre diffraction (CCP13) and non-crystalline diffraction (NCD) was held at Daresbury on the 9th-11th of May attracted 75 participants. The meeting was partially sponsored by Q-Associates, Siemens and Organised Computer Systems.

To reflect the joint nature of the workshop a diversity of topics, including synthetic polymers, hardware sources and detectors, software developments and biological systems, were covered. Each session began with an eminent keynote speaker, followed by presentations from specialists in the field, which included participants from not only the UK but also Belgium, France, Germany, Holland and the USA. A new feature this year was a series of short presentations (no more than 3 minutes), by students, on the content of their posters. The talks were complemented by a poster session and a commercial exhibition by the sponsors Q-Associates, Siemens and Organised Computer Systems.

After the Chairman's introduction G.Zachmann (Hamburg) opened the polymer session by giving a general introduction to polymers, before going on to describe work on spinning/extrusion of polypropylene, SAX/WAX studies of polyvinylidene fluoride, liquid crystalline polymer dislocations studied on the micro-focus beamline at the ESRF and grazing incidence (30Å depth into layer) studies of PET films. B.Komanschek (Daresbury) then described the current facilities, for polymer studies, available at the SRS, primarily on stations 8.2 and 16.1. A.Ryan (UMIST) described his latest work on the time resolved SAX/DSC crystallisation block copolymers, in particular PBO-PEO and PEE-PE head to tail polymers where only half crystallises. R.Cameron concluded the session with a talk on the phase transitions of natural polymers studied by

simultaneous SAX/WAX with particular emphasis on Poly(hydroxybutyrate) which is a biodegradable polymer which has semi-crystalline morphology (spherulite).

Individual short presentations were made by Georgina Bryant, Mike Ewell, Patrick Fairclough, Steve Naylor, Catherine Miles, V. Balaguraswamy, Richard van Gelder, Andy Hammersley, Mark Boehm and Alun Ashton. Tuesday evening was concluded with dinner, poster viewing and judging, the commercial exhibition and a wine reception.

The second day commenced with another keynote presentation from H.Reynaers (Leuven) on the morphology of bulk and oriented tri-block copolymer gels in which he described the changes in the structure on stretching from a spherical to layered form. G.Tiddy (Salford) then described a study of lyotropic liquid crystals which are used in vast quantities in the surfactant industry. E.Pantos (Daresbury) went on to discuss his recent work on gel transformations studied by SAXS, SANS and NMR and the simulation of the processes using fractals.

After coffee, P.Lindley (Daresbury) outlined the current status of the SRS, the state of NCD research with respect to Council funding, the strategy for Diamond and the interim SRS upgrade and detector development plan. R.Lewis (Daresbury) then discussed the status of the area detectors and the problems of the detector wire modulation, the first operational experience with the multiwire detector, and the progress towards "RAPID". This talk was complemented by J.Harford (Imperial College) who described the recent work on the time resolved X-ray study of fish muscle using the 1D multiwire detector with 1ms time resolution and 1mm resolution across the equator. E.Towns-Andrews (Daresbury) continued the hardware theme with a talk on recent results