

beams down to  $2\mu\text{m}$ , small enough to examine cellulose microfibrils in native flax. There was also an interesting presentation on Fruit Fly muscle by Tom Irving using his beamline at the APS in microfocus configuration. Dmitri Svergun presented some very interesting analysis on solution scattering work carried out at the ESRF utilising newly developed software. Veronica James, who spoke about her work on using hair as a marker for breast cancer and insulin dependent diabetes, presented the most radical lecture of the meeting. A lively discussion was held after the presentation on the merit of the work, which included contributions from the floor of the meeting from others that study the subject.

On the Wednesday of the meeting the plenary session was given over to a tribute to Paul W. Schmidt with

contributions given by colleagues and friends during his distinguished career. Prof. John Squire gave a "virtuoso" performance giving the conference lecture. "Movements in a Molecular Symphony - Diffraction Probing of Nature's Linear Motor" was a very enjoyable combination of science and music. The classical music was an agreeable addition to the 3-D images, which made understanding the structural complexities of muscle much easier.

The final news item from the conference is the contest for the location of the next SAS meeting. In a "not-so-close" contest with the ESRF, the Italian party from TRIESTE won the right to host the next SAS meeting in Venice in August of 2001.

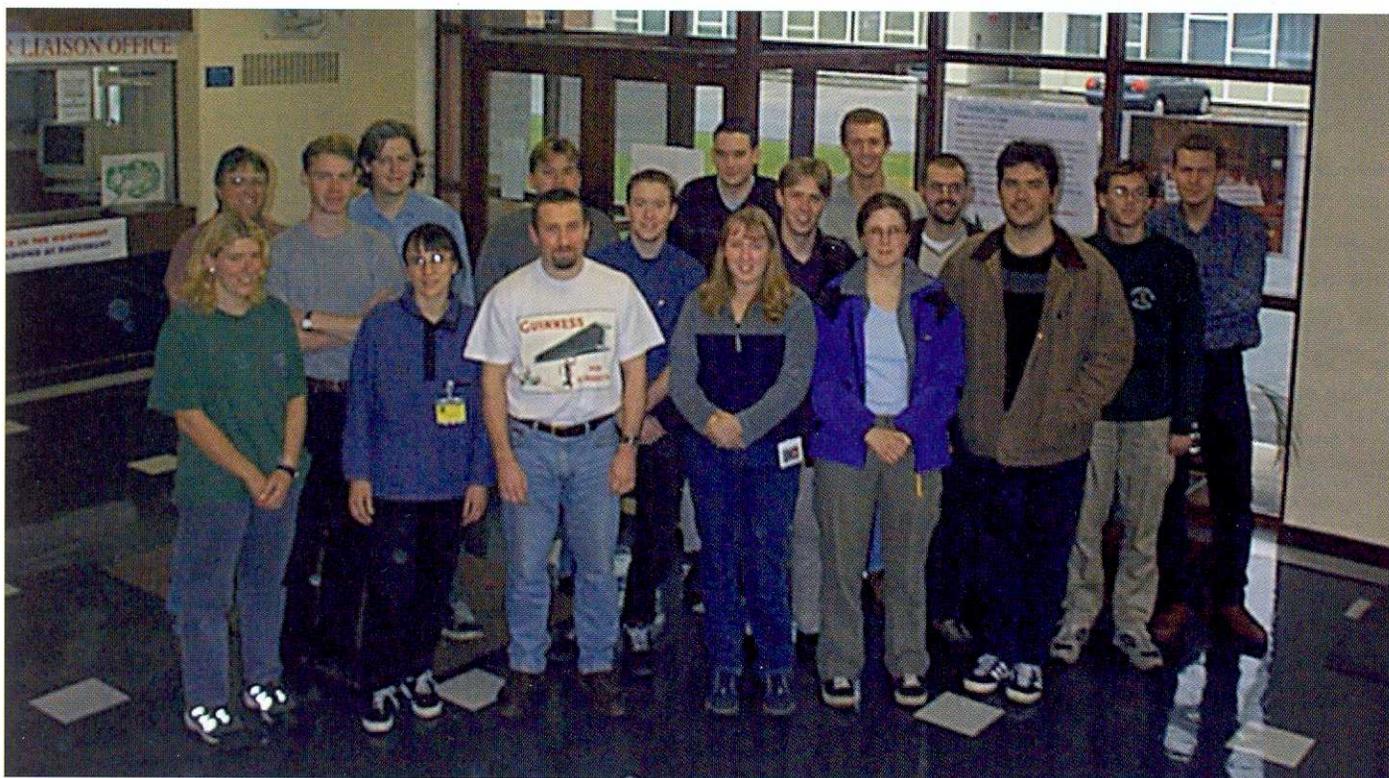
Nick Terrill  
Daresbury Laboratory

### CCP13 and NCD Training Workshop, 23rd-24th November 1999, Daresbury Laboratory

A training workshop was held at Daresbury Laboratory on 23rd-24th November, 1999, to demonstrate data collection and analysis in fibre diffraction and non-crystalline diffraction experiments. This workshop was targeted primarily at new PhD students and post-doctoral researchers who were unfamiliar with fibre diffraction and

SAXS/WAXS data collection techniques and the tools available for data reduction and analysis in the CCP13 and non-crystalline diffraction (NCD) software suites.

The workshop commenced with an introductory lecture by Nick Terrill followed by a demonstration



Delegates at the first CCP13 and NCD Training Workshop at Daresbury Laboratory, 23<sup>rd</sup>-24<sup>th</sup> November 1999.

of SAXS/WAXS and fibre diffraction data collection on stations 8.2 (Nick Terrill and Anthony Gleeson) and 7.2 (Rob Kehoe) respectively. On the 24th November, there was a full day's training in the use of CCP13 and NCD software with demonstrators Mark Shotton, Richard Denny, Nick Terrill and Anthony Gleeson. This covered the reduction of one-dimensional NCD data using XOTOKO and its analysis using the XFIT and CORFUNC programs. Data format conversion and the preliminary analysis of two-dimensional fibre diffraction data using XCONV and XFIX were demonstrated along with the use of the 2-D pattern-fitting program, LSQINT. A total of 17 PhD students and post-doctoral

researchers attended the workshop, which was received very positively. It is now planned to stage the software training workshop as an annual event and some delegates also voiced their interest in an advanced software training course. Notification of further workshops will be published via the CCP13 bulletin board (to subscribe to the bulletin board, see <http://www.dl.ac.uk/SRS/CCP13/subscribe.html>). All CCP13 software can be downloaded from <http://www.dl.ac.uk/SRS/CCP13>

Mark Shotton  
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### Denver X-ray Conference, August 1999, Steamboat Springs

If you ever get an invite to the Denver X-ray Conference at Steamboat Springs, drop everything and take off for a week, it's a brilliant place for a conference. You would be advised to make your travel plans well in advance as this is about as American as public transport gets. I arrived fresh from a ten hour flight via Dallas (thanks to American for upgrading me to business class) to be greeted by howls of derision when I enquired about getting to Steamboat Springs via public transport. The conference title is a little misleading, it is an annual event, normally held in Denver but every three years or so it migrates to Steamboat Springs for a larger event and all the family members join in. I use migrates wisely as Steamboat Springs is 170 miles (280km) from Denver and after 5pm there is no public transport in summer unless you book in advance. Well you live and learn, so a hire car it was. The drive to Steamboat is fairly simple, onto the interstate, turn right at interstate 70, drive for a few hours, turn right onto 9, drive a few more hours and Bob's your uncle, you're at the hotel, no problem, except for the suicidal deer of course, but that goes without saying, oh and it was dark by this point, but hey who's counting.

Steamboat Springs spends most of the winter wrapped in a blanket of snow and is known for its skiing and winter sports. It is placed in a very picturesque setting on the side of the Rockies at about 9000ft (2750m). It's not far from Walton Creek; I was expecting John Boy to drive round the corner every time I went for a walk. The hotel (The Sheraton, reasonable rates over summer) sits at the

bottom of the major cable car route. The cable car is a pleasant 10 minute journey to the top of the mountain where the first day started with a Plenary session chaired by Randy Barton of DuPont and Vic Buhrke of The Buhrke Company. The conference is very broad in nature covering both diffraction and spectroscopy. Due to the large number of industrial members, powder diffraction has a large slice of the cake, with single crystal, SAXS and spectroscopy making up the remainder. However, the plenary sessions, being open to all, were of an exotic flavour covering uses of X-rays in space, from the growing of protein single crystals and their examination with the Bede system ([www.bede.com](http://www.bede.com); [www.nasa.gov](http://www.nasa.gov)) to X-ray detectors in space. Thus the start gathers many of the participants up to the top of the mountain for the opening. The plenary session lasts until lunch with the remainder of the day back in the hotel. To descend the mountain you can either take the serene cable car or, as many of the members decided, take up the \$10 challenge. Just outside the hall, a mountain bike rental was doing brisk business, hiring out bikes for one-way to the bottom, this is the kind of sport I can just about manage, let gravity do all the work for you and hope friction doesn't let you down. You get 1 hour for the journey down, it can be done in about 25 minutes if you are suicidal. The journey is along a sheep track with innumerable concealed hairpin bends, foot deep ruts and shear drops, but well worth it and I highly recommend it. On reaching base camp, there is time for a quick shower and a spot of lunch on the terrace outside Starbucks before the rest of the day's talks.