

New CCP13 Members

Dr Jane Crawshaw

Jane studied for her PhD at the Department of Materials Science and Metallurgy in Cambridge where she was supervised by Ruth Cameron. Her brief was to investigate how hydration, dehydration and mercerisation affect the microstructure of cellulose textile fibres. Small angle X-ray scattering was used to make dynamic observations of structural changes. The water composition of hydrated fibres was investigated using small angle neutron scattering. The X-ray work was done at the Daresbury Laboratory, and the neutron scattering at the Rutherford Appleton Laboratory.

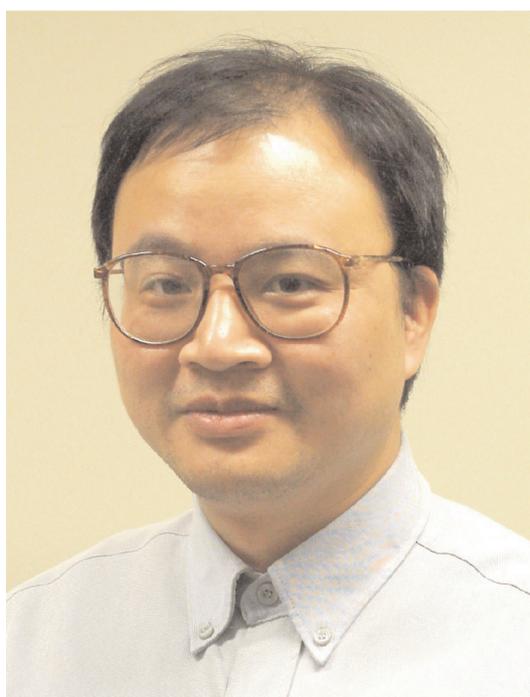
Next, Jane worked as a PDRA for Athene Donald at The Cavendish Laboratory in Cambridge. Once again she used small angle X-ray scattering, this time to investigate deformation mechanisms in rubber toughened PMMA.



Now Jane is moving into the field of polymer modelling working as a CCP13 funded PDRA for Alan Windle at the Materials Science Department in Cambridge.

Dr Andrew He

Andrew He is both a software engineer and a computer scientist with a wealth of academic and commercial experience and rich hands-on technical skills to draw upon. In the middle 80s, he started working on designing and developing real-time control systems, electronic systems and medical equipment using microprocessors, assembly language and C language. During the 90s, he was an experienced computer engineer with solid commercial experience in C/C++, Java, e-commerce, real-time data visualization, biomedical signal processing and image processing. More recently, Andrew has worked on the real-time message-oriented middleware system and Java message service. As a computer scientist, his research interests include parallel and distributed computing techniques, design and analysis of string algorithms and algorithms for molecular sequences, as well as combinatorial optimisation, global optimisation and modelling for the biological molecular structures. Since March 2002, he has been a CCP13-funded research associate in the Biological Structure and Function Section, Biomedical Science Division, Imperial College of Science, Technology & Medicine, London. His interests within CCP13 are



to update and develop programs for modelling biological systems, both at the molecular level using software such as LALS (Smith, P.J.C. & Arnott, S., *Acta Cryst.* (1978) A34, 3-11) and at the molecular assembly level using programs like MOVIE (Hudson, L. et al., 1997, *J. Mol. Biol.* 273, 440-455). Andrew will be involved along with Matthew Rodman in producing the CCP13 Journal "Fibre Diffraction Review".

Ganeshalingam Rajkumar

Ganeshalingam Rajkumar ("Raj") received his B.Sc.Eng. degree in Electrical Engineering from the University of Moratuwa, Sri Lanka, in 1999 and his M.Sc. degree in Information Technology from Loughborough University, UK, in October 2001. His expertise is in stereo image compression, video coding, software engineering and programming. In March 2002 he joined Imperial College as a research assistant funded by the CCP13 project. His research interests within CCP13 include updating and developing programs for stripping and modelling fibre X-ray diffraction patterns, prior to structure determination. He will be responsible for the CCP13 mirror website at Imperial College and will be the main CCP13 contact in matters of data extraction from observed diffraction patterns (g.rajkumar@ic.ac.uk).

