

# New Staff

## **Craig Lucas, HPC Consultant, Manchester Computing, University of Manchester**

I joined CSAR at the beginning of August 2004 as part of the High Performance Computing Team.

The first eight years of my professional life were spent in civil engineering at Staffordshire County Council. I was involved in the regeneration of derelict land, particularly disused collieries. In need of a fresh challenge I left to pursue my interest in mathematics.

First stop was a BSc in Mathematical Sciences with Computer Science at City University in London. I then moved here to Manchester to take an MSc in Numerical Analysis and Computing, the computing element was taught by people who are now colleagues in the Research Support Services group. Finally, I am just completing a PhD in numerical linear algebra. The thesis includes development of efficient numerical algorithms and Fortran code to solve various matrix problems. Some of the code will appear in the next release of the LAPACK library.

Outside of work my main interest is the theatre. So it is fortunate that Manchester has the largest number of theatres in England outside London. I will see anything from a small fringe production to a large West End show, classic or contemporary, as long there is good characterisation and dialogue. My favourite writers are Willy Russell, Mark Ravenhill and Jonathan Larson.

## **Tim Robinson, HPC Consultant, Manchester Computing, University of Manchester**

I moved to the UK in September 2004 having completed a PhD in theoretical chemistry and laser photoacoustic spectroscopy at the University of Otago in Dunedin, New Zealand. My research focused on the prediction of vibrational overtone spectra based on the local mode theory of molecular vibration. Unlike the more conventional 'normal modes' theory of vibration, where all atoms in a molecule move in phase, local mode vibrations involve the absorption of radiation in localized oscillators, for example, absorption in an individual OH bond in a water molecule. Our research group was the first to show that vibrational overtone transitions in water complexes (clusters of water molecules held together by weak intermolecular forces) are contributing to the

absorption of sunlight in our atmosphere. The role of such complexes has previously been neglected in global circulation models and global warming assessments.

Outside of work my interests include South-East Asian, Asian and North-African cuisine (cooking and eating!), wine-appreciation, playing the guitar, and foreign travel. A recent trip to Tunisia has inspired me to brush up on my French and to learn Arabic.

## **Firat Tekiner, Research Associate, Manchester Computing, University of Manchester**

I started to work for Research Support Services on 5th January 2005 as a Software Engineer/Research Associate on the Supercomputing Data Mining project, reporting to Mike Pettipher. I work on synchronising and handling the large amount of data required by data mining applications in this project.

Previously, I did an MSc here at UMIST (now merged with University of Manchester), in the Department of Computation. My MSc compared different distributed mutual exclusion algorithms on a small departmental cluster running PVM. My PhD was in networking where I used some novel methods to improve the performance of the distributed and intelligent antnet routing algorithms, based on the ants' emergent behaviour in real life. In addition, I have also simulated various logical network topologies and traditional routing algorithms on a small cluster by using PVM. The draft of my PhD was only recently submitted, and I'm still waiting for the Viva. I did my BSc in Computer Engineering in Cyprus where I am originally from.

I have been programming since I was in primary school. I started with basic 5 and have programmed in a variety of environments and languages including Pascal/Delphi, Visual Basic, C/C++, Java, x86 assembly, and now I am learning Fortran. I have also used RPC and PVM and am learning OpenMP and MPI at the moment.

I recently got married and devote most of my spare time to my wife, however I have a number of hobbies the main one being amateur photography. Now that my PhD is done, and I have more time and money, I can afford to invest in a better camera and spend some more time taking photos. Other hobbies are travelling, reading, Formula 1, playing football and basketball, and going to cinema.