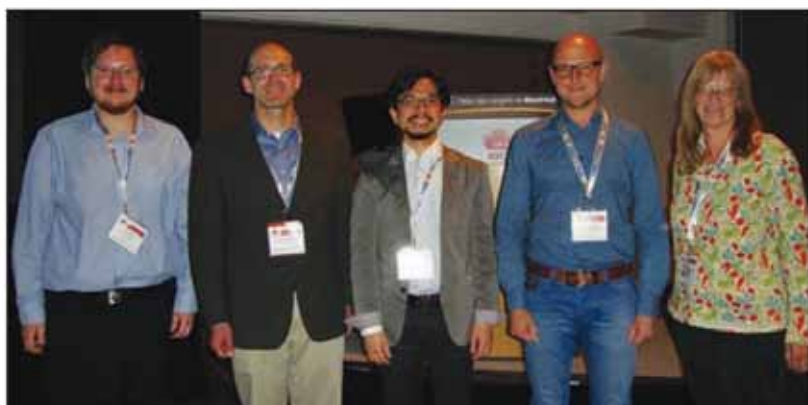


Structure of Metal Compounds Mimicking Protein Active Sites

In microsym. MS91, C. Fischer (Germany), a synthetic chemist, described both expected and unexpected results in the model chemistry of molybdenum and tungsten oxidoreductase enzymes, highlighting the difficulties of emulating nature. G. Rohde (USA) described the challenging syntheses of methane monooxygenase intermediates. The work required low temperatures to study the bridged Fe (IV)-O-Fe (IV) system, using crystallography and XAFS, and featuring the very short Fe-O distance of 1.8 Å. He described the highly reactive open core structures of the form (Fe=O)-O-(Fe=O). A. Višnjevac (Croatia) described work on hydrophobic cavities created using calixarene-type methodology to produce 'bowl' systems, which could contain Cu(I), Cu(II) or Zn(II).

The remainder of the session concerned mercury complexes of oligonucleotide duplexes, (J. Kondo, Japan) and the interactions of ruthenium polypyridyl cations with nucleic acids (J. Hall, UK).

Christine Cardin & Pat McArdle



MS91 speakers and chairs (left to right): J. Hall, G. Rohde, J. Kondo, C. Fischer, C. Cardin.