

Dalton Discussion 2: Bioinorganic Chemistry

University of East Anglia, Norwich, UK

2-5 September 1997

PROGRAMME

Wednesday 3 September

Session 1: Oxomolybdenum and Oxotungsten Enzymes

A crystallographic view of the molybdenum-cofactor

Doug Rees

Caltech, USA

Molybdenum enzymes: learning from chemistry

Ed Stiefel

Exxon Research, USA

Session 2: Small molecule activation by metalloproteins

Principles of small molecule activation by metalloenzymes as exemplified by the soluble methane monooxygenases

Ann Valentine

MIT, USA

Oxygen activation at nonheme diiron active sites in biology: lessons from model complexes

Larry Que

University of Minnesota, USA

Thursday 4 September

Session 3: Biomineralisation

Biomineralization: the form(id)able part of bioinorganic chemistry!

Steve Mann

University of Bath, UK

Inorganic life. Morphogenesis of natural form

Geoff Ozin

University of Toronto, Canada

Session 4: Mixed-valence Metal Clusters in Biology

EPR study of the $S=1/2$ ground state of radiolysis-generated Mn(III) Mn(IV)₃ form of $[\text{Mn(IV)}_4\text{O}_6(\text{bpy})_6]^{4+}$. Comparison with the photosynthetic oxygen evolving complex

Geneviève Blondin

University of Paris Sud, France

Manganese clusters: a common ground for photosynthesis, quantum tunnelling of magnetization and colossal magnetoresistance

Dante Gatteschi

University of Florence, Italy

Friday 5 September

Session 5: Metals in Medicine

Hydrogen bonding of nucleobases: effects of metal ion binding

Bernhard Lippert

University of Dortmund, Germany

Intramolecular migration of coordinated platinum from a sulfur to N⁷ in the nucleopeptide Met-d (TpG)

Jan Reedijk

University of Leiden, The Netherlands