



Figure 1. Dinuclear Cr^{III}-Ta^V unit in compound [Cr(bpy)₃(OH)₂(μ-O)Ta(C₂O₄)₂]₂·7H₂O (100 K) showing displacement ellipsoids at 50% probability. Hydrogen atoms on coordinated water molecule are depicted as spheres of arbitrary radii and those on the aromatic rings are omitted for clarity.

Keywords: oxo-bridged complex, tantalum, chromium, metal-to-metal charge transfer

MS30-P3 Crystal structure determination of four new copper (II) complexes containing *ono* type Schiff base ligands

Duygu Barut¹, Neslihan Korkmaz², Stephen T. Astley², Muhittin Aygün¹

1. Department of Physics, Dokuz Eylul University, 35160 Buca, İzmir, Turkey

2. Department of Chemistry, Ege University, 35100 Bornova, İzmir, Turkey

email: duygu.barut@hotmail.com

Schiff base ligands are considered as ‘privileged ligands’ because they are easily prepared by condensation between aldehydes and primary amines. These ligands are able to coordinate many different metals and to stabilize them in various oxidation states. The chemistry of transition metal complexes with Schiff bases has played an important role in the development of coordination chemistry as a whole. Multidentate Schiff bases have been widely used as ligands, because they can be easily attached to metal ions due to the formation of highly stable coordination compounds. These complexes show a large variety of catalytic, biological, antifungal, anti tumor and anti HIV activities [1].

In the present study, we were interested in the investigation of four new copper(II) complexes synthesized by tridentate Schiff base ligand, have different coordination environments. Single-crystal X-ray data were collected on an Agilent Diffraction Xcalibur diffractometer equipped with an Eos-CCD detector. Data analysis were carried out with the CrysAlis program [2]. Structures were solved by SHELXS-97 and olex2.solve, refined by means of SHELXL-97 programs [3] incorporated in the OLEX2 program package [4].

References

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