



Contribution ID: 95

Type: **Talk**

Material Transport in 19th century Paint Grounds. Part I: Porosity Characterization by X-ray Tomography

Friday, 16 September 2011 16:40 (15 minutes)

Paintings are complex systems that remain chemically active long their completion by the artist. Increasing evidence shows that moisture plays a role as a reagent and in material transport. Our study focuses on Cuno Amiet, a Swiss painter from the late 19th - 20th century who used absorbent, porous preparation layers (i.e. ground layers) increasing their sensitivity to moisture. Several of his paintings showed evidence of the formation and mobility of degradation products. To better understand the interaction of the ground/paint layers with moisture, characterisation of the morphology of the ground layer is a fundamental first step.

Here, we show XTM results obtained on a paint ground sample of Cuno Amiet's Portrait of Max Leu (1898) and on ground reconstructions. These samples exhibit microscale pores connected by a sub-micron network. On Amiet's sample, small micropores abundant at the surface and larger voids close to the canvas could be distinguished, giving valuable insight on the preparation technique. Current work is underway to compare these results with other Amiet's paintings and with model grounds reconstructed according to historical recipes used by the painter.

Please specify poster or talk

talk

Please specify the session

Imaging

Primary author: Dr GERVAIS, Claire (SIK-ISEA)

Co-authors: Dr FERREIRA, Ester S.B. (SIK-ISEA); Dr MARONE, Federica (PSI); Prof. BOON, Jaap J. (SIK-ISEA, AMOLF); Ms BELTINGER, Karoline (SIK-ISEA); Dr CARLYLE, Leslie (New University Lisbon)

Presenter: Dr GERVAIS, Claire (SIK-ISEA)

Session Classification: Imaging

Track Classification: Imaging