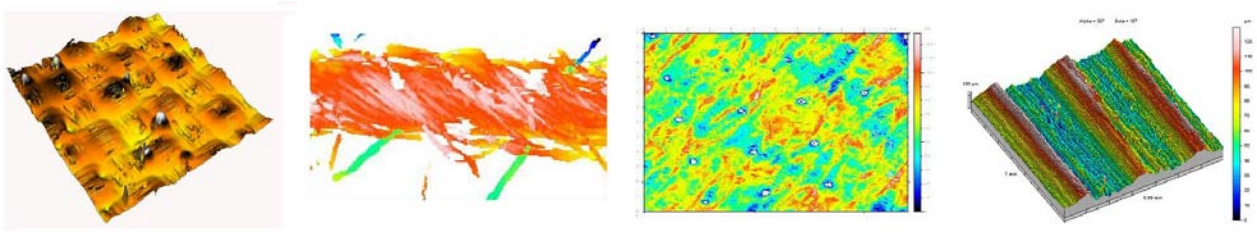
SURFACE MORPHOLOGY INVESTIGATIONS of PRE- AND POST- CONSERVATION PROCESS: TECHNIQUES & ANALYSIS



Images: Toile Airbag; Fibers; Filter Paper; Musical Instrument

Thomas G. Mathia is a Senior Scientist at the Laboratoire de Tribologie et Dynamique des Systèmes Centre National de la Recherche Scientifique. As an electronic engineer, he investigated the physics of contacts under mechanical, electro-magnetic and thermal dynamics conditions taking into consideration the roughness of contacting bodies. As part of his PhD work at Université de Lyon, he pioneered in what is today called, mechatronics. He started the development of tribology on an atomic level (which was later called nano-technology), studying monomolecular friction during his ScD work and developed a French school of surface morphology metrology for the transport industry. He is involved in both developing academic research as well as industrial applications, founded new companies in the field of roughness metrology, tomography, and contributed to the three-dimensional surface characterization and standardization to the "blue book" and “Development of Methods for Characterisation of Roughness in Three Dimensions” *Revised edition* published by Penton Press, July 2000, known as the "green book."

Serge Carras has been working in the field of surface metrology and 3D modelling for about thirty years. He is recognized as a developer and provider of state-of-the-art surface metrology solutions and expert member of the standardization committee (UNM09G5) related to the ISO 25178 standard. He is now CEO of ALTIMET, France, developer of the PheNIX© embeddable technology and AltiSurf® range of instruments, world-class surface metrology solutions used by leading research centers and industry manufacturers worldwide. One of his products, the AltiSurf© instrument sets up the reference in the chromatic confocal surface metrology industry which will soon be standardized by the ISO 25178. This technology has been applied in many industry niches like mechanics, paper and printing, materials and substrates, automotive, nanotechnology.

Dr. Mathia will talk about surface metrology as one of the tools applicable to investigation of pre- and post-conservation treatments. Mr. Carras will present the latest, state-of-the art surface metrology instrumentation that can be adapted in conservation work.

More detailed information about the presenters and Dr. Mathia’s publications are available at MCI. Both presenters will be available for discussion after this lecture.

Please contact Hanna Szczepanowska (szczepanowskah@si.edu) for more information.

MCI

Topics in Museum Conservation

October 29, 2010
10:45 am
Friday

MCI Theater
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4210 Silver Hill Road
Suitland, MD 20746
301-238-1240

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