

Response of Historic Materials to Environmental Instabilities



Łukasz Bratasz

Polish Academy of Sciences
Institute of Catalysis and Surface Chemistry
Cultural Heritage Research Group

National Museum in Krakow
Laboratory of Analysis and Non-
Destructive Testing of Artefacts

Dr. Łukasz Bratasz is a physicist working at the National Museum in Krakow, Poland and Polish Academy of Sciences. His principal interest is the study of response of historic materials to environmental instabilities. He will present recent developments in understanding the mechanism of damage of panel paintings caused by climate variations and the effect of a large number of humidity cycles on damage development in a pictorial layer termed the fatigue damage. A software tool developed by his research group allows for a quantitative risk assessment for panel paintings and identifying the optimum climate control strategy. The proposed approach was used in the National Museum in Krakow to re-define the climate control with the aim to reduce the energy consumption. A hyper-sensitive acoustic emission method was used to ensure transition to the new climate control strategy as the method allowed to trace directly possible damage in the most sensitive objects.

MCI

Topics in Museum Conservation

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Tuesday

MCI Theater

MUSEUM SUPPORT CENTER

4210 Silver Hill Road

Suitland, MD 20746

301-238-1240



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