

IMPROVED PROTECTION OF PAINTINGS DURING EXHIBITION, STORAGE AND TRANSIT – PROPAIN (EU PROJECT FP6, 044254)

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The 3-years EU project PROPAIN started in February 2007. The project aims to provide conservation staff and stakeholders with innovative protection treatments for preventive conservation of paintings during exhibition, storage and transit.

The main topics of investigation are:

- Evaluation of the protective effect of microclimate frames for paintings.
- Evaluation of the physical-chemical state and hence the protective effect of varnishes on paintings generally and in microclimate frames specifically.
- Contribution to preventive conservation strategy standards for microclimate control of paintings on display, in storage and in transit.
- Optimisation of microclimate control and its implication for design of new microclimate enclosures.

Measurements of air contaminants and climate have been performed inside and just outside of different state of the art microclimate frames in 8 museums in Europe.

Three different generic effect dosimeter technologies and a range of passive air pollution samplers have been used. The results from the air pollution sampling are used to assess the protective properties of different frame designs and the reactivity of the different dosimeters. First results clearly show very different responses of the dosimeters inside and outside of the frames and complementary responses particularly related to the effects of inorganic gases, mostly infiltrating from outside, vis-à-vis organic gases, mostly being emitted inside frames. Final results from the project are expected to be a design for more complete dosimetry of environmental influences on paintings and museum objects, more knowledge about the importance of different microclimate frame designs for their performance, especially with regards to climate and pollutants inside the frames, and contribution to environmental standards for paintings in microclimate frames.