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Protecting and stimulating effect on the degradation of eosin lakes. Part 1: Lead white and

Cobalt blue

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Abstract

An important problem encountered during the preservation of paintings and other artworks is the fading of the original colors due to exposure of the colorants to light. This fact is clearly evidenced in some of Vincent Van Gogh's paintings in which an organic red, eosin or geranium lake, is present.

The identification of eosin and the characterization of its degradation products in paintings represents a challenge because of (i) the generally low concentration of the pigment remaining after an aging period of ca 100 years, (ii) the scarcity of the paint micro samples available for analysis and the difficulty of obtaining additional ones and (iii) the complexity of the degradation behavior of eosin when it is mixed with organic or inorganic pigments, binding media or varnish.

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