

Deconstructing Victorian Watercolours: developing a multi-disciplinary and non-invasive analytical approach to the study and conservation of John Ruskin's teaching collection, Oxford

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The Ruskin's Painting Materials project, funded by the Leverhulme Trust, is a groundbreaking four-year study that investigates the impact of the Industrial Revolution on 19th-century artists and their material choices. The project systematically examines and identifies watercolour pigments in artworks selected by John Ruskin for his School of Art, founded in Oxford in 1871. The collection includes watercolours, drawings, prints, and photographs by Ruskin and his contemporaries, such as J.M.W. Turner, Edward Burne-Jones, and William Henry Hunt. Ruskin curated these works to help students master techniques of outline, shading, and colour, embodying the "Elements of Drawing".

This collection spans a pivotal period in 19th-century art history when industrially manufactured synthetic colours became popular. While these new colours inspired many artists, their manufacturing processes were often unverified, leading to adulteration and substitution, which compromised the quality and permanence of pigments. Detecting "fugitive colours" in the Ruskin teaching collection provides vital insights into the material choices of specific artists and guides conservators in making informed preservation decisions.

Using advanced non-destructive analytical techniques, the study identifies, maps, and evaluates chemical compositions at the elemental and molecular levels using MA-XRF and XRD. It documents and measures 3D surface topography features using 3D digital microscopy and RTI, and identifies sub-features like underdrawings using IRR. This comprehensive analysis examines the works of artists influenced by Ruskin's artistic doctrine. It addresses the challenges of identifying individual pigments in mixed or layered colours, such as William Henry Hunt's stippling technique over zinc white gouache. The study also explores the provenance of pigments used by Charles Fairfax Murray, Ruskin's employed copyist, who replicated works by Italian Masters. Notably, it examines a copy of Botticelli's 'Lorenzo Tornabuoni presented to the Liberal Arts', displayed at the Oxford teaching school before the original was relocated to Paris.

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