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**In the Garden of Eden: The conservation and scientific analysis of a 19th-century French panoramic wallpaper**

*L’Eden* is an exquisite hand printed wallpaper that was conserved and mounted for display in National Museums Scotland’s new Art & Design galleries, which opened in summer 2016. Designed in 1861 by Joseph Fuchs and manufactured by Defossé and Karth, the wallpaper is printed with distemper paint on paper using over 3,600 blocks. *L’Eden* represents an idyllic floral scenery showcasing plants found in European botanical greenhouses of the time. There are 20 lengths of wallpaper, each 3 m long, which when displayed together create what must have been an almost cinematic experience for the 19th-century viewer. This wallpaper is considered a uniquely well preserved example even though originally tightly rolled and damaged in some areas. Curators, conservators and analytical scientists worked collaboratively in a multidisciplinary approach to prepare the wallpaper for open display. The project began with documentation and scientific analysis of the materials used in its production, information aimed to reinforce treatment choices, identify any toxic elements and devise an appropriate rotation policy for this light-sensitive artefact. Non-invasive scanning using handheld x-ray fluorescence (p-XRF) analysis was followed by micro-sampling of selected colours from the registration pins for analysis by scanning electron microscopy with energy-dispersive x-ray analysis (SEM/EDS). These analyses identified natural and synthetic pigments used in the 19th century, mainly chromium and lead-based. It additionally revealed the use of organic dyes in the pink to violet hues, possibly early aniline. Light sensitivity of the colours was tested in situ using microfade testing (MFT), confirming the higher sensitivity of pink and violet colours that fall into the Blue Wool class 1 to 2. A systematic approach was adopted to conserve all 20 rolls using well established paper conservation treatments. These included surface cleaning, repairs to torn and weak areas with Japanese tissue and wheat starch paste, strip lining along all edges, humidification to aid in relaxing and consolidating the support and media, and stretching out on boards to flatten. The outsize dimensions demanded complex mounting onto rigid boards for easy installation, authentic display and future flat storage. Attaching the strip-lined wallpapers to aluminium honeycomb panels fitted with split-batten wall fixings enabled the objects to be viewed vertically for the first time since their manufacture. All 20 rolls of *L’Eden* will be displayed in rotation, displaying four at a time. The first four rolls are currently on display. The resulting display sets this stunning work within a gallery context that addresses the relationship between design and mass production. The poster presents scientific and academic research into historical processes used by the designer and manufacturer, together with materials and techniques used to conserve the wallpaper and consideration for rotation, preservation and storage, thereby marrying past, present and future.