

## **Infrared synchrotron radiation for Cultural Heritage: perspectives and applications**

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Synchrotron radiation-based Fourier transform infrared (SR-FTIR) microspectroscopy coupled with scanning electron microscopy (SEM) and energy-dispersive X-ray micro-analysis (EDX) performed on painting cross sections can enhance the performance of conventional FT-IR technique to localize micro and nanometric-size compounds. The additional chemometric approach is used as a powerful way to discriminate pictorial layers with similar chemical composition, by the identification of different compounds. Selected applications, including results obtained in the ADAMO project, will be presented.