

## **FIRST Newsletter**

May 2021, Issue 60

## ESPRIT Reveal, the Perfect Software Companion for Your Micro-XRF

**Spectrometer** Dr. Henning Schroeder, Product Manager micro-XRF,

Bruker Nano Analytics, Germany

Micro X-ray fluorescence (XRF) is a fantastic technology to support your research. Among the many applications micro-XRF can handle, Art and Conservation is the field where the story of scientific result gets picked up by the news and reaches the public. Here, we can make an impression with our innovative Bruker products.

Our instruments allow fast contact-less measurements without any sample preparation, but to get your best results for the **material composition** and **elemental distribution** you need to process the data.

**ESPRIT Reveal** is a software solution designed to provide the analytical features from the ESPRIT family in a user-friendly environment, in specific for the Art and Conservation community.



With Bruker's ESPRIT Reveal software, spectral peaks are automatically identified and assigned to elements and their concentration calculated. Hypermaps, which are composed of many XRF spectra from across the surface of the sample, can be used to visualize the distribution of individual elements or compare the distribution of several elements.

With these capabilities the software is perfectly suited to:

- study the manufacturing techniques of artwork to the depth that hidden layers of paintings have been revealed
- support the dating of cultural heritage objects
- identify authentic material for restauration efforts

The big jump in data processing speed makes ESPRIT Reveal not only the perfect companion for your micro-XRF instruments in Art and Conservation campaigns but wherever you investigate big hypermaps with a high spatial resolution, such as in geo and mining applications.

If you would like to learn more about the ESPRIT Reveal software, check out our on-demand webinar, <u>XRF Data Processing in Art and Conservation with</u> <u>ESPRIT Reveal</u>, which is part of *The Art and Conservation Webinar Series*. Stay tuned for yet another webinar in the coming months on the advanced features of ESPRIT Reveal.

In the meantime, feel free to contact our sales team via info.bna@bruker.com for more information and pricing options.



*Oil-painting of the Rialto Bridge in Venice. With the information on the distribution of the individual elements the original appearance of by now faded colors can be restored true to the original.*