

Portal XRF for Elemental Analysis:

The Technology and Application

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Portable technology is the future of instrumentation. Technological advances with smaller x-ray sources and better computational power has made it possible to develop portal XRF (pXRF) instruments that work by bombarding a sample with x-rays and then analyzing the elementally unique photons produced. One particular application of this technology is analyzing, directly in the field, what the elemental pigment sources of a cave painting are and can even help indicate whether a cave painting is modern or not by observing elements that are rare in nature, but are found commonly in modern paint.