Joint ICTP-IAEA Advanced Workshop on Enhancing Accelerator-Based Analytical Techniques for Forensic Science | (smr 3291)

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Synchrotron infrared spectroscopies and chemometrics to evaluate complex forensic samples

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Content

Synchrotron radiation applications in the infrared regime are increasingly important in forensics. The non-destructive and non-invasive nature of this kind of analysis, which is able to provide chemical information whilst maintaining the integrity of the samples, in one of the main reasons for this success. The disadvantage of this approach is that the spectral information is often redundant and affected by spectral artefacts. The presentation will focus on the use of synchrotron sources and chemometrics in order to bypass the problems of interpretation of complex contexts in view of an increased implementation of advanced analytical infrared methodologies in scientific police laboratories.

Summary

Presenter(s): ZANINI, Franco (Elettra Sincrotrone, Italy)Session Classification: Visit of Elettra Sincrotrone Trieste