

Joint ICTP-IAEA Advanced Workshop on Enhancing Accelerator-Based Analytical Techniques for Forensic Science



20 - 24 May 2019
Trieste, Italy

Further information:
<http://indico.ictp.it/event/78681/>
smr3291@ictp.it

Accelerator-based analytical techniques for elemental and molecular analysis in forensic science have a great potential in key areas such as crime investigations, food, drug and cultural heritage authentication. Although these analytical techniques are readily available and routinely applied in research, there is still a considerable gap when it comes to forensics applications.

Description:

The workshop will provide an advanced training and information exchange platform both for accelerator scientists and forensic end-users. Review of analytical capabilities of accelerator-based techniques including state-of-the-art and technical challenges will be followed by providing guidelines and case studies on how to extend the applicability of accelerator-based techniques to forensic science. A poster session will be organised to present and discuss the participants' research results. A visit to Sincrotrone Elettra and a forensic laboratory will provide hands-on experience. The workshop is open both for young and experienced scientists, forensic experts and policy makers.

Topics:

- Recent advances of accelerator-based (AMS, IBA and SR) analytical techniques relevant to forensics applications;
- Emerging accelerator-based and complementary (e.g. SIMS, NAA, XRF etc.) techniques;
- Analytical challenges in forensics applications e.g.: parallel elemental and molecular analysis and imaging, analysis of soft matter, multilayers, rough surfaces; high sensitivity and resolution, accuracy, damage, data interpretation etc.;
- Case studies and success stories of nuclear technologies applied to forensic science.

Directors:

A. SIMON, IAEA, Austria
G. MADDALUNO, UNICRI, Italy
F.S. ROMOLO, University of Bergamo, Italy

Local Organizer:

S. SCANDOLO, ICTP, Italy

Workshop Speakers:

N.P. BARRADAS, IAEA, Austria
M. BAILEY, University of Surrey, England
T. CALLIGARO, C2RMF-AGLAE, France
J. FERRAZ DIAS, UFRGS, Brazil
I. HAJDAS, ETH Zurich, Switzerland
M. MUSUMECI, UNICRI, Switzerland
F. ZANINI, Sincrotrone Elettra, Trieste, Italy

How to apply:

Online application:
<http://indico.ictp.it/event/8681/>

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

Deadline:

20 February 2019

