

# 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](mailto: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**, Sapienza Università di Roma, 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**

