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.

**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