

**European Network of Forensic Science Institutes (ENFSI)
Expert Working Group Firearms/GSR**

**Akademie für Elektronenmikroskopie und Analytik gGmbH
Münster, Germany**

Training Seminar 2017 Gunshot Residue Analysis

Forensic Gunshot Residue Investigations by means of
Scanning Electron Microscopy / Energy Dispersive Spectros-
copy (SEM / EDS)
- Theory & Practice -



Priv.- Doz. Dr. rer. nat. P.F. Schmidt
c/o Institut für Rechtsmedizin
Röntgenstraße 23
D-48149 Münster
Germany

Tel.: +49 (0)251 / 83-55112
Fax: + 49 (0)251 / 83-55188
pfschmi@uni-muenster.de

Dr.-Ing. L. Niewöhner
Bundeskriminalamt
KT 23 - Schmauchspuren
D-65173 Wiesbaden
Tel.: +49 (0)611 / 55-14054
Ludwig.Niewoehner@bka.bund.de

Training Seminar Gunshot Residue Analysis

Training Seminar GSR

Forensic Gunshot Residue Investigations by means of Scanning Electron Microscopy / Energy Dispersive Spectroscopy (SEM / EDS) - Theory & Practice

May 30th - June 01st, 2017

Schedule: Tue & Wed 8:30-13:15 & 14:15-17:30,
Thu 8:30 - 13:15

Location: Bundeskriminalamt Wiesbaden, Germany

Target group: Experts and technicians of forensic science institutes or police authorities with basic or profound experience in SEM/EDS operation who intend to improve their knowledge on state-of-the-art gunshot residue analysis enhanced by the introduction of new analytical methods.

Language: English

Fee: EUR **550,-** (VAT-exempt)
(including lunches)

Organizer: **Dr.-Ing. L. Niewöhner**
Bundeskriminalamt
KT 23 – Gunshot Traces

on behalf of the ENFSI EWG Firearms/GSR

Conducted by: Priv.-Doz. Dr. P. F. Schmidt
Akademie für Elektronenmikroskopie und
Analytik gGmbH

Training Seminar Gunshot Residue Analysis

Content

Theoretical aspects:

- Fundamentals of SEM/EDS
- Basics of feature detection
- Gunshot residue - formation, sampling, analysis
- Heavy metal free primers
- Potential risks of misinterpretation: occupational and environmental particles
- Quality assurance
- Parameter optimization
- Proficiency tests (GSR2011-2016)
- Additional analytical techniques (e. g. milli-XRF)

Practical training:

- Sampling and sample preparation
- Setting up an automatic GSR run
- Evaluation and manual particle confirmation
- System monitoring using GSR standards
- Examples of heavy metal free primers

This training is suitable for beginners and experts as well.

Practical training will be held in small groups using SEM/EDS systems provided by well-known manufacturers (Aspex, Bruker, EDAX, FEI, Oxford Instruments, Zeiss, Phenom).

Representatives of the companies will be present during the seminar to answer questions of the participants.

It is intended that all participants alternately work on the different SEM/EDS systems to get an overview of the software and instrumentation available on the market.

Participants may bring their own specimens for analysis and are welcome to bring up their special problems.

A certificate of attendance will be issued to all participants.

Registration:

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D- 48149 Münster, Germany**

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Deadline for registration: **15.05.2017**

For the registration for the GSR training course please indicate the type REM and the EDX analytical device, on which you work or will work. We need this indication for the organization into the working groups. Own samples can be examined.

The GSR training course takes place at the Forensic Institute of the Bundeskriminalamt - Wiesbaden. After your registration training course information (confirmation, travel directions and invoice) will be send. **Attention:** all visitors of the Forensic Institute of the BKA have to dispense their DNA.

All participants are kindly asked to book accommodations on their own. There are plenty of hotels (from 1 to 5 stars as well as hostels) available in Wiesbaden. Recommendations can be given on request.

Program subject to change. For damage or losses in connection with the training course no liability is assumed. If the training course does not come off, the participation fee already paid is refunded, further requirements are excluded.