

Call for participation

ENFSI Proficiency Test on Identification of GSR by SEM/EDX – GSR2011 –

Dear GSR expert,

On behalf of the ENFSI Expert Working Group “Firearms/GSR” we would like to invite you to participate in a Proficiency Test on the Identification of GSR by SEM/EDX. The company quo data GmbH is in charge to organize and perform the GSR proficiency test as part of the future GSR Quality Scheme.

As your laboratory has already participated in a former GSR proficiency test or was at least interested in a future participation, you are welcome to participate in the new run.

The primary purpose of this proficiency testing program is to help the laboratories to detect and redress any -unacceptable- inaccuracy in their reported findings, related to the detection and identification of gunshot residues (GSR) by SEM/EDX, and to improve and maintain their performance with respect to inter-laboratory precision.

In the past, all members of the European Network of Forensic Science Institutes (ENFSI) were eligible for participation, but of course other state registered Forensic Science Laboratories, which do not belong to ENFSI, were also welcome to participate in the test program. After the program has received an ASCLD-LAB approval in 2006, it includes now laboratory participation worldwide [1].

The GSR quality scheme is scheduled to be conducted on an annual basis.

Background information

The test is based on the experiences made in the latest tests performed in 2003, 2005, 2008 and 2010. The preparations for the 2011 proficiency test are currently in progress and the samples are expected to be ready for dispatch by 3rd May 2011. The organization and statistical evaluation of the GSR2011 test will be done exactly the same as GSR2010 test by quo data GmbH in Dresden, Germany, on behalf of the ENFSI Expert Working Group “Firearms/GSR”. quo data is specialized in providing services for proficiency tests and the development of statistical tools for quality assurance, and offers the opportunity to have access to a dedicated website, where also supplementary information regarding the current test is available for download [2].

Results of previous GSR proficiency tests have been published in the *Journal of Forensic Sciences* ([3], [4] and [5]).

The findings compiled from this test will be published in a final report and presented and discussed at a special meeting in Dresden. Only laboratories that have taken part in the proficiency test are invited to attend this meeting. More details on the program of the meeting will be given in due course.

Test sample description

As the results of the previous tests have shown, the use of a synthetic sample set is convenient, and the new test will be performed again with synthetic samples ([3], [4] and [5]).

The preliminary preparations for the new proficiency test samples will soon be completed. Sample characteristics were chosen alike the former GSR proficiency tests, although the number of particles, their diameter and location will differ. For more information regarding the preparation of the test samples you may also refer to the documents on the quo data website [2].

Time table

The application deadline for the GSR2011 will be **18th February 2011**. As from **21st February 2011** the invoices will be dispatched. The deadline for payment will be **22nd April 2011**.

Sample distribution is currently scheduled for **3rd May 2011**. Each laboratory will receive one test sample together with test instructions and a questionnaire. Test data and questionnaire data should be filled into a template available on the quo data website, but may also be handed in electronically using an Excel table. Test data not submitted in an appropriate table or format will not be considered and evaluated.

Deadline date for handing in test data and questionnaire will be approximately **three weeks** after sample distribution.

Within 15 working days after submission of the test data, the participating laboratory will receive an individual report on its own findings, and additional information of the test sample including the exact number of GSR particles, their sizes and the exact positions of the particles. This gives the laboratories the opportunity to cross-check their findings. It also allows the sample to be used in the laboratory as a standard for validation purposes in GSR analysis. Laboratories will have 10 working days to report their cross-checked data to quo data, if desired.

Finally, a special meeting is scheduled to be held in Dresden, Germany, in September 2011, where the final report of the test is presented and discussed. Participants, who will not be able to attend this meeting, will receive the final report and their *certificate of participation* by mail.

Participation fee and payment

A participation fee will be charged to the laboratories, which covers the upcoming costs for producing suitable sample material, and the statistical evaluation of the results. The fee will be fixed to **900 €** per participant, plus VAT (for German participants only) and plus individually arising costs for shipment. Please note that for EU-countries a VAT registration number is necessary, otherwise they have to be charged 19 % German VAT, additionally.

The increased costs, compared to the GSR proficiency test last year, are based on a change of the sample manufacturer on the one hand and on an improvement in the quality of the samples in general on the other. The change to the new qualitatively superior sample manufacturer Danish Technological Institute resulted in higher costs. However, these additional costs are also attributed to a significant improvement of the sample material. So the test samples are considerably more elaborate in processing because, for example, the number of size classes has been increased, guaranteeing a better fit of the detection capability.

Please note, that the payment covers also the purchase of the test sample which becomes property of the laboratory and offers the opportunity to use the sample later for other purposes (e.g. as a validation standard for the SEM/EDX system or for quality assurance duties). We will provide in the near future a web-based application which can be used for an automatic analysis of your sample.

In this proficiency test only one data set per laboratory will be taken into account in the evaluation. For the analysis of additional data sets we refer to the new application which can be used for the purpose of validation or for the purpose of quality assurance. The latter version will allow a comprehensive evaluation in the sense of a quality control chart. Each automatic analysis of one data set will cost 40 € in the version for the validation. It will be a bit higher in price in the version for the quality control.

Sample shipment will be performed by *United Parcel Service* (UPS).

Payment and sample shipment will be proceeded as follows:

1. The laboratory accepts the regulations of the test by either filling in the application form on the website or sending back a signed application form to quo data. Thereby it has to be specified if paying will be carried out by bank transfer, by credit card (MasterCard, Visa or JCB) or by PayPal.
2. The laboratory will receive an invoice regarding participation fee and individual shipping costs. The notification includes information on the bank account or a fax form for payment by credit card that needs to be sent back to quo data.

Payment has to be made before test sample shipment.

3. Only those laboratories which made their payment in time will receive their test sample for participation in the announced proficiency test. Any money transfer later than the deadline will be rejected.

Shipping costs will depend on the destination country, and will be - according to UPS:

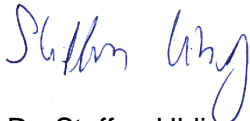
- approx. 50 € for EU countries, and
- approx. 70 € for Non-EU countries.

Possible additional taxes have to be covered by the recipient.

Statement for subscription and conditions for participation

If your laboratory is interested in participation please fill in the template provided on the website. Alternatively you may download it as a pdf document from the website [2] and send it by email, fax or postal mail to quo data. The application deadline is **January 31st, 2011**.

On behalf



Dr. Steffen Uhlig, quo data GmbH

References

- [1] www.ascl-d-lab.org/legacy/aslablegacyapprovedproviders.html
- [2] <http://quodata.de/gsr-quality-scheme.php>
- [3] Niewoehner L., Wenz W., Andrasko J., Beijer R., Gunaratnam L.; "ENFSI Proficiency Test Program on Identification of GSR by SEM/EDX"; Journal of Forensic Sciences; vol. 48(4); (2003); pp. 786-792.
- [4] Niewoehner L., Andrasko J., Biegstraaten J., Gunaratnam L., Steffen S., Uhlig S.; "Maintenance of the ENFSI Proficiency Test Program on Identification of GSR by SEM/EDX (GSR2003)"; Journal of Forensic Sciences; vol. 50(4); (2005).
- [5] Niewoehner L., Andrasko J., Biegstraaten J., Gunaratnam L., Steffen S., Uhlig S., Antoni, S.; "GSR2005-Continuity of the ENFSI Proficiency Test on Identification of GSR by SEM/EDX"; Journal of Forensic Sciences; vol. 53(1); (2008).