

# International News

## Letter from **EUROPE**



Measurement, testing and analytical laboratories measure quantities to characterize objects of scientific, economic or societal interest: substances, products, engineered components, etc.

But how can the work of a laboratory itself be “measured” to characterize its quality and performance? The answer is Proficiency Testing (PT). This letter describes the scope of proficiency testing and its importance for laboratories with a view from Europe.



The purpose of proficiency testing is to assess performance of laboratories for their conduct of specific test, measurements or calibrations. PT provides an opportunity to undertake such comparisons and to have an independent appraisal of the laboratory's data compared to reference values or to the performance of similar laboratories.

Benefits for Laboratories participating in Proficiency Testing Programs have been named last year by ILAC in a brochure, with a cover picture of metrologists and their work, as follows:

- Confirming competent performance
- Identifying testing or measurement problems
- Comparing methods and procedures
- Improving performance
- Educating staff

- Comparing operator capabilities
- Determining method precision and accuracy
- Satisfying regulators and accreditors
- Providing laboratories with risk management

In Europe, the evolution of the European Common Market urged laboratories to extend their work over national boundaries and to compare it with those of other laboratories internationally. This has led to the development of EPTIS, the European Proficiency Testing Information System.

EPTIS is a free online service that lists almost 1,000 PT schemes operated worldwide.

Laboratories can search the database and see whether a specific scheme is available in their region or worldwide. On EPTIS they find information on sample matrices, measurands, testing methods, standards, prices, contact details and much more. EPTIS also explains how PT providers assess laboratory performance. This helps laboratories to judge whether a specific PT scheme is fit for their purposes. A screenshot of the EPTIS website [www.eptis.bam.de](http://www.eptis.bam.de) looks like this:

### Scope of proficiency testing programs

Laboratories can easily consult the database themselves. This can be for a specific keyword or a specific type of PT scheme (i.e. a country, testing field or product group). There is an extra tick box to restrict the query to accredited or otherwise recognized PT providers. Some laboratories contact the EPTIS team personally. Their emails show exemplarily what many laboratories are actually looking for and how EPTIS can help them. One example:

*My name is ..., I am working in [a Latin-American private lab] and I want to conduct inter-laboratory comparisons for gravimetric analysis of filters used for ambient air monitoring for Particulate Matter (PM10 and PM2.5). Maybe you know about a committee that makes round robins or inter-laboratory comparisons with filters you could please tell me about. We want to do this*

*because we want to be accredited ISO/IEC 17025:2005 in this analysis (filter initial and final weight) and this normative indicate that we must make proficiency tests by inter-laboratory comparison.*

Particulate matter has become a major air pollution problem in several parts of the world. PM2.5 measurements are very challenging and special care must be taken to ensure accurate results. A competent PT provider may not be easily found locally. This is where EPTIS comes in as a list of regular PT schemes that are available globally. Two possible schemes plus the contact details of a reputed research laboratory that might organize method validation trials on this topic could be suggested from the EPTIS secretariat.

## Development of proficiency testing schemes

The history of EPTIS goes back to the 1990s. At that time, proficiency testing enjoyed a fast growing interest in Europe as an excellent tool to demonstrate and assess the performance of analytical laboratories. In 1998, 16 organizations in 16 European countries joined forces to overcome the information barrier. The partners extensively surveyed the availability

of PT schemes and their characteristics within their countries. All this information was entered into the EPTIS database, which was made public on the internet in 2000. The European Commission supported the foundation of EPTIS. Since then, EPTIS has grown considerably, both in terms of schemes registered and country participation, and today it is a truly international database. At present, 37 countries take part in EPTIS.

EPTIS is not for profit. The database and website servers, along with the secretariat, are hosted by the BAM Federal Institute for Materials Research and Testing in Germany. Further information can be obtained from Johannes van de Kreeke (mail to: johannes.kreeke@bam.de) from the EPTIS secretariat, who compiled this overview.

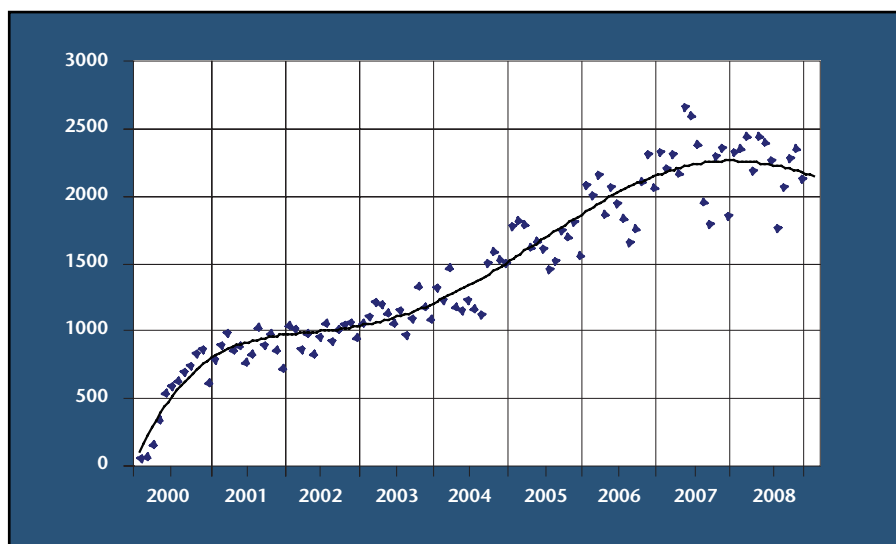
## Pt registration

Who can enter PT schemes into the database? PT providers find registration forms on the EPTIS website. They send the completed forms to a national or regional EPTIS coordinator who then checks their statements for correctness, and enters the schemes into the database. This service is often free for the PT providers although in some cases a fee applies.


The local coordinators are listed on the EPTIS website. The number of PT schemes on EPTIS is increasing, as is the number of EPTIS visitors.


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Number of different visitors per month on www.eptis.bam.de as per January 2009






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**CPH 6000 Process Calibrator**

**Features**

- High accuracy: 0.025%FS
- Measuring ranges from 0 ... 4 psi up to 0 ... 15,000 psi (also vacuum / absolute pressure ranges)
- Loop power and analog signal measurement for calibrating transmitters
- Interchangeable sensors
- Pressure-switch test function
- Stores device under test information and calibration data





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**CPH 6400 Process Calibrator**

**Features**

- High accuracy: 0.025%FS
- Measuring ranges from 0 ... 6 psi up to 0 ... 60,000 psi (also vacuum / absolute pressure ranges)
- Interchangeable sensors
- Pressure-switch test function
- Data logging function




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