QUALITY IN ANALYTICAL SCIENCES: TrainMiC® connects people.

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Quality of chemical measurements is an important issue in today's world influencing quality of life, border-cross trade and commerce. On an international scale, the world of chemical measurements is undergoing major changes. Since a decade initiatives have been taken at an international level and across the measurement sectors to ensure that the measurement science issues are applied in a systematic way. This is done to improve the quality of chemical measurement results and thus make them acceptable everywhere. Only in recent years have the principles of measurement science (metrology) in chemistry received the attention they should. This does not replace the need for many aspects of quality assurance, but compliments this, i.e. bringing a solid foundation to build on.

The course is organised under the responsibility of TrainMiC® European Programme, European Commission funded training platform to foster advanced professional training on generic issues related to the quality of measurement results (Metrology in Chemistry). The aim of the overall TrainMiC® course is to give a comprehensive overview on the importance of the use of metrological principles when performing chemical measurements of various kind. This is of great relevance for routine laboratories, which are driven by the requirements of the ISO/IEC 17025 standard, but also for research laboratories, that may benefit from the implementation of the metrological approaches into their measurements practice. TrainMiC® is about how to interpret the metrological requirements of ISO/IEC-17025 for chemical and bio-analytical measurements in many different sectors (environment, food, consumer protection, etc.).

AGENDA AND TOPICS:

- Traceability of measurement results
- Single laboratory validation of measurement procedures
- Uncertainty of measurement: Principles and Approaches to evaluation
- Selection and use of reference materials
- Quality control

This TrainMiC® course is designed for the analytical chemistry students at the PhD and PostDoc level as well as senior researchers. Several examples related to the mass spectrometry measurements will be given.