



The mission of the JRC-IRMM is to promote a common and reliable European measurement system in support of EU policies.

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Europe & Metrology in Turkey (EMIT) Training Course: “Certification of Reference Materials”

Training course code: EMIT S01-03

TÜBİTAK UME
Gebze/Kocaeli, Turkey

1 - 2 March 2011



Robust science for policy making

OUR MISSION

The mission of the Joint Research Centre is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of European Union policies. As a service of the European Commission, the Joint Research Centre functions as a reference centre of science and technology for the Union. Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.



EMIT Training course So1-03: Certification of Reference Materials

Aim and Introduction

- This course provides knowledge on how to certify reference materials in accordance with ISO Guide 34.
- Reference materials are key tools for instance for achieving traceability of measurement results, proving accuracy of methods and demonstrating proficiency of laboratories.

The goal of the course is to provide:

- insight into the underlying concepts of reference material certification
- sound knowledge on the practical steps that are necessary for the certification of a reference material
- information on compliant production of CRMs with regard to ISO Guide 34.

Who should attend?

- Laboratory managers and practitioners of metrology institutes in Turkey who deal with reference material certification.
- Academic faculty members, researchers and all other EMIT stakeholders/end-users in Turkey who are willing to acquire knowledge in the certification of reference materials.

Prerequisites

- A postgraduate level in chemistry
- Knowledge of basic statistical concepts
- MS-Excel is used during the exercises. Familiarity with this program is required to make full use of the exercises.
- The course will be given in English; participants must be able to discuss and interact in English.

Topics tackled

All steps of the certification of reference materials will be discussed during the two-day training course.

Presentations will cover the different phases and topics of a certification project:

- planning of a certification project
- customer orientation: explore your customer's needs
- from raw material selection to the processed material
- testing requirements
- selection of collaborators
- planning, execution and evaluation of homogeneity studies
- planning, execution and evaluation of stability studies
- planning, execution and evaluation of characterisation studies
- measurement uncertainty & metrological traceability
- value assignment
- certificates and documentation
- customer support

Exercises

This course strongly emphasises the practical application of the theoretical concepts. To this end, several lectures are accompanied by exercises in which the concepts are put into practice.

Participants are encouraged to bring their own laptops to participate actively in the exercises.

Practical information

Timing:

The workshop will take place on 1 March, 2011 from 9:00 until 17:00, and 2 March, 2011 from 9:00 until 16:00.

Accommodation:

Trainees from public institutions are welcome to reserve guest accommodation at the TÜBİTAK UME Institute. Limited availability so reservations best made early *via* email: Oktay.CANKUR@ume.tubitak.gov.tr
Trainees from private organisations need to book their own hotel in the area.

Location:

TÜBİTAK National Metrology Institute UME, PK.54 Gebze, KOCAELİ, 41470, TURKEY.

Registration: This event (with typically 40-50 participants) will be open to the main beneficiaries, universities, accredited laboratories, other institutes and industry.

Registration will be possible from the **17 January, 2011** via the JRC Events Registration System (<https://jrc-meeting-registration.jrc.ec.europa.eu/>).

Deadline for registration: **18 February, 2011**.

Certain rules for event registration will apply:

Phase 1 - Reserved: 15% of the possible places for TÜBİTAK and TAEK.

Phase 2 - Open: 70% open to all other (Turkish) EMIT stakeholders / end-users.

Phase 3 - Confirmation: an applicant's place is confirmed by the event organiser.

Registration fee: none

For late registrations or supplementary information requests, please send an e-mail to JRC-IRMM-TURKEY-METROLOGY@ec.europa.eu

The EMIT Project description can be found via <http://irmm.jrc.ec.europa.eu/Turkey>