
Quality control of analytical methods in gas chromatography

Basic level

Lecturers:

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Tubić Aleksandra, PhD, associate professor at the University of Novi Sad, Faculty of Sciences,
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Sciences,
Ivana Mihajlović, PhD, assistant professor at the University of Novi Sad, Faculty of Technical
Sciences,

Date: 06 – 07 June 2019

Language: Serbian

Place: Faculty of Sciences, University of Novi Sad, Trg Dositeja Obradovića 3, 21000 Novi Sad, VI
floor, Tempus IT room

Duration: 2 days (13.5 hours);

Fee: free of charge

Target group: professionals employed in laboratories accredited in accordance with Standard
SRPS ISO/IEC 17025, young professionals- students of the last year of BSc studies, MSc and PhD
students

Number of participants: 10-15

Contact details: please send an e-mail with title Participation at NETCHEM CPD course to
ivana.ivancev-tumbas@dh.uns.ac.rs until 05/06/2019.

Goal of the course:

To equip the participants with the knowledge in quality control of the gas chromatographic
analytical methods in accordance with SRPS ISO/IEC 17025 Standard requirements.

Learning outcomes of the course:

This course is a comprehensive overview of the internal quality control procedures related to
gas chromatography analytical methods. It is based on the technical requirements of the
international standard SRPS ISO / IEC 17025. Knowledge and skills related to internal quality

control procedures are crucial for professional work of analysts. Participants will be intensively trained to apply basic quality control protocols for gas chromatographic analytical methods using problem based learning in IT classroom with real case studies in combination with theoretical lectures. After the completion of the course, they will be able to:

- conduct the validation of gas chromatography methods in the laboratory,
- to apply basic statistical techniques for analytical methods internal quality control,
- to demonstrate the reliability of laboratory equipment,
- to identify and quantify significant contributions to total measurement uncertainty and to establish target value of measurement uncertainty for the method

Course organisation:

Participants will be intensively trained two days using problem based learning in IT classroom with real case studies in combination with theoretical lectures. Teaching units comprise of:

1. Introduction to requirement of legislation and standards related to analytical methods
2. Internal control of gas chromatograph performance
3. Assessment of the measurement uncertainty
4. Gas chromatography method validation steps
5. Method internal quality control steps

All participants will get educational materials prepared for the course.