

CCM related activities of SMU 2021 - 2023

1. Main research and development activities related to CCM activities:

Project Grant Agreement number: 18RPT02

Project short name: adOSSIG

Project full title: Developing an infrastructure for improved and harmonised metrological checks of blood-pressure measurements in Europe

SMU projects

Reconstruction of a hydrostatic weighing apparatus for density

Reconstruction of a measuring apparatus for viscosity standard

Study and preparation of a mass laboratory for measurements in vacuum and at constant pressure

2. Participation in relevant comparisons

KC's:

CCM.V-K4 – Measurement of viscosity standard liquids in a wide temperature range

CCM.D-K5 – Comparison on density determination of liquid samples using oscillation-type density meters

EURAMET.M.M-S11 - EURAMET supplementary comparison of mass standards 20 kg

Euramet Project No. 1585 - Bilateral supplementary comparison in high gauge pressure up to 1 GPa, ČMI-SMU

Other comparisons:

ASTM D.02.07.A – ASTM Cooperative Kinematic Viscosity Program

SMU has organized interlaboratory comparisons in Mass for accredited laboratories (2022, 2023)

3. Peer-reviews

PR in the field of viscosity by GUM, May 2021, approved

PR in the field of density by GUM, May 2021, approved

PR in the field of mass by GUM, June 2021, approved

4. List of relevant publications.

Dominik Pražák, Jan Rybář, Peter Pavlásek, Václav Sedlák, Stanislav Ďuriš, Miroslav Chytil, František Pluháček. ROZVOJOVÉ VÝSKUMNÉ KAPACITY PRE NADVÄZNOŠŤ MERANIA VNÚTROOČNÉHO TLAKU – VÝSLEDKY EURÓPSKEHO PROJEKTU. Konferencia 2021.

Jan Rybář, Miroslav Chytil, Patrik Grosinger, Andrej Majstrík, Štefan Tóth, Stanislav Ďuriš. POČÁTKY MĚŘENÍ A METROLOGIE TLAKU. Konferencia MMK 2021.

Jakub Palenčár, Rudolf Palenčár, Miroslav Chytil, Viktor Witkovský, Gejza Wimmer Jr., Gejza Wimmer. Linear Comparative Calibration and Uncertainty Analysis of the Measurement Result Obtained With the Calibrated Device. MDPI 2022

Trochta D. : Viscosity metrology; Metrology and testing conference, SMU, Bratislava, 2021

Trochta D. : Density and small volume metrology; Metrology and testing conference, SMU, Bratislava, 2021

Snopko L. : Mass metrology; Metrology and testing conference, SMU, Bratislava, 2021