

**COOMET**  
EURA-ASIAN COOPERATION OF NATIONAL  
METROLOGICAL INSTITUTIONS

**ACTIVITY REPORT OF  
COOMET TC 1.6  
«MASS AND RELATED  
QUANTITIES»**

**Dr. Ilya SHMIGELSKIY  
Chair of COOMET TC 1.6  
email: 2301@vniim.ru**



## TC 1.6 MEMBERS

COOMET TC 1.6 is composed of representatives of 18 COOMET member countries:

COUNTRY	METROLOGY CENTER
Azerbaijan	AzMi
Armenia	ARMSTABDARD
Belarus	BelGIM
Germany	PTB
Georgia	GEOSTM
Kazakhstan	KazStandard
Kyrgyzstan	CSM
Cuba	INIMET
Lithuania	FTMC
Moldova	ISM
Russia	VNIIM
Slovakia	UNMS
Tajikistan	TajikStandard
Turkey	UME
Uzbekistan	UzNIM



## TC 1.6 MEMBERS

Chair of TC 1.6 «Mass and Related Quantities»:

Mr. Ilya SHMIGELSKIY (VNIIM)

Deputy Chair of TC 1.6 «Mass and Related Quantities»:

Ms. Tamilla SHABIYEVA (AzMi)

Chairs of SCs:

SC 1.6.1 "Mass" – Mrs. Viktoriya BOGDANOVA (VNIIM, Russia);

SC 1.6.2 "Force" – Mr. Ilya SHMIGELSKIY (VNIIM, Russia);

SC 1.6.3 "Pressure" – Mr. Aleksandr CHERNYSHENKO (VNIIM, Russia);

SC 1.6.4 "Hardness" – Mr. Andrey ASLANYAN (VNIIFTRI, Russia);

SC 1.6.5 "Density, viscosity" – Mr. Aleksei DEMIANOV (VNIIM, Russia).



# COMPARISONS SC 1.6.1 «MASS»

IDENTIFIER	DESCRIPTION	STATUS
546/UA-a/11 COOMET.M.M-S5	Supplementary comparison in the field of mass measurement	The measurements are completed, the results are presented by the participants
665/UA-a/15 COOMET.M.M-S2	Bilateral supplementary comparison of mass standards	The approximate date of approval of Draft A and preparation of Draft B is May 2023
764/UA/18 COOMET.M.M-S6	Supplementary comparison in the field of mass measurement (kettlebell 20 kg)	Measurements continue
694/MD-a/16 COOMET.M.M-S3	Supplementary comparison of mass standards of 100 mg, 20 g, 1 kg and 10 kg	Work is underway to complete the publication of the Draft B in the KCDB



# COMPARISONS SC 1.6.2 «FORCE»

IDENTIFIER	DESCRIPTION	STATUS
259/RU/02 COOMET.M.F-S1	COOMET comparison in the field of force measurements 20 кН, 50кН, 100кН, 250кН, 500кН, 1000кН и 2000кН.	Currently, the draft Draft B is in the process of preparation



# COMPARISONS SC 1.6.3 «PRESSURE»

IDENTIFIER	DESCRIPTION	STATUS
711/TR-a/16 COOMET.M.P- K15	Comparison of absolute pressure standards in the range from 0.3 MPa to 0.9 Pa	At present, coordinates the final report with participants of comparisons
717/DE-a/17	Supplementary comparisons of national pressure unit standards in the range from 250 MPa to 1500 MPa	Measurements are completed
589/UA-a/12 COOMET.M.P-S1.	Supplementary comparison of national gauge pressure standards in the range from 1 MPa to 10 MPa	Final draft (Draft B) has been agreed upon



# COMPARISONS SC 1.6.4 «HARDNESS»

IDENTIFIER	DESCRIPTION	STATUS
638/UA-a/14 COOMET.M.H-S3	Comparison of national hardness standards using the Super-Rockwell scale	The Draft B was prepared
651/RU-a/14 COOMET.M.H-S2	Supplementary bilateral comparison of national standards in the field of nanoindentation	Measurements completed



# COMPARISONS SC 1.6.1 «DENSITY, VISCOSITY»

IDENTIFIER	DESCRIPTION	STATUS
789/KZ-a/19	Pilot comparisons in liquid density in the range from 600 to 1000 kg/m <sup>3</sup>	Comparison in progress.
788/KZ-a/19	Pilot comparison of liquid kinematic viscosity unit standard at temperatures: 20 °C (250-400 mm <sup>2</sup> /s), 25 °C (50-100 mm <sup>2</sup> /s), 40 °C (20-70 mm <sup>2</sup> /s)	Comparison in progress.



# COMPARISONS «SMALL STATIC VOLUME»

IDENTIFIER	DESCRIPTION	STATUS
822/GE/20	Pilot comparison of small volumes	Comparison in progress
766/GE-a/18 COOMET.M.FF- S7	Pilot comparison of small volumes	Comparison in progress



## CMC STATISTICS

In 2023 year we conducted an examination of 8 CMC the following areas:

- Force;
- Hardness;
- Pressure.

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**THANK YOU  
FOR YOUR ATTENTION!**

**Dr. Ilya SHMIGELSKIY**  
**Chair of COOMET TC 1.6**  
**email: 2301@vniim.ru**