

18RPT01 ProbeTrace

Workshop for traceability of contact probe and stylus instrument measurements



Agenda

16/05/2023

Hotel Mona Plaza, Belgrade, Serbia

Agenda version 2023-04-05

Time	16 May 2023 9:00 – 12:30 CET
Meeting type	In presence
Place	Hotel Mona Plaza, Belgrade, Str. Solunska 21, Belgrade, Serbia
Cost	The participation in the workshop is free. However, the number of participants is limited to 60 (meeting room capacity). The registration for the workshop is closed on 5 May 2023.
Responsibility	Tanfer Yandayan (TUBITAK, TR)
Speakers	Tanfer Yandayan (TUBITAK, TR), Milena Astrua (INRIM, IT), Denita Tamakjarska (BIM, BG), Slobodan Zelenika (DMDM, RS), Fernanda Saraiva (IPQ, PT), Lukasz Slusarski (GUM, PL), Vedran Simunovic (FSB, HR), Ahmed El Melegy (NIS, EG).
Targeted audience	NMI/DIs, industrialists, universities, calibration/manufacturer laboratories
Objective of the workshop	Sharing of the knowledge gained during Probe Trace project; Traceability for contact probe and stylus instrument measurements. Discussion with representatives from industry, academia and NMIs/DIs about calibration of form and roughness testers using different reference standards and use of alternative routes to achieve traceability and investigations for the performance of reference standards to achieve high precisions down to a level of 10 nm in roughness and roundness measurements.

16 May 2023

Time	Item	Speaker
09h00	Introduction to ProbeTrace project: Traceability for contact probe and stylus instrument measurements	T. Yandayan (TUBITAK, TR)
09h15	Traceability for form and roughness testers	
	Investigations of precise displacement actuators to provide traceability for contact probe and stylus instruments	T. Yandayan (TUBITAK, TR)
	Interferometric calibration of micro and nano displacement actuators	M. Astrua (INRIM, IT)
09h45	Calibration of ROUGHNESS tester probes	
	Testing of a Thorlabs RB13 piezo actuator as a potential standard in calibration for roughness instruments	D. Tamakjarska (BIM, BG)
	Potential using of displacement actuator PI P-620.ZCD.in calibration of surface testers and comparison with depth setting standards	S. Zelenika (DMDM, RS)
	Study of Aerotech QNP single-axis piezo nano positioning stages and their application in the calibration of roughness stylus instrument.	Fernanda Saraiva (IPQ, PT)
10h30	Coffee break	

11h00	Calibration of FORM tester probes	
	Feasibility study of a Thorlabs LPS710M piezo actuator as a potential standard in calibration for roundness instruments	L. Slusarski (GUM, PL)
	A proposal for dynamic calibration of tactile probes	M. Astrua (INRIM, IT)
11h30	Numerical tools for form and roughness testers	
	Noise reduction methods	V. Simunovic (FSB, HR)
	Open source software for calibration of surface testers using sphere standards.	A. El Melegy (NIS, EG)
12h15	Open discussion and future plans	T. Yandayan (TUBITAK,TR), all
12h30	End of workshop	

ProbeTrace, Project Number: 18RPT01: Traceability for contact probe and stylus instrument measurements:

https://www.euramet.org/research-innovation/search-research-projects/details?tx_eurametctcp_project%5Bproject%5D=1629&cHash=ee7e3682771534c84ce9e657a494eb19

<http://www.probetrace.org/>

For more information, please contact Tanfer Yandayan (TUBITAK, TR)
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