

Special Session **SS_16**

Metrology and Statistical Analysis of Measurement and Control Systems

Brief description of the specific scientific scope of the Special Session:

Metrology concerns all aspects of human life and man and his competences are, regardless of the development of machines and measuring devices, an important factor influencing the effectiveness of the measuring system. It is directly related to production and quality control, both through the measurement itself, as well as uncertainty analysis and statistical analysis of control and measurement systems.

The session will be dedicated to the identification of issues that improve and allow to shorten the test time and increase its accuracy and effectiveness of the measuring system. We invite you to submit your contribution for the session in the area of, among others, non-contact measurements (e.g. scanners with structured or laser light), non-medical computed tomography, modern techniques in surface topography measurements, multiscale analyzes (where data is collected for one object in macro, meso and micro scale), digital processing of measurement data, use of filtration and statistical measurement and control systems analysis.

List of topics of interest

1. Basics of metrology
2. Geometrical product specification (GPS)
3. Tactile and non-tactile measuring methods
4. Uncertainty of measurement
5. Coordinate measuring techniques and devices
6. Surface roughness and topography measurements
7. Statistical analysis of control and measurement systems (MSA)
8. Measuring devices and specialized dedicated solutions
9. Form, orientation, location and run-out measurements
10. Multiscale measuring devices and data analysis

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