

Session 1.3 Measurement and sensor technology

Time: Tuesday, 05.09.2023

Location: Humboldtbau, Lecture Room HU-HS

Chairman: T. Fröhlich (D-Ilmenau)

1:30 p.m.	R. Oliveira (BR-Rio de Janeiro), P. Weidinger, Z. Song, J. Sander, D. Mirian (D-Braunschweig)
Overview of current EMPIR research projects for the non-static traceability of mechanical quantities	
1:50 p.m.	S. Schulze, R. Theska, (D-Ilmenau), K. Arumugam, G. Shaw (US-Gaithersburg)
Development of a high precision balance for measuring quantity of dispensed fluid as a new calibration standard for the becquerel	
2:10 p.m.	M. Wittke, M. Torres, M. Darnieder, R. Theska (D-Ilmenau)
Investigation of a novel monolithic stiffness-compensated mechanism for high-precision load cells	
2:30 p.m.	P. Fleischmann (D-Stuttgart), J. Happel (D-Stockach), B. Gundelsweiler (D-Stuttgart)
Analysis and development of a sensor concept for multi-stable actuators with passive magnetic shape memory alloy	
2:50 – 3:10 p.m. Coffee break and Visits of Expositions	
3:10 p.m.	J.A. Calderon Chavarri, E.B. Barriga Gamarra, J.C. Tafur Sotelo, J.I. Leon, J. Lozano, H. Lozano, R. Gallo, J. Zena (PE-Lima)
Wireless intelligent sensors based in nanostructures with energy self-sufficiency to study the consequences of high temperatures in combustion motors	
3:30 p.m.	J. Chauhan, S. Gourishetti, S. Grollmisch, M. Rohe, M. Sennewald, J. Hildebrand, J.P. Bergmann (D-Ilmenau)
Empirical study on DED-Arc welding quality inspection using airborne sound analysis	

3:50 p.m.	O. Bader, N.E.B. Amara (TN-Sousse), O. Kanoun (D-Chemnitz)
Evaluation of 3D current injection patterns for human lung monitoring in electrical impedance tomography	
4:10 p.m.	H. Alasasfeh, O. Kanoun (D-Chemnitz), M. Hafsa, O. Bader (TN-Sousse)
Machine learning approach for the image reconstruction of the human forearm section at different hand signs	
End of Session	

