

Ksenia Ostrowska

Academic degrees : doctor habilitatus in Engineering, prof. of CUT

Position : Professor

Engineering - technical field

Discipline Mechanical engineering

Academic qualifications:

Director of the Industry 4.0 Development and Competence Centre, accredited staff of the Coordinate Metrology Laboratory.

Membership in professional and academic boards:

1. Expert on the international working group of CEN/CENELEC, ISO/IEC, WG 10 Coordinate measuring machines, 12 – Dimensions, 18 – Geometrical tolerancing.
2. Technical Committee No. 48 of the Polish Committee for Standardisation on the Fundamentals of Mechanical Engineering – representative of the Kraków University of Technology since 10 March 2011 – ongoing.
3. Scientific Society for Coordinate Metrology, October 2013 – ongoing, President, board member, founder.
4. ProCAX – Polish Association for the Promotion of Computer-Aided Engineering Systems, November 2013 – ongoing, member.

Academic merits:

I founded the Industry 4.0 Development and Competence Centre, and I was the driving force behind the establishment of an Industry 4.0 educational facility at the Faculty of Mechanical Engineering, which is currently under construction. I am also accredited staff at the Coordinate Metrology Laboratory, which is one of the world's leading laboratories and operates as a PCA-accredited calibration laboratory.
I have managed or carried out 16 national and international grants. I am the author and co-author of around 100 scientific and research papers. I collaborate with many European universities and leading research centres, where I have been invited to give lectures. I organize joint projects and lectures by visiting professors from foreign universities under the POWR.03.05.00-00-ZR28/18 programme, which gives me the opportunity to implement new methods of teaching and research.
I am the author of methods for measuring and imaging products.
I have developed Coordinate-Based Virtual Measuring Arms based on the Monte Carlo method.
I have developed Coordinate-Based Virtual Measuring Robots based on the Monte Carlo method and artificial neural networks.
Together with my team, I develop and implement new concepts and methodologies for the calibration of coordinate systems.
For many years, I have also been involved in issues relating to automated quality assurance systems and quality management, metrological aspects in bioengineering and industrial design, and the implementation of Industry 4.0 concepts.

Professional qualifications/language skills:

english

Research field:

My academic, research and innovation activities currently fall within the discipline of Mechanical Engineering (Machine Design and Operation) and are linked to the fields of Production Engineering and Automation and Robotics. Coordinate measurement technology, contact and non-contact measurement systems, simulation-based measurement systems, modelling of measurement systems with an open kinematic chain, applications of coordinate measurement systems in medicine, in-process/in-line metrology.

Address

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Useful links:

http://lmw.mech.pk.edu.pl/