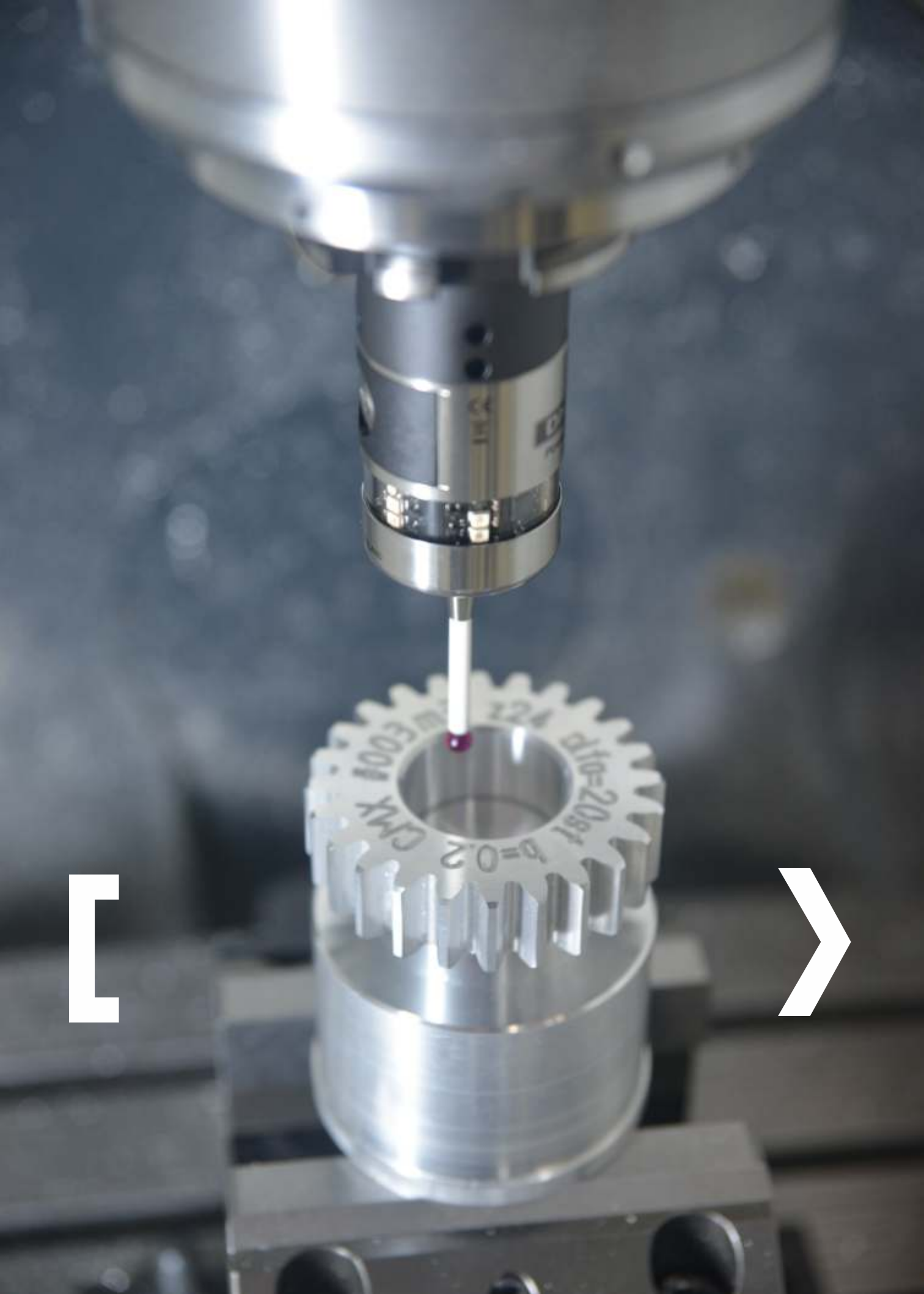


Faculty of Mechanical Engineering and Computer Science

- al. Armii Krajowej 21, al. Armii Krajowej 36
  ul. Dąbrowskiego 73, 42-201 Częstochowa
- phone: 34 325 05 04
- e-mail: biuro@wimii.pcz.pl

wimii.pcz.pl

Machine hall (1980s)

History of the Faculty and its main areas of activity

The Faculty, which has the longest history and the richest tradition among the faculties of Czestochowa University of Technology, was established when the University was founded in 1949 as the Faculty of Mechanical Engineering. In 1953 the name was changed to the Faculty of Machine Design. Initially, it offered three-year engineering programmes. In the academic year 1954/1955 four-year-long programmes were introduced, replaced by five-year programmes in 1957/1958. Due to changes in the educational profile, the emergence of new specialisations and the launch of the Computer Science degree programme in 2000, there was another change of the name to the Faculty of Mechanical Engineering and Computer Science. The scientific and research work conducted at the Faculty focuses on widely understood issues related to mechanics, machine design and operation as well as mathematics and computer science.

Machine hall (2021)

CNC DMG MORI CLX 350 CNC Universal Turning Centre

Faculty Authorities

Małgorzata Klimek, MScEng, PhD, DSc, ProfTit

- ***Dean of the Faculty***
  Małgorzata Klimek, MScEng, PhD, DSc, ProfTit

- ***Director of Scientific Discipline Mechanical Engineering***
  Janusz Szmidla, MScEng, PhD, DSc, CUT Associate Professor

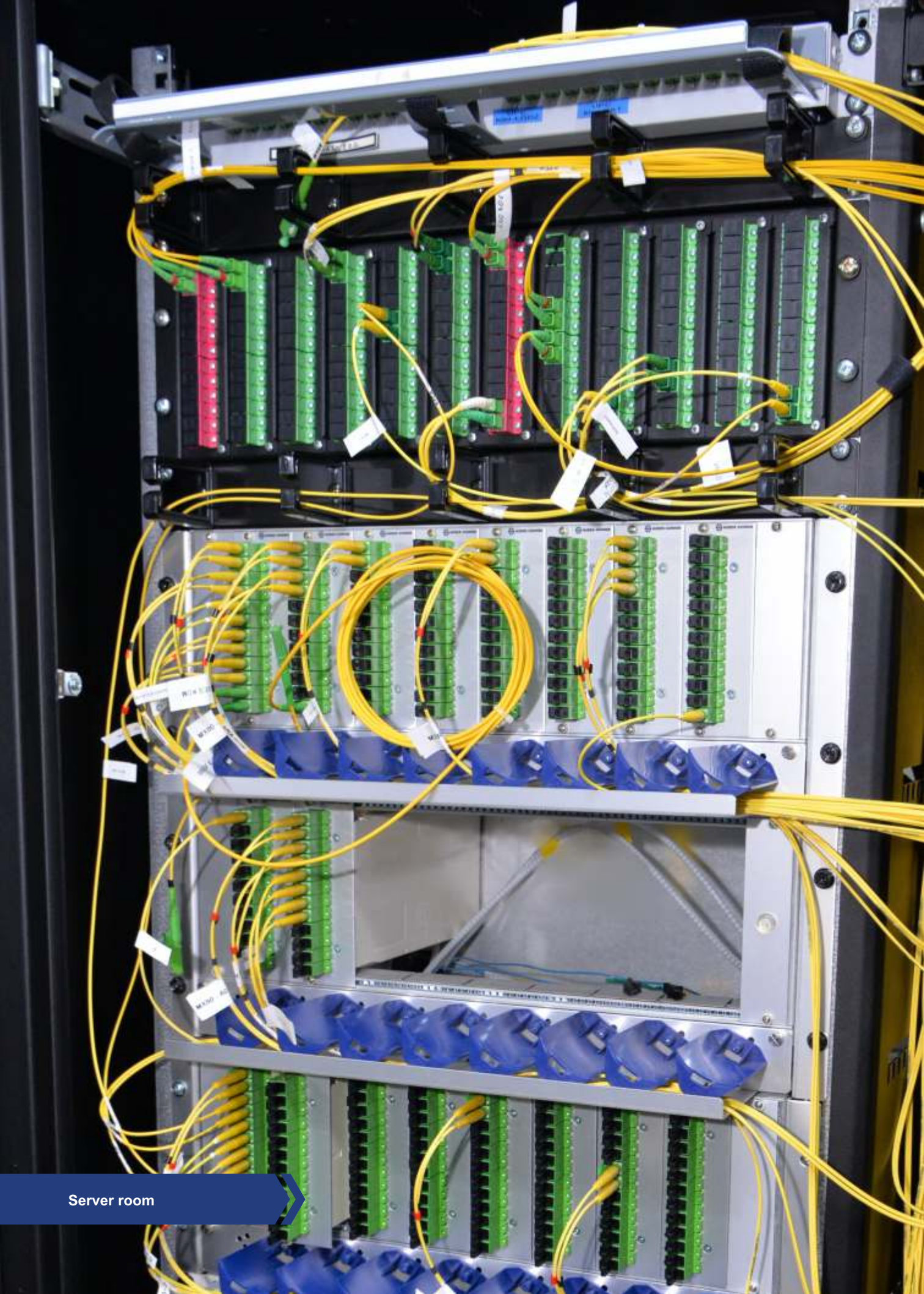
- ***Director of Scientific Discipline Technical Computing and Telecommunications***
  Robert Nowicki, MScEng, PhD, DSc, ProfTit

- ***Director of Studies of Mechanical Engineering***
  Dariusz Kwiatkowski, MScEng, PhD, DSc, CUT Associate Professor

- ***Director of Studies of Technical Computing and Telecommunications***
  Janusz Starczewski, MScEng, PhD, DSc, CUT Associate Professor

- ***Deputy Director of Studies of Technical Computing and Telecommunications***
  Krzysztof Kaczmarek, MScEng, PhD

- ***Director of Development***
  Arkadiusz Szymanek, MScEng, PhD, DSc, CUT Associate Professor

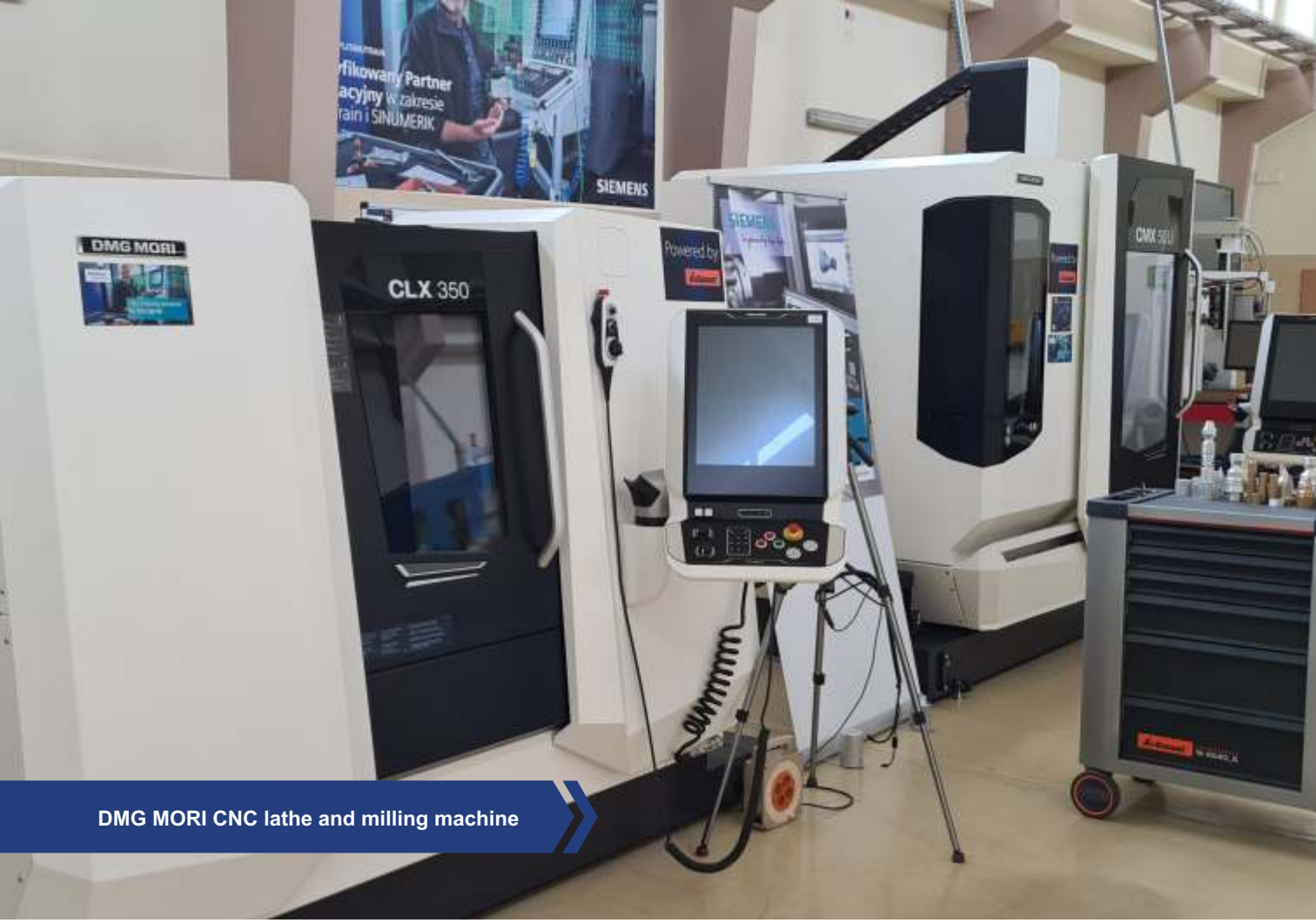


Server room

Academic staff and their academic achievements, research projects

The academic staff of the Faculty consists of 22 Professors, 41 a DSc degree and 90 a PhD degree. Scientific work of the Faculty's staff results in publications in high ranked journals, patents and utility models, national and international projects carried out in cooperation with institutions, research studies within consortia and commissioned research. Together with the Faculty of Electrical Engineering, a project within the Regional Excellence Initiative is implemented to develop the discipline of Technical Computing and Telecommunications. Numerous projects financed by NCN (National Science Centre) and NCBiR (National Centre for Research and Development) are carried out. Under the NAWA (National Agency for Academic Exchange) programme projects are run aimed at promoting international research cooperation, and academic exchange, as well as aiding universities through the creation and implementation of international programmes of study.

Mobile Laboratory for Autonomous Systems



DMG MORI CNC lathe and milling machine

Laboratory for Numerically Controlled Machine Tools

Facilities

In recent years, research and teaching laboratories have been expanded. The latest investments include two state-of-the-art CNC machines from DMG-MORI, a CLX350 V4 lathe and a CMX50U five-axis milling machine, a FIBER fiber laser, wire EDM (Electrical Discharge Machine) and a modern PIV measurement system for non-invasive velocity field measurements using laser light scattered on particles. New computer laboratories include the Computer Forensics Laboratory as well as the AI&T Lab and the Parallel Computing, Computer Simulation, and AI Laboratories established under the REI (Regional Excellence Initiative) project (a total of 4 laboratories are planned to be created). The NVIDIA DGX-2 system for AI research including hardware and software for deep learning, has also been launched. The Faculty invests in the development of teaching and research facilities, which ensures a high quality of scientific research and education.

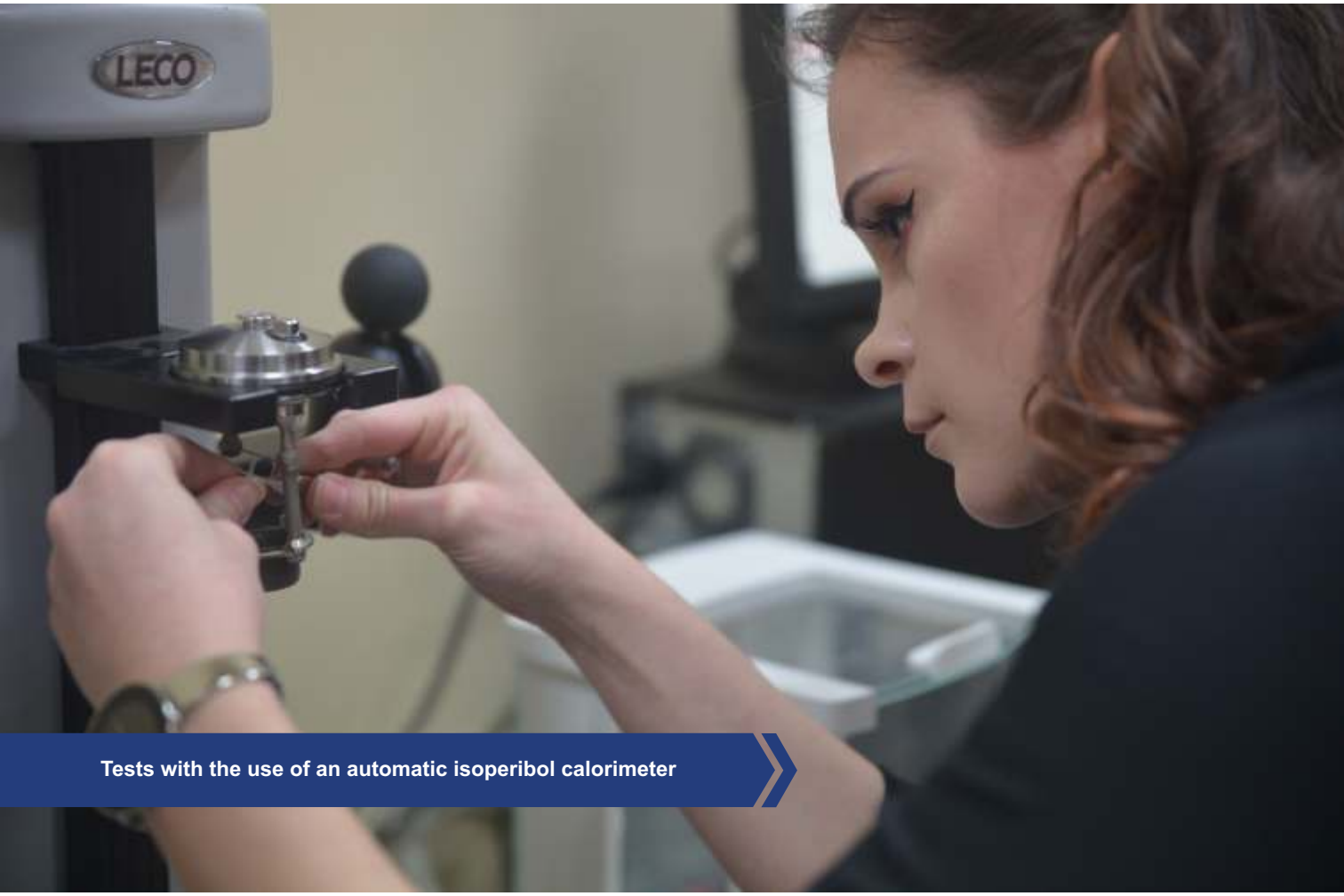
Universal lathe TOP 400

Drafting room

Laboratory for Plastics Processing Machinery and Equipment

Educational offer

The Faculty offers the following degree programmes: Computer Science, Artificial Intelligence and Data Science, Applied Mathematics and Information Technology, Mechanics and Machine Design, Mechatronics. Moreover, MSc Computer Science degree programme courses and all degree courses under the Erasmus+ programme are taught in English. In addition, the following postgraduate studies are offered: Materials and Technologies of Plastics Processing, Programming of Numerically Controlled Machine Tools, Requirements and Competencies of the International Welding Engineer – IWE and Computer-Aided Machine and Mechanical Equipment Design.



Tests with the use of an automatic isoperibol calorimeter

Mars rover built by CUT Rover Team at the 2018 University Rover Challenge – an international competition in the USA

Students of 'Computer-Aided Machine and Mechanical Equipment Design Research Club – CUT Rover Team'

Student Research Clubs and other student activities

At present, scientific work of the Faculty's students is carried out in sixteen research clubs, such as: Computer Science; Mobile and InterNet Developers – MIND; Applied Mechanics; Welders; Polymer Processors; Computer Science 11/1986; Destructive and Non Destructive Testing; Computer Measurement Systems; DTSpace; Computer Engineering, Networking and Operating Systems; Information Systems Design; ECO-ENERGY; Thermal Power Engineering – Thermoenergy; Automotive Technology (IMTiTS); Computer Aided Machine and Mechanical Equipment Design.

Erasmus+ exchange student in the Faculty's laboratory


DMG MORI
CMX 50 U
Powered by

Cooperation with business

For many years, the Faculty has been cooperating with regional and national industrial companies. The Faculty has established the Faculty Advisory Council composed of successful entrepreneurs, managers and representatives of regional organisations. The aim of the Council is to exchange knowledge and experience concerning the employers' expectations of our graduates, as well as to exchange views on the position and role of the University and the Faculty in the social-economic reality. An important role of the Council is to provide advice and opinion on the activities of the statutory bodies and to participate in developing ideas for educating the students of the Faculty. The leading companies that are part of the Council include the following: Kimla, Siemens, Eltrox, Satel, MarGol, Exact Systems, APJ Sikora, Asten Group, SGP, Orlen, PCC Rokita, Lhoist, Nordkalk, Unia UPS and Invest in Czestochowa together with the City Hall (Academic Czestochowa Project).

Keyence high resolution digital microscope

Laboratory for Geometrical Quantities Metrology

International cooperation

The Faculty extensively cooperates internationally in many scientific areas with leading world centres. The most important scientific centres and companies with which the cooperation is carried out are as follows: Institute of Thermomechanics Czech Academy of Science, the Czech Republic; University of Ostrava, the Czech Republic; Technical University of Kosice, Slovakia; AVL List GmbH, Austria; Friedrich-Alexander - Universitaet Erlangen-Nuernberg, Germany; University of Slavonski Brod, Croatia; University College Dublin, Ireland; Imperial College London, the UK; Politècnica de València, Spain; Universitat de València, Spain; Universitat Jaume I, Spain; Coimbra University, Portugal; Lomonosov Moscow State University, Russia; HSE Tikhonov Moscow Institute of Electronics and Mathematics, Russia; Iowa State University,the USA; University of Buffalo, the USA; Queensland University of Technology, Australia.

University of Slavonski Brod, Croatia, CEEPUS Mobility

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Wydział Inżynierii Mechanicznej i Informatyki
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The President
Mr. Damien OWENS

The president
Prof. Bohdan Macukow

Brussels, February 2021

Kraków, February 2021

A graduate of this programme may define him/herself "EUR-ACE® Bachelor/Master" as appropriate.

EUR-ACE Master Certificate awarded to Computer Science Degree Programme

Significant accomplishments

The Mars rover built by CUT Rover Team won the international University Rover Challenge 2018 competition in the USA - the most prestigious Mars rover competition in the world, beating 35 vehicles from around the world. The Faculty's staff were among the winners of the Fulbright Scholarship in the academic year 2020/2021 and the individual award of the Minister of Education and Science in 2021. Since 2020 the Faculty has been Certified Educational Partner in the field of operating and programming numerically controlled machine tools with the SIEMENS Sinumerik control system. In 2021 the Faculty received the European EUR-ACE LABEL Certificate for BSc and MSc Computer Science degree programmes. Since 2017, Czestochowa Young Explorers' University project, co-financed by the Ministry of Education and Science and EU funds under ESF, has been implemented. Pupils of primary school grades I-VIII develop mathematical, science and ICT skills as well as competences in creativity, innovation and problem-solving.

Czestochowa Young Explorers' University