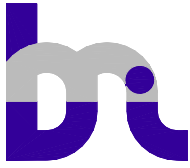


FACULTY OF MECHANICAL ENGINEERING AND COMPUTER SCIENCE



Dean: prof. Jacek Stadnicki, Ph.D., D.Sc.
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Website (Polish): www.wbmii.ath.bielsko.pl

The Faculty is one of well-known and the oldest units on the University.

All the departments listed below deliver courses at the Bachelor's and Master's levels (as chosen by the student), as well as carrying out research in these fields. The Faculty leads Doctoral courses in Mechanical Engineering as well.

Major fields of study:

- applied mechanics,
- mechanical engineering,
- finite element analysis,
- vehicles and car engines,
- manufacturing technology and automation,
- materials engineering,
- mathematics,
- production engineering.

The Faculty consists of seven Departments:

1. DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
2. DEPARTMENT OF ELECTRICAL ENGINEERING AND AUTOMATION
3. DEPARTMENT OF MECHANICS AND COMPUTER SCIENCE
4. DEPARTMENT OF MECHANICAL ENGINEERING FUNDAMENTALS
5. DEPARTMENT OF INTERNAL COMBUSTION ENGINES AND VEHICLES
6. DEPARTMENT OF MANUFACTURING TECHNOLOGY AND AUTOMATION
7. DEPARTMENT OF INDUSTRIAL ENGINEERING

1. DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Head of the Department

prof. dr hab. Kazimierz Nikodem



Research interest:

- convex analysis,
- functional equations and inequalities,
- multivalued functions,
- modelling of stochastic algorithms,
- methods of artificial intelligence and image processing.

E-mail: www.km.ath.bielsko.pl

2. DEPARTMENT OF ELECTRICAL ENGINEERING AND AUTOMATION

Head of the Department

prof. dr hab. inż. Igor Kurytnik



Research interest:

- electrical engineering and electronics,
- power electronics,
- electrical metrology,
- digital and microprocessor technology,

- automation,
- material science in electrical engineering,
- electrical machines and mechanisms,
- networks and telecommunication systems.

E-mail: www.keia.ath.bielsko.pl

3. DEPARTMENT OF MECHANICS AND COMPUTER SCIENCE

Head of the Department

prof. dr hab. n.t. Stanisław Wojciech



Research interest:

- structural and dynamic analysis with FEM,
- optimal control of machines drives,
- modelling of machine dynamics with consideration of flexible links, clearance and friction in joints,
- structural analysis of off-shore cranes,
- computer methods and algorithms
- modelling of air pollution

E-mail: www.kmiimk.ath.bielsko.pl

4. DEPARTMENT OF MECHANICAL ENGINEERING FUNDAMENTALS

Head of the Department

prof. dr hab. inż. Jacek Stadnicki



Research interest:

- computer simulation, structural, modal and dynamic analysis using FEM packages Patran/Nastran/Famad, Mark, Dytran,
- mechatronics, machine control, industrial automation,
- problems of optimisation in machine design,
- analysis, testing and design of gear transmissions,
- high-temperature corrosion and oxidation, technologies of materials with required properties,
- computer aided design in systems CATIA, UniGraphics, Inventor,

- non-compressible liquid flows – FLUENT,
- mechanics of damage, diagnostic methods, theory of graphs.

E-mail: www.kpbm.ath.bielsko.pl

5. DEPARTMENT OF INTERNAL COMBUSTION ENGINES AND VEHICLES

Head of the Department

dr hab. inż. Kazimierz Romaniszyn, prof. ATH



Research interest:

- analysis and numerical simulation of working cycles in internal combustion engines,
- selection and optimisation of algorithms of control of spark and diesel engines,
- analysis of combustion process of alternative fuels in spark and diesel engines,
- experimental and modelled investigations of vehicle dynamics, including vehicles with electric and hybrid drives,
- calculation and design of vehicle chassis,
- modelling of thermal processes in energy systems.

E-mail: www.kssip.ath.bielsko.pl

6. DEPARTMENT OF MANUFACTURING TECHNOLOGY AND AUTOMATION

Head of the Department

dr hab. inż. Stanisław Płonka, prof. ATH



Research interest:

- optimisation and designing of manufacturing processes,
- CAD/CAM systems,
- artificial intelligence in machine manufacture,
- refining, modification and crystallisation of aluminium alloys (ATD and AED),
- improvement of properties of foundry alloys,
- economical processes of deep drawing,
- coordinate measuring technique and surface roughness measurements.

E-mail: www.ktmia.ath.bielsko.pl

7. DEPARTMENT OF INDUSTRIAL ENGINEERING

Head of the Department

prof. dr hab. inż. Jozef Matuszek



Research interest:

- design of production processes (in machine and agricultural industry),
- modelling and simulation of production processes,
- integrated management systems,
- computer management systems,
- digital factory.

E-mail: www.kip.ath.bielsko.pl

Research - General Disciplines:

- applied mechanics,
- mechanical engineering,
- manufacturing technology and automation,
- materials engineering,
- production engineering,
- mathematics.

COOPERATION

The Faculty has always tried to meet the needs of industry in Bielsko-Biala and the surrounding region. Cooperation with national and foreign firms is carried out on the basis of long-term agreements, short-term research projects as well as in the form of vocational or in-house training. We cordially invite all companies interested in cooperation to contact the Dean.

The Faculty cooperates with:

- Actro, Molde
- AVL GmbH, Graz
- Axtech, Molde
- Carl Zeiss, Oberkochen

- Centro Ricerche FIAT Orbassano, Turyn
 - Mahr, Goettingen
- and many other domestic companies.