



# UNIVERSITY OF AGRICULTURE IN KRAKOW - UAK





krakow-wawel.webp



# KRAKOW

- ✓ Cultural and educational center,
- ✓ Every year over 200,000 students study at Krakow's 25 institutions of higher education
- ✓ Capital of Małopolska Region,
- ✓ Royal Capital City and necropolis of Polish kings,





**7 faculties**  
**University Centre of**  
**Veterinary Medicine (JU-UA)**  
**27 main fields of study**  
**60 specializations**  
**31 post-graduate programs**

**Over 7 000 students**  
**Over 730 academic staff**



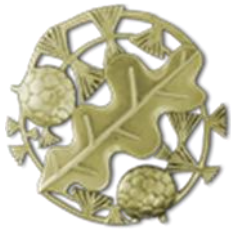


# Faculties



## Faculty of Agriculture and Economics

- Agriculture
- Environmental Protection
- Bioeconomics
- Quality and Environmental Safety
- Management
- Economy



## Faculty of Forestry

- Forestry







# Faculties



## Faculty of Animal Sciences

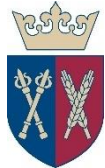
- **Animal Husbandry**
- **Applied Biology**
- **Animal Bioengineering**
- **Animal Ethology and Psychology**



## Faculty of Environmental Engineering and Land Surveying

- **Land Surveying and Cartography**
- **Spatial Management**
- **Environmental Engineering**
- **Water Engineering and Management**
- **Landscape Architecture**





# Faculties



## Faculty of Biotechnology and Horticulture

- **Biotechnology**
- **Horticulture**
- **Garden Art**
- **Technology of Healing and Pro-health Plants**



## Faculty of Production and Power Engineering

- **Mechatronics Engineering**
- **Management and Production Engineering**
- **Renewable Energy Sources and Waste Management**
- **Transport and logistics**







# Faculties



## Faculty of Food Technology

- Food Technology and Human Nutrition
- Dietetics
- Brewing and malting



## University Centre of Veterinary Medicine (JU-UA)



- Veterinary Medicine



# **Courses taught in English**

**Over 100 courses  
taught in English  
offered by all  
Faculties**

- ✓ Erasmus+ Programme Countries, (117 Agreements with 30 Countries )
- ✓ Erasmus+ Partner Countries (Western Balkans, Eastern Partnership countries, Russian Federation, Central Asia)





# **PhD studies - the Doctoral School of the University of Agriculture**

**8 semesters (in Polish and English)**

**PhD in 8 scientific disciplines  
belonging to:**

- 1. agricultural sciences**
- 2. engineering and technical  
sciences**
- 3. social sciences**

**Around 30% of the PhD students  
are foreigners**



## **EU: Horizon 2020**

- „Small farms, small food businesses and sustainable food security- SALSA”**
- „Food science, technology and engineering- European Joint Doctorate training towards knowledge, skills and mobility- *EJDFoodSci*”**
- „*Smart strategies for the transition in coal intensive regions-TRACER*”**
- „*Collective approach of research and innovation for sustainable development in highland - HIGHLANDS.3*”**

## **EU: Horizon Europe**

- „Learning to realize multiple forest policy objectives under climate related stress and disturbance – LEARNFORCLIMATE”**





# **Membership in international networks:**

- 1. European University Association (EUA)**
- 2. Visegrad University Association (VUA)**
- 3. ICA Association for Life Sciences University**
- 4. International Relations Officers' Network of the Association of European Life Science Universities (IROICA)**
- 5. International Relations Offices Forum (IROS Forum)**
- 6. Bloom – bioeconomy network**
- 7. EPNOE Networks of International Polysaccharide Community**
- 8. European Forest Institute (EFI)**
- 9. International Union of Forest Research Organizations (IUFRO)**



# Research and innovation at UAK – Support Units

- Centre for Technology Transfer
- Centre for Project Administrative Support
- Innovation Centre of the University of Agriculture in Krakow, Ltd.
- Academic Entrepreneurship Pre-incubator
- Academic Business Incubator





## The Technology Transfer Center of the University of Agriculture in Krakow



- support researchers in each stage of their work
- help from the idea of the research, also in developing of idea and getting a research grant,
- help in patent or invention applied to the patent office,
- protect rights for the invention,
- participate in the commercialization process,
- help in seeling idea to the market place.



# The Innovation Center of the University of Agriculture in Krakow LTD



- deals in the commercialization of the results of scientific and research works created at the University of Agriculture by selling patents and licenses and creating spin-off companies.



Rzeczpospolita  
Polska



Ministerstwo Nauki  
i Szkolnictwa Wyższego

UNIA EUROPEJSKA  
EUROPEJSKI FUNDUSZ  
ROZWOJU REGIONALNEGO





# „Incubator of Innovation 2.0 and 4.0”

implemented as part of a non-competitive project entitled „Support for management of scientific research and commercialization of R & D results in scientific units and enterprises" under the Intelligent Development Operational Program 2014-2020 (Measure 4.4)

## Current stage of selected R&D pre-implementation works



**DOMAIN:** Biological Sciences, Agriculture and Horticulture

**AREA:** Phytoremediation of industrial wastewater

**Head of the Grant:** PhD Joanna Augustynowicz

Fig. 1. Researches as part of the work entitled „**Optimization of phytoremediation of industrial wastewater containing chromium using callitriche (*Callitriche* sp.) and co-inhabiting organisms**”.

# Current stage of selected R&D pre-implementation works

**DOMAIN:** Mechanical Engineering, Environmental Engineering, Mining and Energy

**AREA:** Optimization of the combine's pneumatic system

**Head of the Grant:** Prof. DSc Sławomir Kurpaska

Fig. 2. Overview diagram as part of the work entitled „**Determination of technical and operational parameters of the pneumatic system which is the equipment of the working head in the combine harvester section for strawberry fruit harvesting, row or bed, field and / or under cover**".

# Agritech market

**AgriTechMarket.pl – TECHNOLOGY BASE**  
of the University of Agriculture in Krakow

All presented inventions are legally protected. The Technology Transfer Center of University of Agriculture in Krakow (CTT UR) takes care of their use and implementation into business. The purpose of the Technology Transfer Center of University of Agriculture in Krakow is to commercialize the results of scientific research and R&D works and development, with a particular focus on technology transfer from science to business.



# Agritech market



## INVENTIONS

Search Inventions

Industry

Type of offer

ADVANCED 

SEARCH

**We are ambitious and have numerous achievements and plans for the future, we initiate R&D cooperation by participating in numerous networking initiatives:**

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- II Forum "Networking of SIR Partners" organized by the Agricultural Advisory Center in Brwinów, Warsaw branch,

- Workshops for scientists entitled "Build your STARTUP",



- Together with the technology transfer units of Krakow universities: the Jagiellonian University, AGH, PK, UEK and special purpose vehicles, the so-called Demo Day at the Auditorium Maximum of the Jagiellonian University, during which our scientists presented the best pre-implementation works carried out under the "Innovation Incubator 2.0" project to investors and investment funds.

- Together with the Marshal's Office of the Lesser Poland Voivodeship, we implemented a project entitled "Innovative Safari", during which scientists had the opportunity to meet entrepreneurs from various counties of the Małopolska Province.

- "Fair of Innovative Initiatives" at the Ministry of Agriculture and Rural Development, incl. on the implementation of the measure "Cooperation" under the RDP for 2014-2020.



# V FORUM

GREEN SMART CITY

24-25  
PAŹDZIERNIKA  
2019

Centrum Kongresowe UR,  
aleja 29 Listopada 46,  
31-425 Kraków

Więcej informacji na stronie  
<https://fgsc.urk.edu.pl/>

ORGANIZATORZY:



Dofinansowano ze środków  
Narodowego Funduszu  
Ochrony Środowiska  
i Gospodarki Wodnej



**Forum connects science,  
business and local  
government officials  
It concerns the subject Smart  
City and Smart villages**

<https://fgsc.urk.edu.pl/rejestracja.html>

<https://www.facebook.com/FORUMGreenSmartCity/>

# STARTUP SCHOOL UR



The aim of the “Startup School UR” workshops is to support University employees and research teams working for science. Participants will gain experience and knowledge needed to create the foundations of their own business.

They will receive support in the form of a series of trainings related to: team building, strategic and operational activities, running a company (building the company’s strategy, business models, business presentations). The training will also cover legal and accounting issues related to running your own business.

The organizers are: University of Agriculture in Kraków through the University’s Technology Transfer Center and the Innovation Center of the University of Agriculture in Kraków Ltd.





# HUGO GREEN SOLUTIONS

## **Product and process innovation**

**Hugo - Growth Stimulator** - devices for stimulating seeds before sowing in the field or in the ground and a device for stimulating plants in the field, integrated with the Hugo - Agricultural robot. Plant biostimulation is based on the use of a proprietary algorithm (to stimulate plant seeds and juvenile plants in field cultivation), which, combined with the traditional method of stimulation, effectively stimulates plants to grow.

**Hugo - Agricultural Robot** - a fully integrated self-propelled vehicle for irradiating plants in the early stages of growth and with the possibility of using spot treatments related to spraying and foliar feeding of plants.





**Thank you  
for your attention**