



# Development of a Modern Higher Education System for Water Engineering in Syria



8-14.01.2011 Damascus

**Department of Land Protection**  
**Opole University Poland**

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- One of the oldest Polish towns
- Inhabited by a population of over 120 thousands
- The capital of the District of Opole – a borderland of rich history and multicultural heritage, situated in south-west Poland



60 years of academic tradition  
16 years of university history



## Opole University

was established in 1994 as a result of joining one of the best Polish pedagogical academies:  
The Higher Pedagogical College (1950-1994)  
and the Opole branch of the Catholic University of Lublin.



# Faculties



Philology



Economics



History  
and Pedagogy



Mathematics,  
Physics and  
Computer Science



Theology



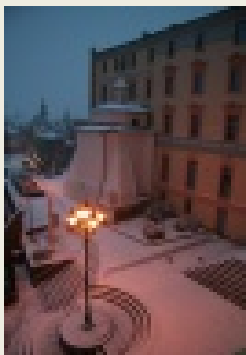
Chemistry



Law  
and Administration



Natural Sciences  
and Technology



32 majors



111 specialities



60 postgraduate studies

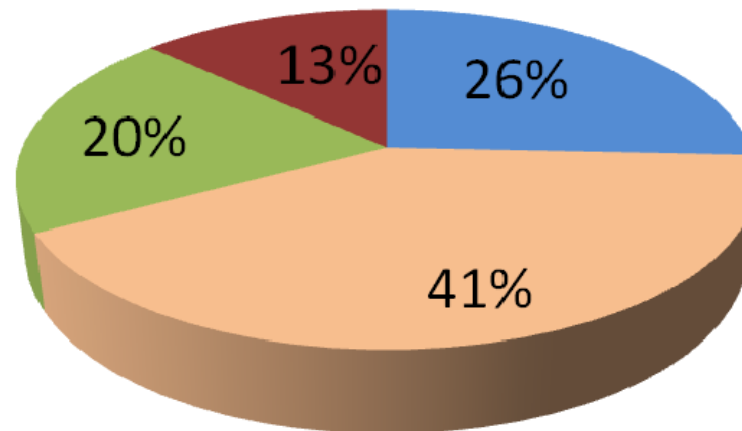
8 doctoral studies



Over **700** academic staff members educate approx. **17,000** students

### academic staff

■ professor ■ doctor/assistant professor ■ assistant ■ senior lecturer







# Faculty of Natural Sciences and Technology

Established in 1999, the Faculty derived from the Institute of Biology and Environmental Protection and the Department of the Process Engineering.

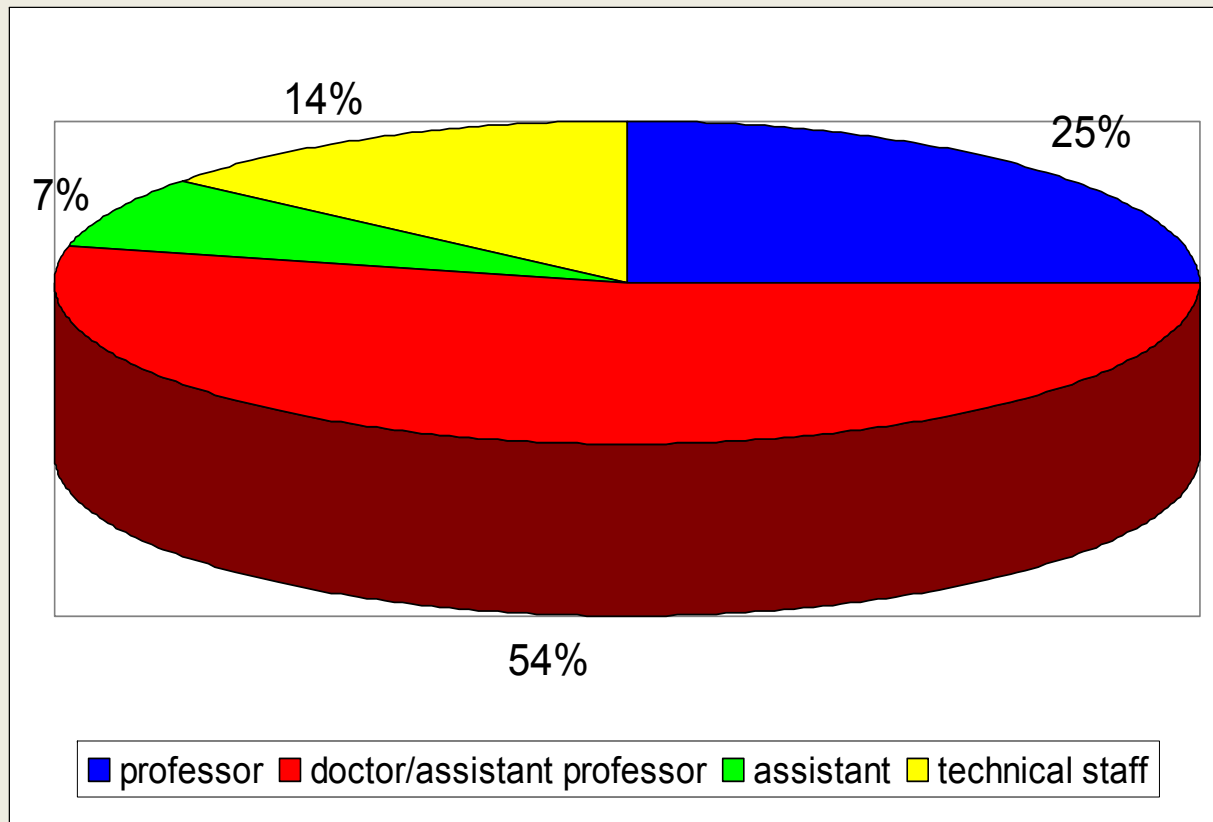
## Departments:

- Biotechnology and Molecular Biology
- Biosystematics
- Land Protection
- Process Engineering
- Technology

## Majors:

- Biology
- Biotechnology
- Environmental Engineering
- Environmental Protection
- Technical and Computer Education

## Faculty of Natural Sciences and Technology



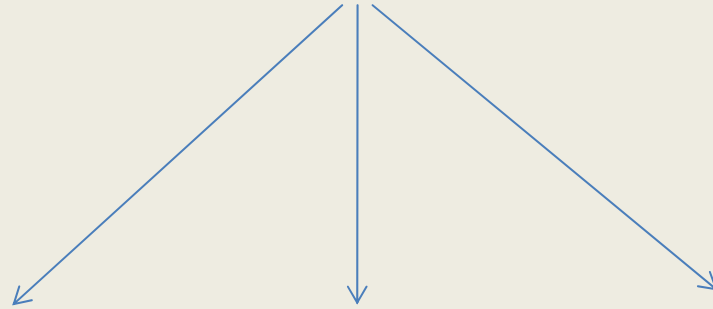
### Students:

- full-time - over 700
- external - over 400





## Department of Land Protection



Chair of Waste and  
Sewage Management

Chair of Soil Science and  
Environmental Geology

Chair of Monitoring and  
Spatial Management



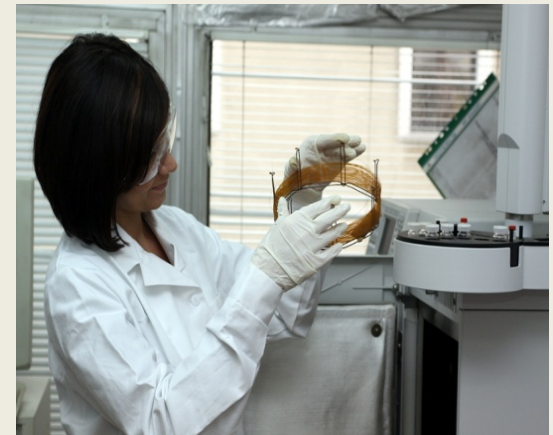


prof. Czesława Rosik-Dulewska

# Chair of Waste and Sewage Management

## **Educational profile:**

- Waste management
- Water supply and sewage disposal
- Hydrology
- Meteorology and climatology
- Water protection
- Mineral waste materials
- Organic waste materials



## **Scientific profile:**

1. Assessment of physical and chemical properties of industrial wastes in terms of:
  - methods of their disposal,
  - their capacity for deposition and management in underground mine workings,
  - identification the opportunities and direction of their utilization in industrial technologies as substitutes for natural resources.
2. Chemical analysis of municipal wastes and composts produced from them in order to determine the suitability of:
  - municipal waste for composting,
  - compost for environmental/natural usage.
3. Evaluation of anthropogenic impact on surface water and groundwater quality.
4. Studies on water retention and flood retention.

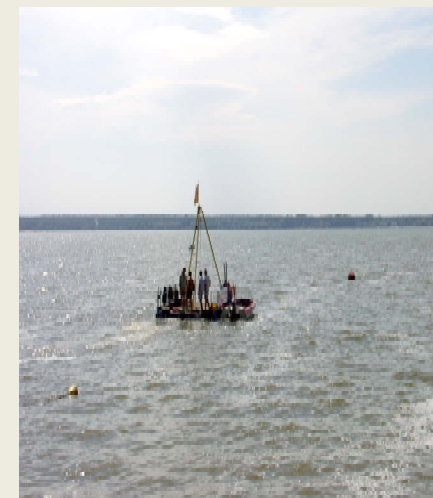


dr hab.  
Tadeusz Magiera

# Chair of Soil Science and Environmental Geology

## **Educational profile:**

- Pedology
- Soil protection
- Land reclamation
- Geology
- Environmental magnetism
- Humic substances in soils and organic wastes
- Plant cultivation technology
- Agrocenosis protection



## **Scientific profile:**

1. Characteristics and assessment of physico-chemical and chemical properties of:
  - urban soils,
  - forest complexes' soils in the areas of high anthropopression and in protected areas.
2. Studies on the soil humic system in relation to habitat features and anthropogenic factors.
3. Application of the soil magnetometry to the investigations of:
  - pollutants' distribution in the upper soil layer,
  - deposition magnitude of industrial and urban dusts.
4. Monitoring of transport pollution.
5. Land reclamation, particularly postmining and landfill reclamation.
6. Economically effective and environmentally friendly technologies of plants' cultivation.





dr hab.  
Stanisław Koziarski

# Chair of Monitoring and Spatial Management

## **Educational profile:**

- Aquatic ecology
- Geomorfology
- Monitoring and bioindication
- Spatial management
- Civilization threats
- Geodesy and photogrammetry
- Teledetection and GIS



## **Scientific profile:**

1. Anthropogenic transformation of natural and cultural landscapes in terms of their protection:
  - local and regional systems of protection of the landscape diversity,
  - spatial planning in local and regional scale,
  - typology and physico-geographical regionalization, and its application in the protection of natural environment,
  - application of the remote sensing and GIS in the environmental protection and spatial management.
2. Biological and ecotoxicological studies on aquatic ecosystems:
  - structure and functioning of benthic macroinvertebrates in various ecosystems,
  - assessment of running water quality based on macroinvertebrate communities,
  - evaluation of toxicity of bottom sediments.
3. Effect of abiotic and biotic factors on health status of trees.



# THANK YOU



Department of Land Protection

[www.kopz.uni.opole.pl](http://www.kopz.uni.opole.pl)