

# Institute of Environmental Engineering



UNIVERSITY  
OF ZIELONA GÓRA



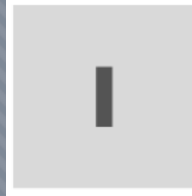
INSTITUTE  
OF ENVIRONMENTAL  
ENGINEERING  
University  
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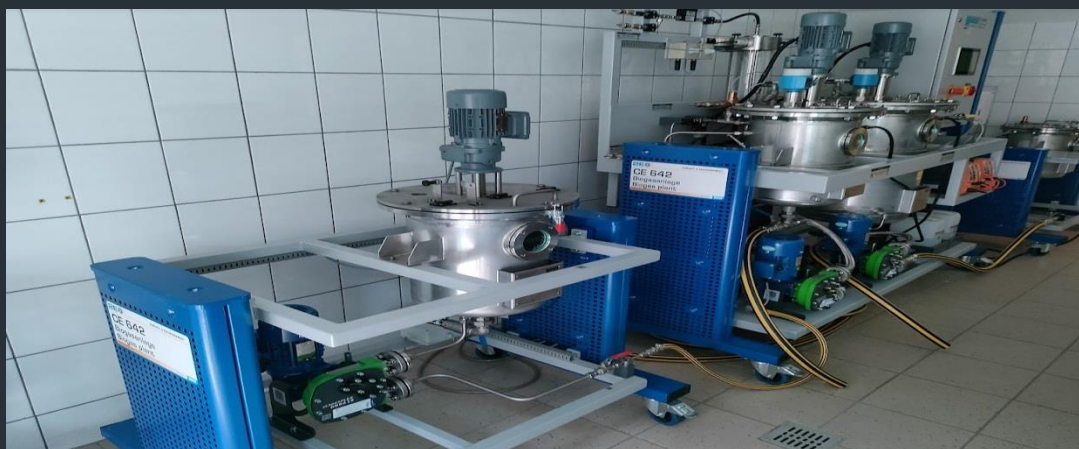
- One of the oldest units at the University - the beginning of the Institute of Environmental Engineering dates back to 1975.
- What sets us apart from other units? Many years of experience in research, commercialisation of results and cooperation with industry



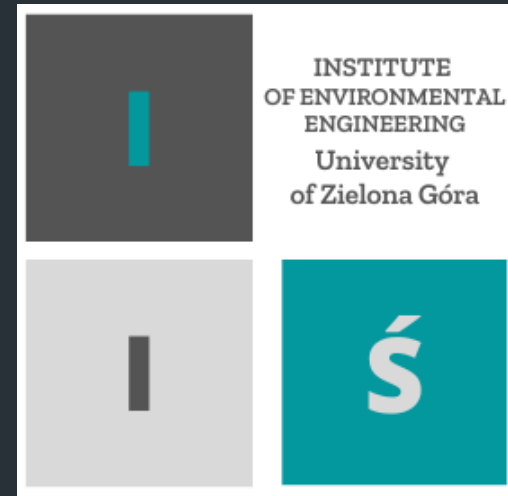
# We have modern research laboratories



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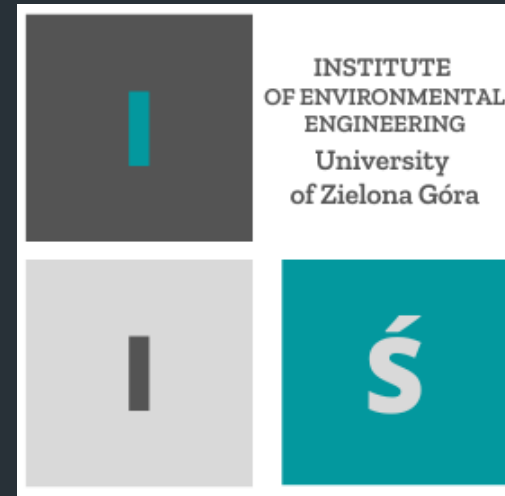
Experience in  
water treatment





Cooperation with Waterworks and Sewage System Company in Zielona Gora resulted in modernisation of the technological system at the Zawada Water Treatment Plant (WTP), where pre-oxidation has been replaced by indirect oxidation, poly aluminium chloride has been introduced instead of iron coagulant, and lamellar settling tanks have been used to effectively precipitate suspended solids.

Experience in  
wastewater treatment

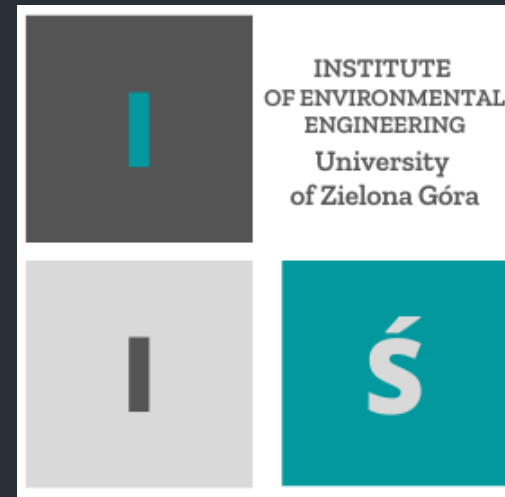




Collection and testing of municipal and industrial wastewater; analysis and evaluation for upgrading water treatment plants (Gubin-Guben), cooperation with local wastewater treatment plants in Zielona Gora

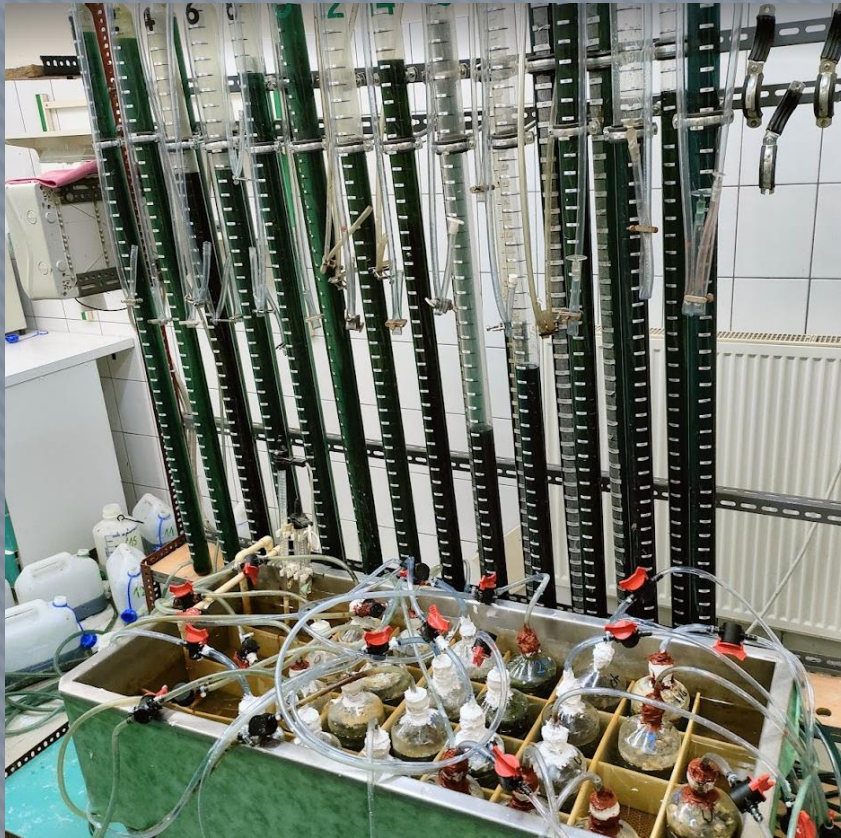


# Experience in waste management



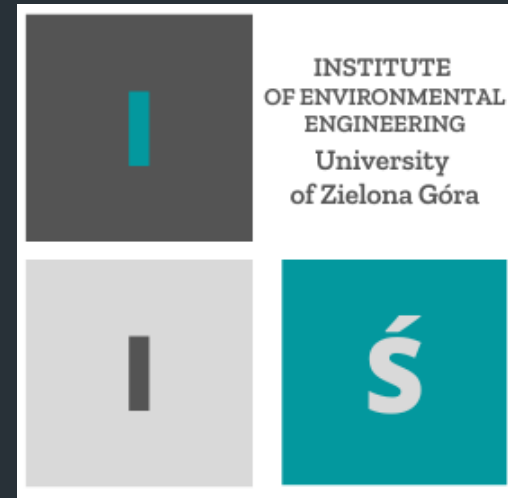


Analysis of waste at 8 mechanical-biological treatment installations in Poland



Development of industrial waste management technologies in accordance with the principles of a closed loop economy (biogas production from methane fermentation)

# Experience in land reclamation



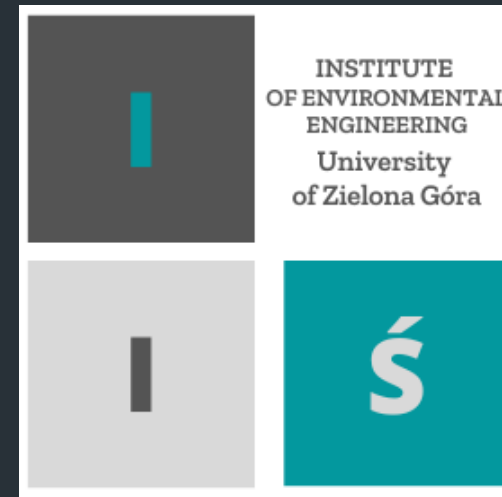


Reclamation in the direction of forestry of areas left after lignite mining in the Łęknica, Lubuskie Region, Poland



Reclamation in the direction of agriculture of areas left after sand mining in the Dobroszow Wielki, Lubuskie Region, Poland

Experience in  
water management  
in urbanized areas

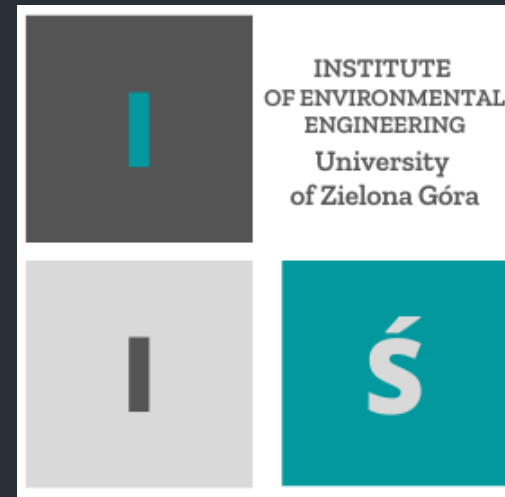


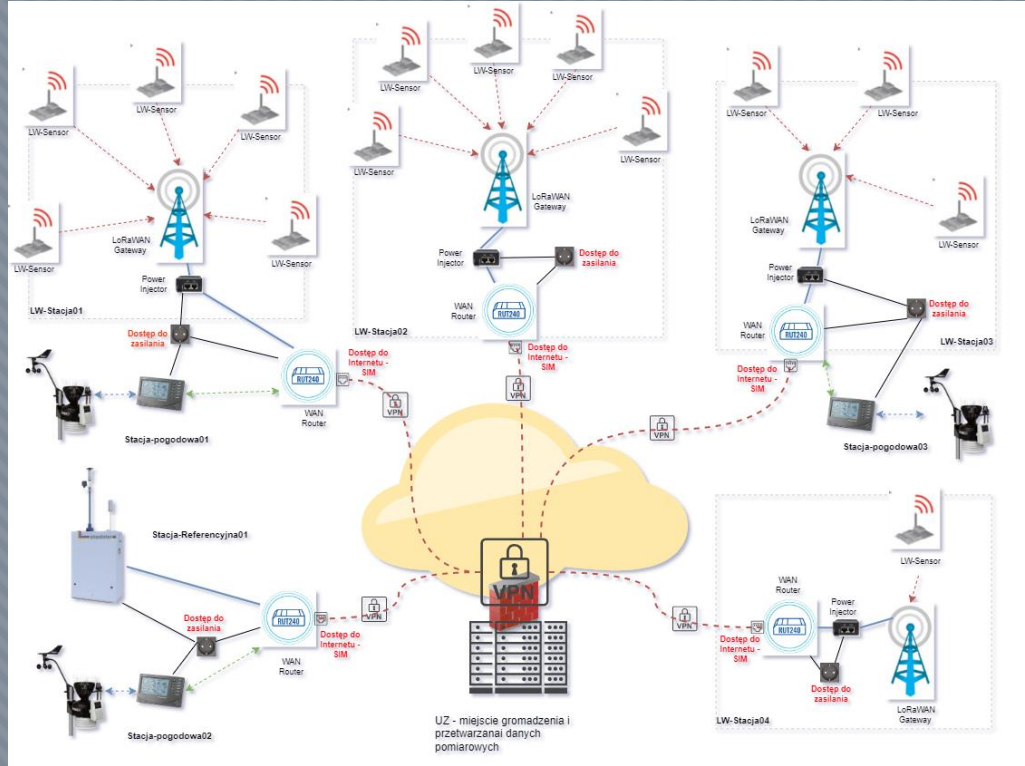


Analysis of storm drainage, development of hydraulic calculations and dimensioning of retention tanks and storm overflows. In cooperation with operators of rainwater networks, including the Water Supply and Sewerage Company in Glogow and Gorzow Wielkopolski



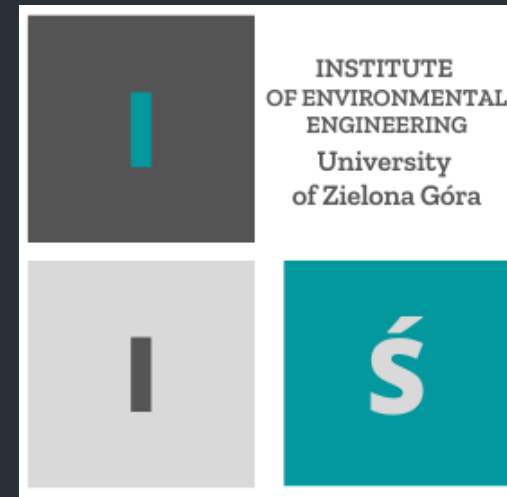
Experience in  
advanced analytical  
algorithms





Designing and building an innovative air quality monitoring system based on advanced analytical algorithms supported by artificial intelligence methods. Example: a system for air quality analysis in the city of Żary in Lubuskie Province.

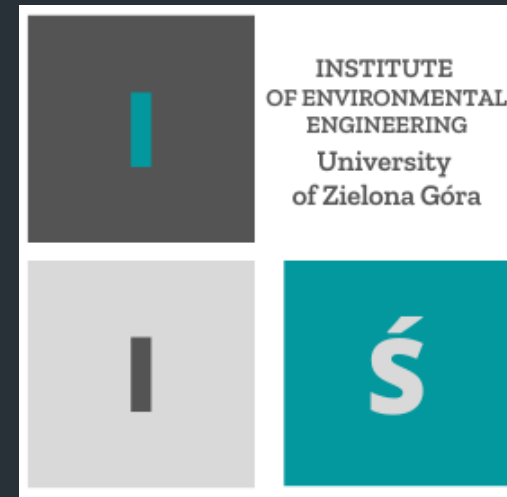
Experience in  
modern energy  
sources and energy  
efficiency in buildings

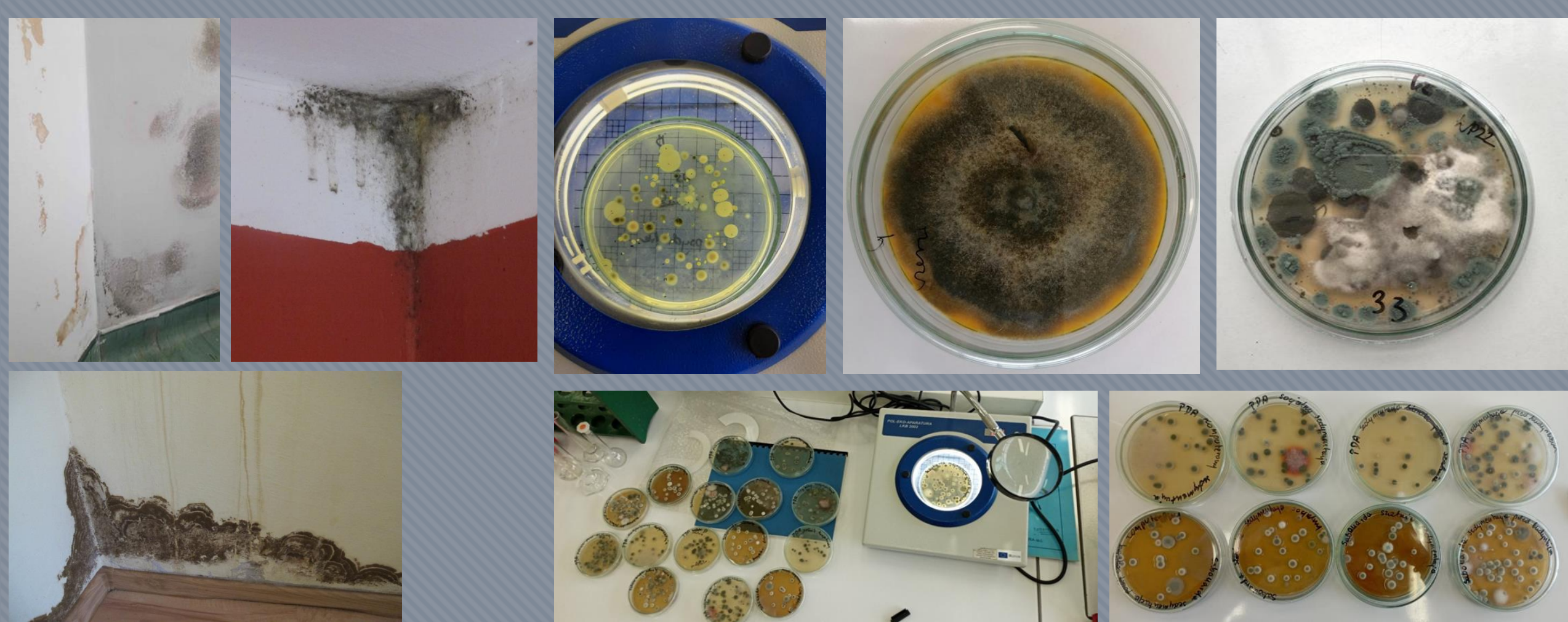




Designing the retrofitting of building heating systems using modern heat sources and energy storage, increasing the energy efficiency of buildings and designing zero-emission facilities. Example: modernisation of the Provincial Sports and Leisure Centre in Drzonkow, Lubuskie Province.

Experience in  
building health and  
indoor air quality





Mycological testing for building and assessment of health risk to people; Biodeterioration and biodegradation of building envelopes; Analysis of biofilms on building surfaces; Microbiological analysis of quality of indoor air. Work requested by the residents and local entrepreneurs.

# We look forward to working with you!



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