ERASMUS+INTERNSHIPS OFFER - INSTITUTE OF ENVIRONMENTAL ENGINEERING

Marzena Jasiewicz, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: alternative energy sources, interior installations, physics of buildings

Internship possibilities:

- Balancing renewable energy. Estimating the potential of energy from renewable sources. Selection, calculation and design of basic technological systems of heat sources using RES.
- The project incorporates water and sewerage, installation of hot and cold water from the circulation, installation
 of sewage and rainwater for building multi-family.
- Leakage tests, searching for thermal bridges and installation leaks using a thermal camera.

2 Ewa Ogiołda, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: water supply, trenchless technologies

Internship possibilities:

- Water consumption characteristic (volume and irregularity),
- Causes and magnitude of water losses,
- Calculation of water supply systems parameters,
- Trenchless technologies.

3 Ireneusz Nowogoński, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: water supply, urban hydrology

Internship possibilities:

- Modern simulation methods for water supply systems including inventory results, nodal distribution estimation methods.
- Modern simulation methods for sewerage systems including analysis of rainwater catchments and typical sewerage network facilities.
- Analysis of rain gauge data
- Preparation of simulation models of a selected urbanised area.

4 Piotr Ziembicki, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: thermal energy, heating, ventilation, computer simulation and AI, district heating systems, energy analysis of buildings

Internship possibilities:

- Buildings energy analysis using computer simulation methods (software used: DesignBuilder, EnergyPlus, OpenStudio, SketchUp),
- HVAC systems energy efficiency analysis using computer software and python programming,
- Pollutions emissions analysis for buildings of any type based on databases and facility inventory (required skills: basics of relational databases, basic programming skills in python and R language),
- Innovative system for monitoring and analysis of air quality in the city of Zary

5 Andrzej Greinert, PhD, hab. Eng., Prof. at University of Zielona Gora

Discipline: Environmental Engineering

Scientific interests: SUITMA-s; soil degradation; soil reclamation; urban areas development and management; municipal green areas

Internship possibilities:

- Historical and contemporary soil forming factors and effects of their activity,
- Construction and demolition wastes in soil diversity, effects,
- Durability of anthropogenic transformations of urban soils,
- Urban soils characteristics as a factor limiting possibilities of a land use,

Urban green areas development as a factor of sustainable development of the city.

6 Jakub Kostecki, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: heavy metal/trace elements in environment; environmental impact assessment; SUITMAs; soil degradation; soil – plant interaction

Internship possibilities:

- The state of the environment in the selected area (urban, industrial),
- Urban soils sealing.
- Use of selected wastes (eg. brewery waste, wine waste, sewage sludge) in circular economy,
- Environmental impact assessment,
- Soil contamination in the city/industrial plant.

7 Marta Gortych, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: energy storage, energy storage in phase-change materials, heat and mass transfer and hydrology **Internship possibilities**:

- Modern energy storage such as thermal or chemical energy storage,
- Mass and heat flow in various types of materials e.g. PCM metrics used in construction,
- Hydrology e.g. determination of watercourse balances.

8 Katarzyna Łuszczyńska, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: bioindication, sick building syndrome (SBS), moulds in buildings

Internship possibilities:

- The application of bioindication methods for the determination of the toxicity of moulds in buildings
- Mycological analyzes in construction and assessment of potential health hazards of inhabitants
- Use of biotoxicological methods to assess environmental contamination,
- Plankton as an indicator of water purity,
- Biological analysis of activated sludge,
- Interested in field of technical microbiology.

9 Roza Wasylewicz, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: heavy metal and trace elements in environment; soil degradation; adaptation to climate change of a urban areas

Internship possibilities:

- The state of the environment in the urban or industrial area,
- Soil contamination in the city or selected industrial plant,
- Adaptation to climate change of a selected urban area.

10 Sylwia Myszograj, PhD eng., hab. professor at University of Zielona Gora

Discipline: Environmental Engineering

Scientific interests: wastewater treatment technology, sewage sludge management, energy from waste, microplastic **Internship possibilities**:

- Microplastics in wastewater determination and removal technologies,
- Intensification of sewage sludge and biowaste anaerobic digestion,
- Trace elements in methane fermentation.

11 Izabela Krupińska, PhD, hab. professor at University of Zielona Gora

Discipline: Environmental Engineering

Scientific interests: coagulation processes, groundwater purification, iron removal

Internship possibilities:

- Optimization of the coagulation process for the removal of oxidation by-product precursors and disinfection based on absorbance measurements at 254 and 272 nm,
- Application of Zeta potential to assess the efficiency of water purification in the coagulation process.

12 Ewelina Płuciennik-Koropczuk, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: wastewater treatment

Internship possibilities:

- Technologies for the treatment of municipal and industrial wastewater,
- Removal of pollutants difficult to biochemical decomposition,
- Removal of micropollutants from wastewater (especially from the PPCPs group),
- Estimation of the risks of PPCPs to the environment and human health,

The possibility of recovering raw materials and resources from wastewater and sludge streams.

13 Anita Jakubaszek, PhD Eng.

Discipline: Environmental Engineering

Scientific interests: wastewater treatment, heavy metal/trace elements in wastewater,

Internship possibilities:

- Municipal and industrial wastewater treatment,
- Optimization of wastewater treatment systems,
- Biogenic compounds and heavy metals in wastewater treatment plants,
- Wastewater treatment in constructed wetlands,

Individual wastewater treatment systems