Title, Name and surname
Assoc. Prof. Elzbieta Fornalik-Wajs

Faculty and Department
Faculty of Energy and Fuels, Dep. of Fundamental Research in Energy Engineering

Keywords.
thermodynamics, energy systems, experimental analysis, numerical analysis, mass, momentum and energy transfer, magnetic convection, nanofluids, nuclear reactors, jets, heat exchangers

Scientific profile.
My research interests are directed but not limited to: thermodynamics and energy systems, experimental and numerical investigations of mass, momentum and energy transfer, they include: impinging jets, heat transfer processes in turbulent confined jets, convection in Czochralski melt systems, magnetic convection, nanofluids, heat exchangers, thermal-hydraulics in nuclear reactors.

Exemplary thesis titles
- Numerical analysis of energy transport caused by two-phase impinging jet
- Numerical analysis of silver nanofluid forced convection in channel of complex shape
- Numerical analysis of energy transport in high temperature plate heat exchanger
- Experimental and numerical analysis of convective heat transfer in a cylindrical system
- Experimental and numerical analysis of compressible flow in a duct of variable cross-section

The form of conducting master's theses
Students participate in weekly meetings where the research progress and plans for the next week's are presented. Detail issues are discussed during individual consultations.