Research focus of the Centre:
Centre of Excellence is providing researches and education at university level on electrical machines and electric traction for sustainable technical development. Cooperation with industry is a significant aspect of Institute activity as well as networking and twinning with several Polish and international institutes. Scientific research are concentrated on problems of theory, design, exploitation, construction and testing of highly efficient and energy saving electrical machines and electric traction systems.

Research projects currently run in the Centre:
* New constructions, control, testing and designing of electrical machines.
* Analysis of modern power supply and drive systems of traction vehicles.
* Modelling and simulation of electrical machines and traction vehicles.
* Analysis and measurements of electrical energy quality and disturbances caused by rectifier traction substations on the supplying AC lines.
* 5th Framework Program for Competitive and Sustainable Growth, ESCARV - User Group for Electrical Systems Compatibility to Support Rail Interoperability cooperation with the University of Genoa.

Human resources:
The full-time personnel working at Institute of Electrical Machines is composed actually of 6 professors, 14 assistance professors and assistants, 7 Ph.D. students and 8 persons of technical and economical staff. The CoE will be directed by Coordinator while the International Advisory Board will create the policy and assess the activity of the CoE. Research workers, individuals and Ph.D. students from the whole Electrical Engineering Faculty will co-operate on the specific topics and take part in the conferences, seminars and mobility.

Training possibility:
The CoE is recognized as a high level educational center in Poland. In the full-time M.Sc. course, led by Institute of Electrical Machines, at the fourth semester students choose from among Electric Machines/Micromachines, Electric Traction and Automobile Electrotechnics specializations. A series of post-graduate courses and short-training in the electromechanical energy conversion topics are available, according to the need of the industry. The laboratories with modern equipment allow to make a wide ranges of specialized measurements.

Scientific co-operation:
Since many years researchers of CoE have been linked to European Universities and research centers. This co-operation is organized as a formal - within the frameworks of the signed mutual agreements and projects - or in another forms of cooperation as: visits, meetings, seminars, conferences.

Co-operation with industrial partners:
Co-operation of CoE with industrial partners as electrotechnical engineering companies, railways, tram companies and metro is expressed by working-out many R&D projects in quality of electromechanical energy systems, design of new construction and solutions of power supply systems for transport.

Other info:
Homepage: [http://www.ime.pw.edu.pl/](http://www.ime.pw.edu.pl/)