



LABORATORY OF MAGNETIC MEASUREMENTS

Main objectives and activities of the laboratory

- research and application of computer models of hysteresis,
- magnetic field measurements in technical applications,
- applied research and development of single-purpose devices for magnetic measurements,
- design of technical solutions for suppression of inrush currents, ferroresonance, etc.

Professional focus of the laboratory

- use of computer models of hysteresis for evaluation of materials, analysis, regulation or suppression of transients of electric machines,
- measurement of magnetic fields of electric machines and their parts (motors, transformers, chokes, relays, power cables, electromagnets, permanent magnets, clamps, separators ...) in stationary and alternating magnetization as well as during transients.

Offered services

- measurement and analysis of magnetic fields
- measurement of external fields of magnets and magnetized / demagnetized components,
- determination of magnetizing quality of single and multi-pole magnets,
- measurement of the stray magnetic fields of machines in steady states and transients,
- verification by the finite element method simulations,
- design of special purpose measurement systems.
- measuring properties of the soft magnetic materials
- measurement of B-H characteristics using closed samples, Epstein frame or SST tester.
- solving of transients caused by non-linearity of the magnetic circuits
- suppression of inrush current of the transformers,
- ferroresonance damping,
- consulting activities in the field of the circuit switching and transient processes in the electrical engineering.



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