



Design and PLM Laboratory

Principal goals and activities

Systemic generation of the concept of the innovated product (analysis of the initial situation, forecasting of the innovation process, formulation of problem, decomposition of problems, analysis of known and patented solutions-IP, creative generation of concepts and their evaluation, design review).

General focus of laboratory

- Unique, comprehensive skills in the methods focused on the initial stages of the innovation process.
- Support to training of bachelor, master and doctoral students.
- Use of the Innovative Engineering Office (Ateliér inovačního inženýrství).

Specific instruments and outcomes

- Various methodologies and SW for problem formulation, forecasting of the direction of innovation, search for known and patented solutions, application of progress trends in engineering and innovation principles and/or standards.
- Various methodologies and SW for Design Review and value analysis.

Offer of expertise

- Analysis of the innovation situation and systemic formulation (decomposition) of the problem.
- Forecasting of the innovation development (Directed Evolution).
- Value analysis (VA/VE).
- Application of TRIZ+ methods and tools to achieve more robust technical solutions.
- DFA analysis of the design (Design for Assembly).
- Presentation of workshops in the field of generating concepts, FMEA and 3P.

