

Call for cooperation

Laboratory for Rapid Prototyping and Reverse Engineering (RP&RE lab) of Mechanical Engineering of University of Tuzla is laboratory with the longest tradition in Bosnia and Herzegovina (since 2004) from the field of Rapid Prototyping and three-dimensional (3D) digitization of data. Laboratory is contains the following equipment:

- Rapid Prototyping system (3D printer z310+) with associated components;
- Systems for 3D digitalisation (tactile and laser 3D scanners) with associated components;
- Auxiliary equipment (Material Testing Machine, Portable Surface Roughness Tester, Metal Hardness Tester, plotter), and
- Associated software.

The above mentioned equipment and the competency of laboratory personnel enable implementation of all technical tasks related to: three-dimensional digitization of objects, shape optimization, drafting, printing of technical documents and posters (in colour), the integral development of new products (from idea to prototype), the production of prototypes (for mechanical industry, infrastructure construction, architectural solutions, geographical models, consumer goods, medicine, ...), direct production of molds for casting of non-ferritic metal materials with melting point up to 1100°C, production of matrix for the indirect casting processes, production of flexible prototypes, as well as, various testing with available auxiliary equipment.

With the aim to overmaster with new knowledge, apart from professional issues, laboratories staff devotes considerable attention to scientific research work as an integral segment of the laboratory activities. In accordance to that, series of scientific-research projects have been implemented so far. Direct results of those R&D projects are generating new knowledge, publishing of a series of scientific research papers, completed numerous diploma theses and a few master theses, as well as one doctoral dissertation in process. In the future the primary objective in this area is networking with other related laboratories and centres, and applications to international scientific research projects in order to exchange knowledge and experiences and acquiring new knowledge.

All current operations in the field of laboratory activities: theoretical and practical education of students (undergraduates, graduate and postgraduate students) and employees of companies, service to industry and other institutions, scientific-research work are resulted in accumulation of significant scientific and technical potentials and gathering of extensive experience in work with the Rapid Prototyping and Reverse Engineering systems.

If you are interested in any form of cooperation (technical or scientific-research activities), with the RP&RE Lab of Faculty of Mechanical Engineering in Tuzla, or have a specific question, please contact Head of the Laboratory, Alan TOPČIĆ, PhD, assistant professor (alan.topcic@untz.ba).

More information on laboratory activities, available equipment and human resources can be found on the laboratory web page: www.rprelab.mf.untz.ba

RP &RE lab team