



TECHNICAL CHARACTERISTICS RESEARCHING OF MODERN PRODUCTS IN MACHINE INDUSTRY (MACHINE DESIGN, FLUID TECHNICS AND CALCULATIONS) WITH THE PURPOSE OF IMPROVEMENT THEIR MARKET CHARACTERISTICS AND BETTER PLACEMENT ON THE MARKET

Goal of the project

The overall goal of the project are to increase the inter-university research cooperation in the fields of advanced methods of manufacturing, industry logistics and production engineering and the integration of research results in industry, trough students, doctoral students, professors and researchers, by facilitating the contacts with companies functioning in the influence areas of the partner universities.

Short description of the project

- The network project is designed to stimulate academic mobility within Central, Eastern and South Eastern Europe and to promote the university cooperation.
- The activities are carried out predominantly during the academic mobilities, planned for undergraduate students, PhD students and teachers, through specific actions: exchanging of information, knowledge and experience, participating to the common research projects, assisting with work on M.Sc. and Ph D thesis
- Detailed description of the project and of activities are available on the CEEPUS web page: https://www.ceepus.info/public/ network/network.aspx

Implementation period

01.09.2014 - 2015

Project implemented by

27 universities from 11 countries Lead partner:

 University of Novi Sad, Faculty of Technical Sciences, Department of Mechanism and Machine Design

Project partners:

- POLITEHNICA UNIVERSITY OF TIMISOARA, Faculty of Engineering Hunedoara
- University of Sarajevo
- University of Banja Luka
- University of East Sarajevo
- Angel Kanchev University of Rousse
- University of Chemical Technology and Metallurgy
- Technical University of Liberec
- Jan Evangelista Purkyne Univ. in Ústí nad Labem
- Budapest University of Technology and Economics





- College of Nyíregyháza
- University of Montenegro
- University Sts. Cyril and Methodius Skopje
- Poznan University of Technology
- "Politehnica" University of Bucharest
- Technical University of Cluj-Napoca, MB Faculty
- Technical University of Cluj-Napoca, Dep. ETM
- "Transilvania" University of Brasov
- "Eftimie Murqu" University of Resita
- "Lucian Blaga" University of Sibiu
- Belgrade University
- University of Nis
- University of Kragujevac
- University of Ljubljana
- Slovak Univ. of Technology in Bratislava, Fac. Mechanical Engineering
- Slovak Univ. of Technology in Bratislava, Fac. STU, Trnava
- Technical University in Košice

Main activities

- Courses, lectures, laboratory work and seminars.
- Joint Program, common elaboration of PhD and master thesis.
- Project activities combined with activities of Balkan Association of Power Transmissions—BAPT (Workshops, Summer courses and Scientific conferences, in cooperation with network partners, dedicated to special topics in machine design and fluid techniques).
- The network supports also the journal Machine Design (ISSN 1821-1259) and all CEEPUS local coordinators of partners are members of Scientific Editorial Board of the journal.



Research Report

Index of main activities fields:

Teaching and training. Design. Marketing and advertising. Engineering, Manufacturing and Construction. Engineering and engineering trades. Computing and Computer use.

Milestones for the main activities:

- Designation of criteria, rules, schedules for students mobilities.
- Selection of supervisors on the host universities.
- Preparation of experimental investigation stands for research connected with the PhD thesis.
- Permanent professional e-discussions with the network partners.
 Project Management. Evaluation reports.
- Conclusion from final valuation meeting organized on the end of the academic year.

Results

- Joint Program: Optimization of Gear Transmissions. Design of Products and Machines
- Experimental investigation stands
- Professionals Visits of partner institutions: for the Politehnica University of Timisoara/Faculty of Engineering Hunedoara, 17 mobilities (10 incoming, 7 outgoing).
- Achievement of the requirements for teaching staff in teaching hours and and for students in obtained ECTS Credits, at the partner institutions.
- Final Report and valuation meeting, organized on the end of the CEEPUS academic year.

Financed through/by

 CEEPUS - "Central European Exchange Program for University Studies"



Applicability and transferability of the results

- Common criteria, rules, schedule for outgoing and incoming students, applicable in future students CEEPUS mobilities.
- Ensuring of possibility to develop future joint programs and joint thesis supervision.
- Stimulation of academic mobilities, in particular regional students and teachers mobilities within Central, Eastern and South – Eastern Europe



Research Team

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