

## Cooperation with industry

**The Faculty of Technology and Education carries out the following research projects under cooperation agreements and in cooperation with industry:**

<b>RESEARCH TYPE</b>	<b>PROJECT LEADER</b>	<b>FOR</b>	<b>DURATION</b>
The development of shank tools and microtools with a particular focus on nanostructured PVD coatings.	Prof. Jan Walkowicz	Research service for FANAR S.A. Ciechanów POIR. 01.01.01-00-0531/15	2016-2018
Research of component processes in thermo-chemical and surface treatment of metals and hybrid manufacturing technologies of nano-coatings.	Prof. Jan Walkowicz	Agreement: POIG/1.4/NCBIR/	2014-2015
Development of software for the analytical model for determining the process parameters in relation to the intended final result.	Prof. Jerzy Ratajski	Institute of Precision Mechanics Warsaw	2014
Thin modified carbon coatings for tribological applications.	Prof. Andrzej Czyżniewski	Warsaw University of Technology	2014
<a href="#">Hybrid technologies of surface modification of woodworking tools.</a>	Jan Staśkiewicz, Ph.D. / Prof. Witold Gulbiński	Research project within the framework of Innovative Economy Operational Programme	2009-2013
Applied research in the field of protection against corrosion: 1. depositing protective coatings onto the surface of nonwoven fabric coated with thin metallic layers, 2. corrosion susceptibility studies of the metallic surfaces secured by the protective coatings.	Ewa Dobruchowska, Ph.D.	Textile Research Institute in Łódź Agreement: POIG.01.03.01-00-006/08	2013
X-ray analysis of nitrated	Prof. Jerzy Ratajski	Institute of Precision	2013

layers on 32CDV13, 40HM, WCL, 38HMJ steels.		Mechanics Warsaw	
Morphology and surface composition researches of steel plates.	Prof. Kazimierz Reszka	Arnsperger Chemical Products, Cologne	2012
Qualitative and quantitative analysis of the deposited phase: 1. quantitative analysis of a thin layer (or layers, in the multilayer systems) to define the chemical composition, primarily content of eventual impurities or additives and percentage (% wt.) of the components within the deposited layer; 2. qualitative analysis in the field of a thin layer surface morphology.	Ewa Dobruchowska, Ph.D.	Textile Research Institute in Łódź Agreement: POIG.01.03.01-00-006	2011-2012