

Journal

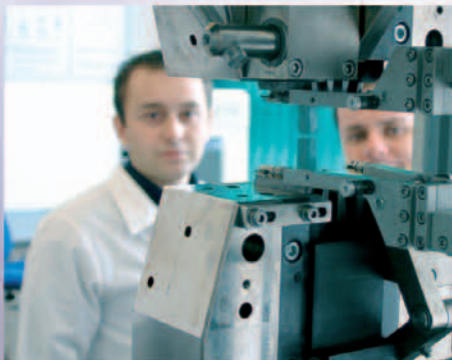
of Achievements in Materials
and Manufacturing Engineering



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Cover story

The Institute of Engineering Materials and Biomaterials of the Silesian University of Technology in Gliwice, Poland (the IEM&B of the SUT) was founded 10 years ago on 1 September 1997 and since then as a result of election and then yet for three time after the end of the next cadencies its management was entrusted to Prof. Leszek A. Dobrzański. The Institute is a successor of the traditions of the Department of Physical Metallurgy founded on 24 May 1945 together with the Silesian University of Technology and directed for almost a quarter of the century by Prof. Fryderyk Staub, Dr h.c. transformed to the

Institute of Physical Metallurgy and Welding, and then of Physical Metallurgy directed for 16 years by Prof. Łucja Cieślak and then by Prof. Jan Marciniak and Prof. Jan Adamczyk. In that period the dynamic development of the scientific staff specialising in the field of materials science, which at present employs ca. 20 professors and habilitated doctors and ca. 80 doctors, took place. In the period of over 60 years a few thousands of BSc and MSc engineers specialised in various fields dealing with those fields of science but formally in the field of Mechanics and Machines Building, Automation and Robotics, Management and Production Engineering and Technical and Computer Science Education, out of which about a half have been educated for last 10 years, were educated. At the beginning the scientific interests of the staff of the Department of Physical Metallurgy, the Institute of Physical Metallurgy and Welding and the Institute of Physical Metallurgy concerned manufacturing, processing and heat and surface treatment and the behaviour in exploitation conditions and also methods of steel and other iron alloys researches. During the last 10 years the present divisions and the then Department of Foundry transformed from the Institute of Foundry, and also the then Division of Processing and Application of Plastics earlier joined with the Division of Plastic Processing of Metals were joined. At present into the scope of interests of the scientific staff of the Institute of Engineering Materials and Biomaterials there are included all the groups of engineering materials such as: metal, ceramic, polymer and composite ones, and also engineering, constructional, tool, special and functional together with biomimetic, intelligent and nanostructural ones together with the full range of materials processing technologies, methodology of materials design and suitable research methods.

This year for the first time in over 60-year history of the Institute conditions for the foundation of the branch of studies: "Materials Engineering" appeared in the Faculty of Mechanical Engineering of the Silesian University of Technology in which the Institute is the biggest internal unit. Many factors both external and internal ones have an influence on such an advantageous decision. In order to use that decision the creation of two new and unique in the State scale macro-branches of studies: "Applied Computer Science with Computational Materials Science" and "Nanotechnology and Materials Processing Technologies" combining in each case curriculum requirements for two component branches of studies which curriculum contents is its basis that is of "Materials Engineering" and respectively "Technical and Computer Science Education" and "Mechanics and Machine Building" were proposed. Those totally original curriculum proposals were approved by the Council of the Faculty of Mechanical Engineering of the Silesian University of Technology enable to present the totally different educated specialists than so far searched by the industry, fantastically prepared for activities in professional practice.

On the occasion of the 10th anniversary of the unit we wish the scientific and didactic successes and not persisting satisfaction from made activities. On the cover and the last page photos from laboratories and scientific workrooms of that Institute richly equipped with the unique scientific and research equipment are presented.

