

# Journal

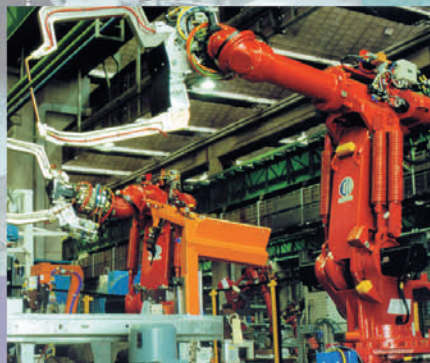
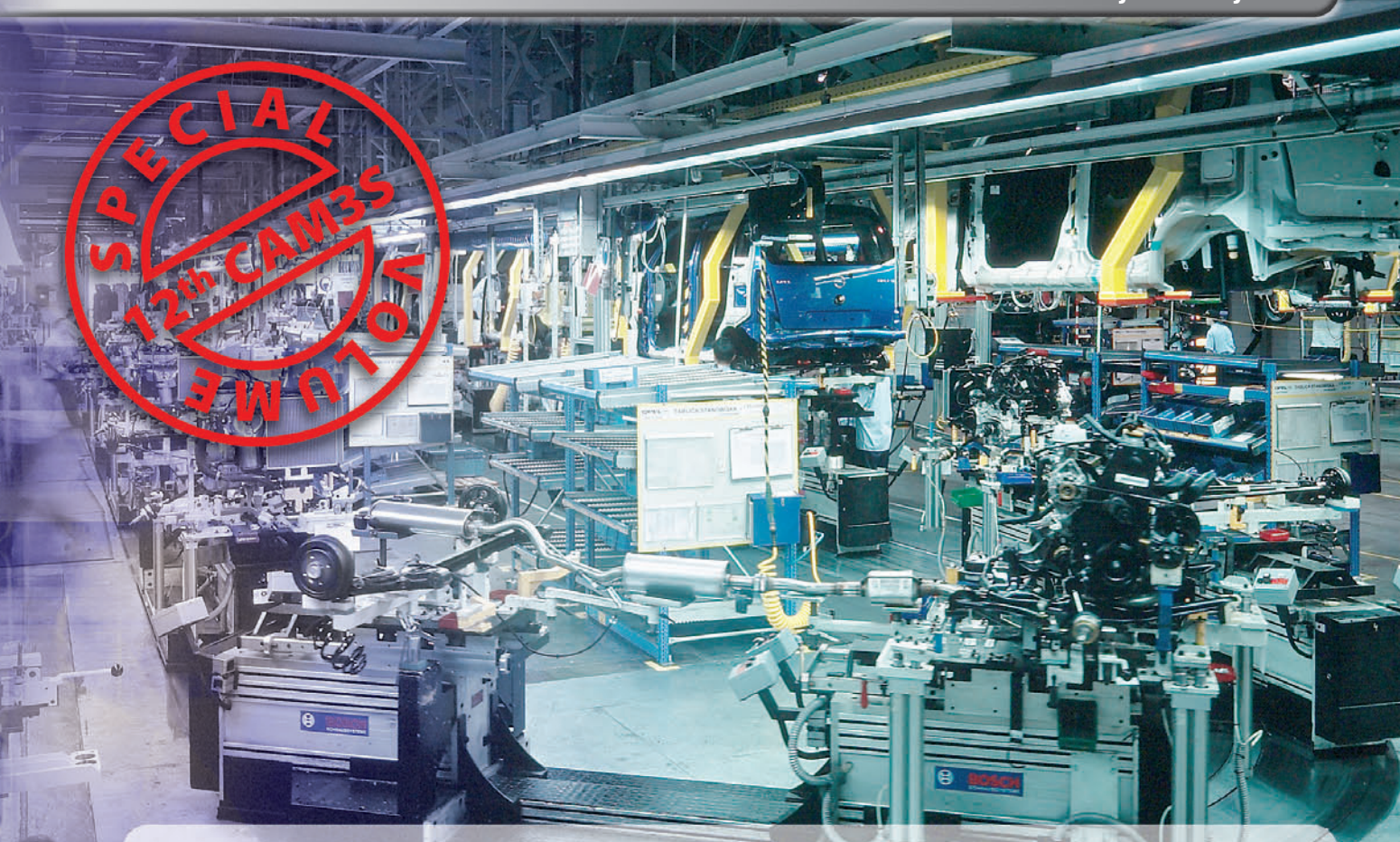
of Achievements in Materials  
and Manufacturing Engineering



Published monthly as the organ of the World Academy of Materials and Manufacturing Engineering

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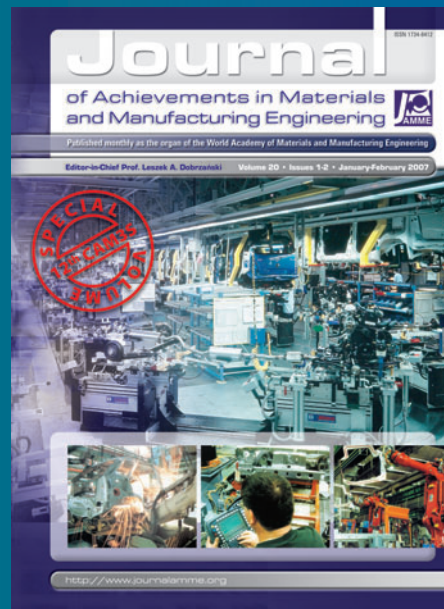
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## Cover story

Yet in 1992 initiative of the international cooperation between mechanical and materials engineering was made. In 2005 the World Academy of Materials and Manufacturing Engineering as an international academy of sciences was founded and since that time it combines the issues of materials and manufacturing engineering including mechanical engineering and as experiences of almost last two years show that such multi-the-



matic cooperation gives very good synergic effects which cannot be expected earlier. Manufacturing is the transformation of raw materials into products in various processes, using various machines and in operations organised according to the well-prepared plan. Therefore, the manufacturing process consists in a proper use of resources like: materials, energy, capital, and people. Nowadays, manufacturing is a complex activity uniting people working in various professions and carrying out miscellaneous jobs using diverse machines, equipment, and tools, automated to a various extent, including computers and robots. The technical aspect of this effort pertains the engineering design of a product. The goal of manufacturing is always to satisfy the market needs of customers, according to the strategy of a company or an organisation being engaged in manufacturing, employing available possibilities and equipment. It was brought up in details in the conceptual paper in volume 15 of the Journal AMME. In that Special Issue papers concerning many of those complicated issue worked out in the connection to the next International Scientific Conference on Contemporary Achievements in Mechanics, Manufacturing and Materials Science are included. Manufacturing structure in 15 countries of the European Union yet before its broadening can show how important issues they are. Ca. 25% per each of the whole sphere concerns manufacturing of food, pharmaceutical, electronic products and computer science techniques and mechanic products. In turn in that sphere of manufacturing tool and technological machine and micro- and miniature elements include 9% per each, air industry and manufacturing of dies and forms – 11% per each, 22% is for manufacturing of other elements and tool mechanic machines, and almost 40% includes automotive industry. As a matter of fact a significant part of scientific activity connected with the scope of CAM'S conference deals with materials and technological processes applied in automotive industry and exploitation properties and durability of cars and their elements. The cover photo deals with a car assembly in one of contemporary factories of those products belonging to the most popular today and applied in the world mechatronic equipment and fully automated and robotised technological processes applied is such companies. Some of papers included in that volume deal directly with that subject matter.