

# Editorial



This special issue of the Journal of Achievements in Mechanical and Materials Engineering is published in the Commemoration of the 20<sup>th</sup> Jubilee of the International Scientific Conference on Achievements in Mechanical and Materials Engineering "AMME" and is dedicated to Prof. Leszek A. Dobrzański – a Distinguished Professor of the Silesian Technical University, on the occasion of the 65<sup>th</sup> anniversary of his birthday.

Once again materials scientists of all over the world are blessed with the privilege to gather in a beautiful and warm environment in this friendly country of Poland to exchange technical, scientific and life experiences. Such an opportunity, kindly provided by Prof. Leszek A. Dobrzański and his team of collaborators, this time in a wonderful venue by the Baltic Sea in north Poland, has been repeated in the last 20 years providing a unique chance to make long lasting research fellows and friends.

On this occasion of the 20<sup>th</sup> anniversary of the International Scientific Conference on Achievements in Mechanical and Materials Engineering "AMME", a short visit to the past must be made, precisely to 1992 when the series of AMME conferences started. Since then, in a yearly periodicity, over 60 conferences took place, in which altogether a few thousands of delegates from ca. 55 countries of the world attended. Such meetings provided the strengthening of a group of numerous scientists who gathered around Prof. Leszek A. Dobrzański leadership, decided in 2005 to create the World Academy of Materials and Manufacturing Engineering – WAMME. In its 7 years of existence, in spite of its youth, the Academy was established as an important scientific association, responsible for the publication of world-wide recognized scientific periodicals as the Journal of Achievements in Materials and Manufacturing Engineering – JAMME and the Archives of Materials Science and Engineering, formerly the traditional *Archiwum Nauki o Materiałach* and the Open Access Library, as well as promoting, sponsoring or being patronage of other publications, scientific conferences and meetings in different countries.

Since their origin, the AMME conferences have featured the forum where new workgroups were coined that later submitted proposals of international projects within CEEPUS, COPERNICUS, TEMPUS, ERASMUS programmes' frameworks and the Fifth, Sixth, Seventh Framework Programme forced on the European Union activities in the field of research, technology and demonstration.

Accompanying events including the General Assembly of the World Academy of Materials and Manufacturing Engineering, the General Assembly of the Association of Computational Materials Science and Surface Engineering, meetings of the Bodies of the Polish Academy of Sciences, workshops, panels and students sessions have been accompanying the Conference main activities through the years.

The successful journey of the AMME conferences can be stated by the impressive number of papers presented and published in its technical sessions and published in its proceedings, in the countless scientific meetings, scientific and technical ideas exchanged, international cooperation provided, etc. Practically all aspects of the study, development and application of Materials and Processing have been contemplated, such as Metallic Alloys, Ceramics and Glasses, Composites, Amorphous Materials, Nanomaterials, Biomaterials, Multifunctional and Smart Materials, their processing via different processes, their properties and all range of mechanical-physical aspects, as Ductility and Crack Resistance, Fatigue, Creep-resistance, Fracture Mechanics, Mechanical, Electrical, and Magnetic Properties, Corrosion and Erosion, Wear Resistance, Toxicity, Also Methodology of Research, modelling and simulations of processing and properties, automation of processing, industrial applications, industrial management, planning and organization as well as education trends are contemplated in the scope of discussions.

The 20<sup>th</sup> conference in its highly successful series acquires a new level both in terms of the scope and geographical ranges. The contributors have come so far from the Americas, Asia, Australia, Africa and Europe. The conferences in this series were very fruitful as proceedings of these conferences totalled nearly 1500 papers and ca. 550 in the extended version in Journal of Materials Processing Technology (indexed by Thomson Reuters), ca. 1700 in Journal of Achievements in Materials and Manufacturing Engineering, ca. 700 in Archives of Materials Science and Engineering, ca. 30 in Archives of Computational Materials Science and Surface Engineering and ca. 100 in journals of the Inderscience Publishers in Switzerland and Great Britain. All accepted abstracts of AMME 2012 Conference are published in the Conference Programme and Proceedings. In the occasion of the 20<sup>th</sup> anniversary of AMME, which coincides with the 65<sup>th</sup> anniversary of Prof. Dobrzański's birthday, the Fellows of WAMME decided that best way to pay an appropriate homage to Prof. Dobrzański for his effort as head of this tremendous organization as WAMME would be a publication of three Special Issues of the Journal of Achievements in Materials and Manufacturing Engineering which I have the pleasure to present as a Deputy Editor-in chief.

In the makeup of those issues, monographic papers (general reviews, general reviews of own researches, full research papers, conceptual papers) sent by ca. 45 specially invited authors from several countries, were included. The prompt response to the invitation and the high standard of the papers certainly shows the author's appreciation and recognition of Prof. Dobrzański's outstanding scientific, educational and organisational achievements.

On this occasion of the 65<sup>th</sup> anniversary of Prof. Dobrzański birthday, I would like to bring back some words I had the opportunity to pronounce about his 60<sup>th</sup> anniversary of birthday: "turning 60, an age when ordinary people start to wonder about slowing down professional activities and go fishing, Prof. Dobrzański, on the contrary, seems to be at the merge of a new era. His activities as a member of numerous academic and scientific bodies both in Poland and abroad, as a member of editorial boards in various journals and as a member of programme committees of various important international conferences worldwide, have only increased with the passing years". I would not change a single word on that after 5 years.

I have had always pleasant opportunities of meeting Prof. Dobrzański in many occasions in Poland, Brazil and other countries, since we first met in Wisła, Poland, in AMME'95 conference. Through the years I was able to fully comprehend your enormous capacity of work, natural leadership, generosity and capacity of generate new ideas, which placed at the service of science can be reflected in the extraordinary resume Prof. Dobrzański has built.

I want also to repeat some words by late and unforgettable Prof. Jan Adamczyk, who knew deeply Prof. Dobrzański and shared his company for around 40 years as his teacher, mentor and friend: "Prof. Dobrzański

completed his university studies in 1971 at the Mechanical Engineering Faculty of the Silesian University of Technology. During his studies he distinguished himself with diligence and eagerness in acquiring knowledge and with the outstanding organizational abilities...

Prof. Dobrzański gained recognition as scientific authority thanks to his strenuous and straight-forward work, making a significant contribution to the development of Materials Engineering... being also successful in his didactic and organizational activities".

I must add to those true words that, over the years, Prof. Dobrzański tireless pursuit of knowledge and his friendly and cooperative personality lead to unparalleled scientific achievements both in scientific publications as papers, books, research projects, as well as leading international cooperation groups, creating laboratories in new and innovative fields of the Materials and Processing Engineering area. His work got a far deserved recognition all over the world; it can be mentioned that Prof. Dobrzański was a laureate of several awards, decorations, honorary diplomas from national and international engineering and scientific associations and international universities. Just to point out a few: Doctor Honoris Causa by the University of Rousse, Bulgaria, Doctor Honoris Causa by the Khmelnitisky National University of Ukraine, a fellow of the Academies of Engineering Sciences in Ukraine and Slovak Republic, granted by the William Johnson International Gold Medal and Albert Schweitzer Gold Medal, and medals and awards of foreigners universities as Naples and Bologna, in Italy, Pzlen and Ostrava in Czech Republic, Ljubljana in Slovenia, Rijeka in Croatia, Lvov and Khmelnitisky in Ukraine. Moreover, Prof. Dobrzański has been also a laureate in Poland, mainly for his numerous books and textbooks.

From Prof. Dobrzański outstanding achievements it is really difficult to choose the most important facts to be pointed out. However; it is worth mentioning that he has published ca 1800 papers, 50 books, and promoted, to this date, 45 PhD theses; many of his students and PhD students received important recognition awards. He is a founder and a current president of the World Academy of Materials and Manufacturing Engineering, an Editor-in chief of the Journal of Achievements in Materials and Manufacturing Engineering, JAMME, an Editor-in chief of the Archives of Materials Science and Engineering, an Editor-in chief of the International Journal of Computational Materials Science and Surface Engineering, an Editor-in chief of the Open Access Library, and was an Associate-Editor of the International Journal of Manufacturing Technology and Management and a European Editor of the International Journal of Materials and Product Technology, the International Journal of Computational Materials Science and Surface Engineering, an Associate Editor of the International Journal of Manufacturing Technology and Management and a European Editor of the International Journal of Materials and Product Technology, all published by Inderscience in Switzerland and cited by Thomson Institute.

Prof. Dobrzański also has dedicated a particular attention to the promotion of his country beyond its borders, establishing cooperation with ca. 150 countries all over the world; bringing out professional relations and friendships that were fruitful in joint international projects like TEMPUS, CEEPUS, LLP-ERASMUS and others. It just so happens that almost at the same day as the 65<sup>th</sup> anniversary of Prof. Leszek A. Dobrzański begins his job as a Vice-Rector of the Silesian University of Technology in Gliwice, Poland, and the choice for this function proves a recognition of his achievements by his own University.

To finalize, I would like to mention that this Special Issue of the Worldwide Journal of Achievements in Materials and Manufacturing Engineering is being published by the International OCSCO World Press, Gliwice-Campinas-Portland-Madrid-Daejeon-Brisbane-Cairo (under the patronage of the World Academy of Materials and Manufacturing Engineering in collaboration with the Committee of Materials Science of the Polish Academy of Sciences and the International Federation of Heat Treatment and Surface Engineering) after peer reviews worked by experts invited by the Editorial Board.

On behalf of Fellows of the World Academy of Materials and Manufacturing Engineering – WAMME, and my own, I want to express my deep gratitude to all the authors and general participants of the AMME'2012 for the promptly answer to our invitation to send contributions and to attend the conference in this special occasion of the Commemoration of the 20<sup>th</sup> Jubilee of the International Scientific Conference on Achievements in Mechanical and Materials Engineering "AMME" and the Celebration of 65<sup>th</sup> anniversary of Prof. Leszek A. Dobrzański's birthday.

Your contributions assured the high quality of those special issues of the Journal of Achievements in Materials and Manufacturing Engineering and your effort to be present in Kolobrzeg in this special occasion certainly is a great homage to Prof. Dobrzański.

To Prof. Leszek A. Dobrzański, our deepest and sincere wishes of happiness and hopes that his career continues on its brilliant and fruitful path.

Yours sincerely,

Prof. Maria Helena Robert  
Deputy President of the WAMME  
Editorial Editor-in-Chief of the JAMME