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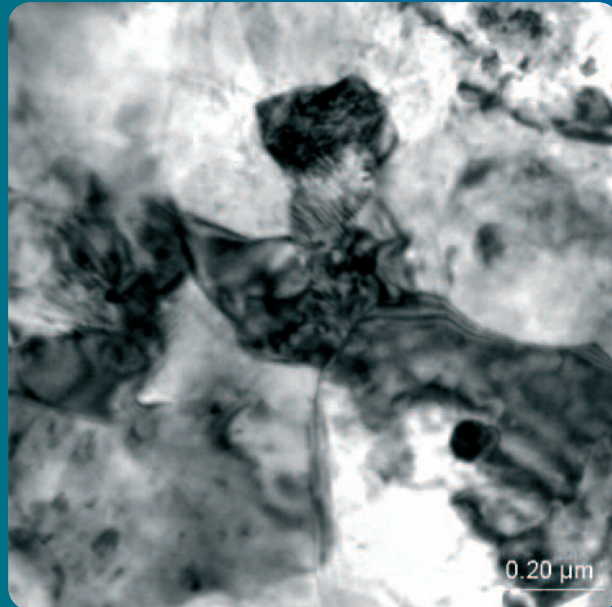


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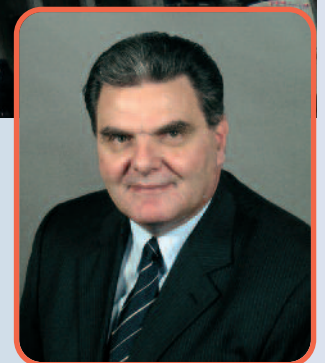
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The paper entitled "Microstructure investigations of cast Zn-Al alloys" presented by B. Krupińska, Z. Rdzawski, M. Krupiński and K. Labisz on a **page 12**

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shows the possibility of the application of popular modifiers for chosen types of zinc alloys. The special aim of this work is to determine the influence of alloy modification on the crystallisation kinetics and microstructure of the cast zinc alloy. This research work presents also the investigation results of derivative thermoanalysis performed using the UMMA device. The material used for investigation was ZnAl8Cu1 alloy. Investigations concerning the development of optimal chemical composition and production method of zinc-aluminium alloys with selected rare earth metals with improved properties compared to elements made of alloys with appliance of traditional methods, will contribute to the better understanding of the mechanisms influencing the improvement of functional properties of the new one. For phase determination electron microscope techniques like SAD diffraction investigations which were carried out on the 200 kV transmission electron microscope were used. The UMMA (Universal Metallurgical Simulator and Analyser) device allows to determine the specific melting process, the influence of the cooling rate on the crystallization of phases and eutectics of the investigated alloys. Cooling rate influences the microstructure and properties of the investigated zinc cast alloys. The investigated material can find its use in the foundry industry; an improvement of component quality depends mainly on better control over the production parameters.



Dear Readers,

Today we present the pictures from Calgary, Canada on the cover. It is a city in the province of Alberta, Canada situated at the confluence of the Bow River and the Elbow River in the south of the province, in an area of foothills and prairie, approximately 80 km east of the front ranges of the Canadian Rockies. In 1988, Calgary became the first Canadian city to host the Olympic Winter Games. The Society of Petroleum Engineers (SPE) and the Canadian Society for Unconventional Resources (CSUR) will organise the 2013 Unconventional Resources Conference - Canada, which will be held at Calgary Telus Convention Centre in Calgary, Alberta on 5th–7th November 2013. The participation of drilling and completion engineers, geologist and geophysicists, reservoir specialists, land personnel, petroleum and operations engineers, technical consultants, management and financial professionals and professionals working in the unconventional resources sector of the E&P industry is expected. We inform about it PT Readers of our JAMME Journal in the belief that this narrow, albeit important subject matter will be interesting for some of them. On the other hand, we hope that the scientific papers published in that issue will be interesting for everyone. We wish, therefore, the absorbing reading.

Gliwice, in October 2013

Prof. Leszek A. Dobrzanski M Dr hc
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