LIGHT METALS

MAGNESIUM ALLOY DEVELOPMENT: AN LMD SYMPOSIUM IN HONOR OF KARL KAINER

Magnesium alloys play a key role as lightweight materials for automotive, aerospace, 3C industries, and even as a biodegradable material for medical implants. However, each of these areas of applications has its own requirements on the property profile. Therefore the alloys have to be designed according to the required property profile. This has to cover the influence of alloys e.g. on mechanical properties, corrosion behavior, deformability, etc. but also on processing steps. Additionally there is a need in prediction performance of alloys and to validate this with appropriate computational approaches.

The scope of this symposium will be the description of magnesium alloy design from the selection of alloying elements, processing steps towards selected applications, the performance of alloys during service and how they get recycled. These real-life approaches will be accompanied by modelling and simulation approaches to predict the microstructure and properties.

ORGANIZERS

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