

Advanced Casting and Solidification of Light Alloys for Transportation

Overview

The course is intended to give in depth understanding of the materials requirements of transport sector and the basis for choosing the light alloys for these applications. In addition to providing the basic fundamental knowledge of microstructural modifications than can lead to significant improvement in the properties of light alloys, the course also emphasizes on the latest development in this field including the advanced light composites and metal foams.

Course participants will learn these topics through a series of lectures and interaction with the stalwarts in the field. The participants will also be exposed to the technology of grain refinement, modification, in-situ composites and metal foams through a few experimental demonstrations.

Dates for the Course	4th to 11th July, 2016
Host Institute	IIT Madras
No. of Credits	1
Maximum No. of Participants	50
You Should Attend If...	<ul style="list-style-type: none">▪ You are an UG/PG student studying metallurgy, materials science, mechanical, production or manufacturing and interested to know about the advances in light materials for transportation sector.▪ You are working in an industry that deals with transportation, particularly automobiles.▪ You are a scientist in an R&D laboratory that deals with research on light alloys and composites for various automotive applications.▪ You are a research scholar or faculty from an academic institution interested in learning about the advances in the development of light alloys and composites for various transportation applications.
Course Registration Fees	<p>The participation fees for taking the course is as follows:</p> <p>Student Participants: Rs.1000 Faculty Participants: Rs.2000 Government Research Organization Participants: Rs.4000 Industry Participants: Rs.5000</p> <p>The above fee is towards participation in the course, the course material and laboratory experiments for demonstration. The participants may be provided with hostel accommodation, depending on the availability, on payment basis.</p>

Course Faculty



Prof. Ravi C. Ravindran is in the Department of Mechanical and Industrial Engineering, Ryerson University, Toronto, Canada. He is a stalwart in the field of light alloys. His research is mostly on casting of Al and Mg alloys and their composites with strong collaboration with transportation industry.



Prof. B.S. Murty is in the Department of Metallurgical and Materials Engineering, IIT Madras. He is well known in the field of Metallurgy and Materials Engineering. His research interests include light alloys, in-situ composites, metal foams and nano materials.

Course Coordinator

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