

February 27 to March 3, 2011 San Diego Convention Center • San Diego, California USA

# **The Casting and Solidification of Metals**

# Sunday, February 27, 8:30 a.m. to 4:00 p.m.

#### **Overview**

A new understanding of casting quality problems will be presented. The course will be intended to update delegates on the latest techniques for the treatments of liquid metals and alloys, and the design of filling systems for castings to ensure the production of high quality, economic castings. The effect of defects on the development of microstructure and properties of cast products will be included. The course will cover both scientific and practical aspects of the new technology. The systems described are applicable to alloys of magnesium, aluminum, copper, cast irons of all types, and steels of all types.

Metal treatments and the new techniques for filling and feeding designs will be presented in detail. The presentation will focus on sand, permanent mold and investment casting processes, although the workshop will be of interest to die casters. The emphasis will be on simultaneous quality improvement and cost reduction. If they wish, delegates are invited to bring 'problem castings' to be solved as class exercises.

# Who should attend?

Casting methoding engineers will be targeted, although management at any level will find the course intelligible and valuable to appreciate what can be achieved.

#### **Topics**

- · Metal treatment and quality assessment.
- · Design of naturally pressurized running systems for gravity poured castings of all types.
- · Worked examples for Al alloy and steel castings.
- Casting defects and prevention.

# **Speakers**

John Campbell, Emeritus Professor of Casting Technology, University of Birmingham, UK

# **How to Register**

Register by February 4, 2011 using the online registration form. Cost is \$475 for members and \$560 for nonmembers.

# **For More Information**

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John Campbell

