Celebrating the Megascale:  
An Extraction and Process Metallurgy Symposium in Honor of David G. C. Robertson

At a time when maintaining metals production is increasingly important to modern society, producers face the challenge of remaining profitable within an unpredictable global economy, while minimising environmental impact and energy consumption. Economies of scale are becoming increasingly important in this setting, leading to larger and larger plants – some reaching the megascale – and requiring the support of highly skilled professionals.

Professor David G C Robertson has devoted his career to the education of highly skilled metallurgical professionals and to the engineering of all types and sizes of metallurgical processes, particularly those involving molten metals. David’s research has focused on transport phenomena of smelting, refining, and solidification processes, particularly mass transfer, kinetics and fluid dynamics. He has made major contributions in the areas of metal-slag-gas reactions, gas injection into melts, gas-jet atomization of liquid metals, ferro-alloy production, and the development of continuous steelmaking, among many others. During the course of this research, he has supervised the work of 26 PhD and 14 MS candidates, who now work around the world and in numerous environments: academia, industrial research, and corporate management. The symposium will feature presentations on the application of engineering principles to metallurgical and materials processing, focusing in particular on metals production and recycling.

The David Robertson conference will be a prestigious event, expected to attract industry leaders in the field of pyrometallurgy through:
- Stimulating discussion
- Facilitating industry networking
- Large, knowledgeable audiences
- Comprehensive industry support from all role players

Papers are invited that cover the following topics:
- Pyrometallurgical Processing Fundamentals (thermodynamics, kinetics, gas-liquid reactions etc)
- Non-ferrous smelting, converting and refining (sustainable technologies for a global market, meeting the greenhouse challenge, price cycles and processing strategies)
- Ferrous metallurgy and iron and steel production (innovative versus established technologies, meeting the greenhouse challenge)
- Ferro-alloys (melting practice)
- Process modelling and simulation (interfacing fundamentals and operations, energy profiling for improved efficiency, do-it-yourself versus commercial software)
- Metallurgical education (education for a global industry, efficient teaching strategies for a new generation – social media, on-line, flexible delivery versus traditional, continuing education strategies)

A social event will be held during one of the evenings of the conference.

Abstracts should be submitted to TMS via the web site at: http://www.tms.org/tms2014
Additional details are available in the information web site at: http://www.pyrometallurgy.co.za/DavidRobertson/

All accepted papers will be published in the conference proceedings. Selected papers may be published in JOM.

Organized by: Phillip Mackey, Eric Grimsey, Rodney Jones and Kent Peaslee

Make plans now to attend this conference!