

# Foreword

The 'Southern African Pyrometallurgy 2011' conference provides an opportunity for people from southern African pyrometallurgical operations to present their work, and provides a forum for the exchange of ideas between people from southern Africa and from elsewhere around the world. Papers from ten countries are presented here, covering a wide variety of topics of pyrometallurgical interest. Unsurprisingly, electric arc furnaces feature strongly in the programme, but there is also good coverage of upstream and downstream processes, as well as of refractories. A wide range of processes is covered, including steel, ferro-alloys, silicon, PGMs, nickel, and copper.

The previous 'Pyro 2006' conference began a collection of 'Pyrometallurgy in Southern Africa' papers, published on the [pyrometallurgy.co.za](http://pyrometallurgy.co.za) website, that describe plant operations (as well as some history, and highlights of current work), thereby providing valuable and useful reference material. The 'Pyro 2011' conference provides some further contributions towards the goal of eventually having a description of every smelter in the region.

This conference has a significant focus on the properties of slags, and a particular highlight is the one-day short course on 'The estimation of slag properties' by Professor Ken Mills from Imperial College in London.

Pyrometallurgy has played a very important role in southern Africa for at least four centuries, and continues to do so. The 'Cradle of Humankind' world heritage area, about 40 km from Johannesburg, contains the site of the earliest evidence of the deliberate controlled use of fire by human beings (about 1.3 million years ago), and this is obviously a necessary precursor to pyrometallurgy. It is hoped that the venue, as well as the social and cultural activities, will help to make the conference a memorable one for those able to attend. I trust that the ongoing value of the papers and presentations will make all the hard work of the many contributors most worthwhile.

**Rodney Jones**

*Convenor*

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