

Journal Comment

The Advanced Metals Initiative (AMI) programme was established in 2003 by the Department of Science and Technology (DST) and the Science Councils, namely, the CSIR, Mintek and NECSA. The objective of establishing this initiative was to research, develop and innovate across the advanced metals value chain. In this context, the advanced metals are defined as all metals that provide opportunities for creating new products and utilising advanced properties through the application of new technologies. From the DST's strategic consideration, the AMI's outputs must enable the following: the creation of new industries, improving the competitiveness of old and existing industries and the promotion of technology localisation.

In order to realise these ambitious goals, four networks were created at the CSIR, NECSA and Mintek. The CSIR is responsible for the Light Metals Development Network (LMDN), which coordinates research on aluminium and its alloys, as well as hosting the Titanium Centre of Competence (TiCoC). NECSA was tasked with the coordination of the Nuclear Materials Development Network (NMDN) with the aim of developing novel, environmentally-friendly, cost-effective processes for the manufacturing and beneficiation of zirconium, hafnium and monazite. Mintek coordinates both the Precious Metals Development Network (PMDN), which focuses on the precious metals gold and the platinum group metals (PGMs), and the Ferrous and Base Metals Development Network (FMDN).

At the FMDN's maiden conference in 2012, the R&D efforts in the network narrowly focused on three strategic sectors of the economy – the transportation, energy and petrochemical industries. However, as part of its evolution and growth since then, the R&D focus has now been extended to include pervasive material challenges in other key industrial sectors such as automotive, medical, construction, aerospace, logistics and mining. It is our wish, therefore, that the conference will provide a forum for brainstorming

and proposing other relevant R&D areas that can be included in an effort to further strengthen the FMDN for the future. The FMDN continues to support postgraduate students at various higher education institutions (HEIs) as part of its mandate towards human capital development (HCD).

The Ferrous 2016 Conference Organising Committee takes this opportunity to welcome all delegates to the conference and extends its appreciation for your attendance. We are looking forward to your technical contributions and value-adding debates that will unfold during this conference with the ultimate goal of ensuring that the eventual outcomes out of this network, and other AMI networks, benefit the broader South African community. The Committee also thanks Raymond van der Berg and his dedicated team at the SAIMM for their excellent organisation of the conference. Finally, we thank the Department of Science and Technology (DST) and the officials responsible for the AMI Programme, Llanley Simpson and Wilna du Plessis, for their expert guidance of the programme and for funding the Ferrous 2016 Conference.

Thank you.

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Conference Convener