

SPOTLIGHT

ZrTa2011 New Metals Development Network Conference

12–14 October 2011 • Mount Grace Country House & Spa • Magaliesburg

The Advanced Metals Initiative (AMI) of the South African Department of Science and Technology (DST) facilitates research, development, and innovation across the whole value chain in the field of advanced metals. The goal is to achieve sustainable local mineral beneficiation and to increase the downstream value-addition of local advanced metals in a sustainable manner through industry-relevant research and development, technology transfer, and ultimately, commercialization. The programme consists of a number of networks associated with various science councils, namely Necsa, CSIR and Mintek. CSIR is responsible for the Light Metals Development Network (Ti and Al), while Mintek coordinates both the Precious and Ferrous Metals Development Networks (PGM, Au, and Fe). Necsa was tasked to coordinate the New Metals Development Network (NMDN) with the aim to develop novel, environmentally-friendly, cost-effective processes for the manufacturing (and consequent beneficiation of mineral resources) of zirconium, hafnium, tantalum, and niobium metals.



Since the initiation of the program, the NMDN's research and development activities were focused on the optimization and refinement of the zirconium metal manufacturing process and all processes preceding the metal. We are proud to mention the contributions made by some of the leading tertiary education institutions in this country to the NMDN's research activities to date. The NMDN's commitment to human capital development was demonstrated by the number of postgraduate studies supported. To date no less than six MSc studies were obtained through AMI funding. Currently, seven students are enrolled for PhD studies and five for MSc studies.

During the ZrTa2011 conference, researchers and industry role-players had the opportunity to present the progress that was made over the past few years with related research. The conference provided a forum to discuss the potential for industrial application of the technologies developed with regard to beneficiation of these metals. At the same time, the activities of the New Metals Development Network was promoted to the broader South African industrial and scientific communities.

The annual conference is the AMI's flagship event of the year. The participation of presenters and delegates—from all over the world—in enrichment of the diversity of perspectives and content presented is highly appreciated. Topics that were covered included mineral beneficiation, chemical processing, purification, and metal manufacturing. It is believed that of all the participants the invaluable experience, insight and comments added to what was potentially a very important discussion for sustainable development.

J. Nel
Chairman