



## Seeing beyond the cloud, repositioning the African minerals industry



The future of any country lies with its youth. This statement is especially true for the African minerals industry. The minerals industry continues to play a pivotal role in the establishment of a strong economic base in various countries on the continent. However, the minerals industry is faced with complex challenges and stiff competition for foreign direct investment. The collapse of this industry will have dire consequences for the citizens of countries whose economies are reliant on mining. However, these challenges present industry leaders and young professionals with an opportunity to create a vision for the mining industry that will inspire confidence for the future of Africa. Young

professionals must create and own a roadmap that describes the steps necessary to realize this future. To create this roadmap, it is necessary to take cognisance of the mining policies, human capital, and techno-economic conditions needed to change the status quo and position Africa as a destination of choice for capital investment.

One of the ways to map out the future of the minerals industry was to host a conference at which young professionals could engage in dialogue on what this future will look like. This dialogue was supplemented with networking sessions with industry leaders.

This edition of the *Journal* contains some of the papers that were presented during the conference. The first paper discusses unlocking the potential of deep-level mining through multi-stakeholder collaborations. The next two papers focus on the necessary design considerations towards integrated mine planning and creating a technology map to facilitate modernization in the minerals industry. The last three papers cover topics in mineral processing, *vis-à-vis* investigating cost-effective ways of recovering rare earth elements from alternative sources; development of a technique for nickel electrodeposition from sulphate electrolytes; and investigation and optimization of the industrial process for extraction of iron, vanadium, and titanium from titanomagnetite. The remainder of the papers addresses various issues affecting the minerals industry.

The minerals industry is in need of young professionals to develop solutions for the numerous complex challenges alluded to earlier. Solving these challenges will require a collaborative effort involving the different stakeholders such as academic and research institutions, the minerals industry, governments, and communities. I wish to take this opportunity to thank all individuals and organizations that made this Young Professionals Conference a success.

**S. Nhleko**

*Chairperson of the Organizing Committee*