I recently had the privilege of attending, and representing the SAIMM at, the inaugural Mines, Wines and Art, which was held in the Convent Courtyard at the Goodman Gallery in Green Point, Cape Town on Sunday 4 February 2024. This event, occurring on the eve of the ‘Investing in African Mining Indaba’, aims to establish itself as a highlight of the annual Mining Indaba gatherings. The Goodman Gallery showcased a thought-provoking exhibition featuring mining-themed works by esteemed South African artists David Goldblatt, William Kentridge, and Sam Nhlengethwa. Fine wines from estates with direct ties to mining, such as Vergelegen, Steenberg, Gabrielskloof, Wildekrans, and Boschendal, were served. The event was organized by the SAIMM and sponsored by Webber Wentzel.

The guest list included the king and queen of Lesotho, his Majesty, King Letsie III and her Majesty Queen Masenate Mohato Seeiso, along with Lesotho’s Ministers of Energy (Hon. Professor Nqosa Mahao) and Natural Resources (Hon. Mohlomi Moleko) and the Chairman of the Lesotho Highlands Development Agency (Mr Stephen Phakisi). The Royal Bafokeng Nation was represented by Kgosi Leruo Molotlegi. Also in attendance were the British High Commissioner to South Africa (His Excellency Anthony Phillipson), the CEO of the ICMM (Rohitesh Dhawan), the CEO of the Minerals Council (Mzila Mthenjane), Vice Chancellors of the University of the Free State (Professor Francis Pietersen), University of Cape Town (Professor Daya Reddy), University of Stellenbosch (Professor Wim de Villiers), Chairs and CEOs of Anglo American (Duncan Wanblad and Nolitha Fakude) and Seriti Coal (Mike Teke), among many other dignitaries.

The event, led by Michael Solomon as the master of ceremonies, featured brief but insightful addresses from various speakers, including myself, King Letsie III, Professor Daya Reddy (UCT), Professor Francis Petersen (UFS), and Mzila Mthenjane, all on the theme of a just transition in mining. Christo Els of Webber Wentzel delivered the closing remarks.

Overall, the event was a resounding success, offering guests the opportunity to mingle, explore the gallery, and enjoy a splendid dinner paired with delicious wine.

I extended my stay in Cape Town to participate in and deliver a presentation at another event organized by the SAIMM. This workshop, held on the Friday following the Mining Indaba, focused on tunnelling and was conducted in collaboration with the International Tunnelling Association (ITA) and the South African National Committee on Tunnelling (SANCOT). In an upcoming President’s Corner, I look forward to discussing SANCOT and its role within the SAIMM further.

I did not attend the Mining Indaba in person, as it’s more tailored for investors and my erudite colleagues in the mining, exploration, and ESG fields, rather than a specialist rock engineer like myself. However, I followed the event closely as it serves as a valuable indicator of the mining landscape in Africa.

It is encouraging that the South African President, Cyril Ramaphosa, attends the Mining Indaba and re-affirms the government’s commitment to the mining industry. Given that the industry contributes 7.5% towards the national GDP, accounts for 60% of exports by value, and employs approximately 476 000 people, this commitment is essential. The transformation...
of black ownership in the industry from 2% in 2004 to the current 39% is truly remarkable. Importantly, the government acknowledges the crippling effects of unstable electricity supply, logistical bottlenecks (mainly port and rail), and illegal mining, cable theft, and other criminal activities on mining in South Africa. However, the implementation of critical interventions by government and business will determine whether meaningful reform takes place, to make South Africa a more attractive investment destination. The implementation of an efficient, transparent, and modern cadastral system for digital management of prospecting and mining rights applications is crucial for the mining industry, and the President announced that a preferred bidder had been selected to implement the system.

Each mining company underscored the critical significance of responsible mining practices, integrating sustainability into their business strategies, and making steadfast commitments to decarbonization. During the discussions, innovative approaches were showcased, such as investing in renewable energies, ensuring a just transition, and recycling. Not only do these approaches contribute to decarbonization efforts, but they also aid in securing energy requirements.

The International Council on Mining and Metals (ICMM) announced its intention to amalgamate responsible mining standards into a unified, globally recognized framework, collaborating with the World Gold Council, Copper Mark, and the Mining Association of Canada. This initiative will hopefully address the multitude of standards currently being applied and simplify the requirements for mine owners. The consolidated standard is intended to serve as a single reliable source of information, adopted throughout the industry.

As ESG pressures continue to mount, the focus on critical minerals such as copper for electricity distribution, as well as nickel, cobalt, and lithium for applications in solar, wind, and hydropower installations, along with the production of battery energy storage systems and electric vehicles, becomes increasingly vital. These minerals play a pivotal role in facilitating the global energy transition. This will undoubtably continue to create opportunities in Africa and contribute to the development of people and communities.

As a final note, I read with interest the recent announcement that a fleet of BMW iX5 hydrogen fuel cell electric vehicles (FCEVs) is now driving on South African roads. They are supported by a green hydrogen refuelling centre in Johannesburg, supplied by Sasol. The initiative was a joint venture between BMW, Sasol, and Anglo American. These luxury SUVs have a 125 kW drive train a 500 km range on 6 kg of fuel. Notably, one significant advantage of FCEVs over battery electric vehicles (BEVs) is their rapid five-minute refuelling time. It’s worth mentioning that the BMW iX5 fuel cell is provided by Toyota, a frontrunner in fuel cell development, who have their own Toyota Mirai, which is the best-selling FCEV in the USA. It will probably take some time for the green hydrogen fuel supply to roll out in South Africa and worldwide, and for FCEVs to become an affordable reality. However, the hydrogen economy holds tremendous potential for South Africa and PGM miners. Platinum and iridium are used in generating green hydrogen and potentially in proton exchange membrane (PEM) electrolysers. Most fuel cells utilize platinum as a catalyst, alongside lesser quantities of ruthenium. Both elements contribute distinctive traits of durability, power density, and efficiency to the fuel cells.