

## Obituary

### Hugh Scott-Russell



Hugh Scott-Russell passed away in Johannesburg on 20 November 2013. He is survived by his wife Barbara, their four children, and eight grandchildren.

Hugh was born in Randfontein on 13 February 1935. He attended junior school in Randfontein and went on to Pretoria Boys High School to complete matric. Hugh joined the Land Bank after school, and two years later he enrolled at the University of the Witwatersrand to study for a BA in preparation for a career in teaching. However, due to a lack of funds he decided to join the mining industry as a geological assistant at Randfontein Estates Gold Mine. This was the start of what was to be a long and distinguished career with Johannesburg Consolidated Investments Ltd (JCI). Hugh spent a while in the mining technical service departments before moving on to mining, where he was to excel. He moved steadily through the ranks in the JCI gold mines before being promoted to Rustenburg Platinum Mines (RPM) as Mine Manger. It was here that he demonstrated his passion for modernization and the use of technology and mechanization to improve productivity in mining. With his leadership and drive the five shafts at RPM converted from manual mining methods to scraper mining in two years. His promotion to Consulting Engineer for the group's platinum mines followed. It was not surprising that he was promoted again four years later, this time to the position of Technical Director, and two years later Hugh became an Executive Director of JCI.

Here Hugh had the opportunity to innovate and modernize the mining methods employed in the JCI mines – the motivation being better working conditions for employees, improved safety, lower working costs, and increased productivity. The four JCI gold mines introduced trackless mechanized mining methods (TM<sup>3</sup>) with varying degrees of success. Failure did not deter him, and he accepted the teachings that arose from these as well as from the successes, building on them for future projects. Many of these are evident in the successful bord and pillar operations in the narrow reef, shallow-dipping UG2 workings of the platinum mines today.

Hugh gathered a multidisciplinary team of specialists and professionals to support these endeavours and to investigate the potential of many other technologies such as electrohydraulic drills for narrow reef stoping, hydropower drilling and cleaning, continuous scraping, impact rippers, monorails, and diamond wire cutting. This team was encouraged to explore, develop, and implement new technologies. He recognized the potential offered by oil well drilling technology and introduced it in the deep gold reef drilling programmes at the time.

Hugh's support for innovation was not restricted to his area of technical expertise, and he frequently saw potential in other areas of the mining value chain. Specifically within the metallurgical field, he provided critical support for various advances such as the use of Davcra cells for flotation in the platinum concentrators, CIP technology in the gold division of JCI, Foxsmelt technology in the platinum smelters, and new solvent extraction technology in platinum refining to name a few. During his time as Technical Director of JCI Hugh was always receptive to well devised and meaningful technical improvements throughout the industry. This ability to see beyond the narrow constraints of his own technical discipline made Hugh's contribution to the South African mining industry an important one.

Recognizing that people had to be skilled in these technologies for them to succeed, he actively drove skills and human resource development in the JCI group. People were encouraged to study, and talent management and multidisciplinary career development programmes were introduced throughout the group. He encouraged the distribution of technological developments and know-how throughout the group and in all disciplines through the presentation of papers at the JCI quarterly technical seminars. Many of these papers were subsequently published in the SAIMM Journal.

Hugh described, in his Presidential address in 1993, what he considered to be the 'advanced technologies' of the day – technologies such as plasma rock blasting, rock planning, sunburst excavations, reaming and boring of the reef horizon, and 'the intelligent mine'. Some of these have subsequently come to fruition.

A man of many parts, Hugh always rose to the challenge and was highly competitive. He enjoyed sport. In his youth he excelled at rugby at school and represented Transvaal, initially as a member of the Kwaggas side and then in the senior Provincial XV. He was a keen golfer, and many a charity benefitted from the charity golf days he organized. An avid reader, Hugh enjoyed autobiographies and history. As he encouraged those who worked with him to further their studies, so did Hugh. He attended management and executive development programmes at Wits, Unisa, and Insead in France. These were followed by an MSc in mining engineering from Wits and later a PhD from Nottingham University.

Hugh was a Fellow of the SAIMM and served with distinction as President in 1993/1994. He was also a Chartered Engineer, a Fellow of the IMM and the IME in the UK, as well as an Honorary Member of The Institute of Engineering in Cardiff.

In 1994 after thirty-eight years of service with JCI Hugh retired to live in Johannesburg. Barbara and Hugh travelled widely to be with their children who had moved to many different parts of the world.

Hugh will be remembered for his foresight, inspirational leadership, and drive to modernize and improve the mines of South Africa.

M. Rogers  
L. Cramer