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## ABOUT THE AUTHOR

**Cornelius Frank Vermaak** was born in the village of Steynsburg on 12 September 1927. He obtained a first class Senior Certificate at the Paul Kruger High School before proceeding to study at Rhodes University. After graduate training, he joined Geophysical Surveys (Pty) Ltd, and worked on several geological and geophysical projects in central and southern Africa before being appointed as Manager of the firm, based in Windhoek.

Having met his future wife, and tired of continual travelling, he joined the SA Minerals Corporation Ltd as Chief Geologist at the Otjosondou Manganese Mine, which was taken over by the Johannesburg Consolidated Investments Co. Ltd (JCI) in June 1954. In 1958, he was seconded to Randfontein Estates Gold Mine, until his transfer to JCI's Exploration Division. One of his first exploration projects was in the Bushveld Complex, which has continued to hold his interest until the present day. In 1959, he led a major exploration team to unmapped Ngamiland in Botswana, where he did most of the mapping himself, using calculated-risk landings by aircraft in the remoter regions. This expedition almost ended in tragedy when he contracted sleeping sickness in the Okavango swamps, but he made a miraculously complete recovery after six months in hospital.

Frank managed exploration teams on a wide variety of projects, including asbestos near Badplaas, andalusite near Zeerust, limestone near Dwaalboom, and various extended mapping projects in the western Bushveld Complex. A position as Chief Geologist at Pilanesberg Nickel Mine was followed by platinum exploration in North and South America, until he was transferred to JCI's head office in Johannesburg in 1969. Here, with his colleagues Cousins and Feringa, he became intimately involved with the entire range of PGM projects, on both the exploration and the mining sides. In 1971, he started branch companies of JCI in Angola, and in his capacity as Exploration Manager initiated numerous prospects in the Kunene Complex. In 1973, he was transferred to Johannesburg as Group Geologist, responsible for all the mines in the JCI group. From 1977 to 1984, he was appointed Divisional Consulting Geologist in charge of research (including Spectral Africa Pty Ltd) and Manager of JCI's James Park Complex in Randfontein. He became Consulting Geologist in 1981, and undertook economic studies and commodities research until he elected to take early retirement, after over 31 years of service in the JCI group.

Throughout his career with JCI, Frank's interest in the Bushveld Complex in general, and the PGM in particular, never waned. He supervised many mapping projects, such as that on the Potgietersrus limb of the Complex, which culminated in the landmark paper by Van der Merwe. He delivered this paper at the International Platinum Symposium of the Society of Economic Geologists in Denver, Colorado, as well as two others, which dealt with the genesis of the Merensky Reef and the nickel pipes at Vlakfontein. While in the USA, he visited Sudbury with Dick Hutchinson, and the Duluth Complex. On other occasions he has visited numerous areas of PGM mineralization in both North and South America.

In 1985, Frank was invited to join Mintek as Editor of various scientific publications, including *Chromium Review*, to which he contributed many papers on the PGM and the Bushveld Complex. He then accepted a highly successful four-year diplomatic posting as Counsellor for Mineral and Energy Affairs in Bonn, West Germany, with accreditation to Austria, Finland, Germany, Norway, Sweden, and Switzerland, as well as the eastern European countries behind the 'Iron Curtain'. While in Europe, he took the opportunity to visit PGM deposits in Sweden and Finland, including the Kemi chromite mine, as well as various institutions in Poland and Russia that were involved in PGM research. He also attended many seminars, including the International Platinum Symposium in Espoo, Finland. He finally retired upon his return to South Africa in June 1990.

Frank has published a large number of scientific papers in a variety of journals, dealing mostly with the Bushveld Complex, the PGM, and other commodity and energy studies. He has served on the Group Geologists' Committee of the SA Chamber of Mines, and the boards of control of the Bushveld Research Unit at the University of Pretoria and Precambrian Research Unit at the University of Cape Town. He also served on the Consultative Committee of the Economic Geology Research Unit and the School of Earth Sciences at the University of the Witwatersrand, and on the South African Committee for Stratigraphy and the South African Scientific Committee for the International Union of Geological Sciences.

Frank has been a member of the Geological Society of South Africa since 1952, and was elected to Council from 1979 to 1986. He was Honorary editor of the Society's Quarterly News Bulletin for eight years, and ran the large and very successful Geocongress '81, for which he was presented with the Society's Honours Award. He was one of the first Fellows to be nominated by the Society, in 1968. He convened the section on the Bushveld Complex in the prestige volumes *The Mineral Deposits of Southern Africa*, published in 1986. On his retirement, he again accepted