



	<h2><u>Curriculum Vitae Summary</u> <u>Dr Nicolaas Casper Steenkamp</u></h2>
Expertise:	Consulting Geologist – Geological, Geometallurgical and Geotechnical Investigations, Audits, Due Diligences/Reviews, Contractor Management, Desktop studies
Date of birth:	21/08/1980
Nationality:	South African
Commodity exposure:	Gold, Platinum, Coal, Chrome, Nickel, Copper, Manganese, Iron, Bauxite, Diamonds, Phosphates, other base metals
Country exposure:	South Africa, Zimbabwe, Mozambique, Australia, Peru, Lesotho

Dr Nicolaas C. Steenkamp works as a Geologist and Mining Business Analyst and has over 12 years of experience in a broad range of fields. Nicolaas obtained a PhD in Geology at the University of Pretoria and is a registered PrSciNat with SACNASP. He is also a member of the GSSA, SASS, MINSAs and SAIMM.

He is involved in contractor management, geological, geotechnical and geometallurgical project work and studies. Dr Steenkamp has a background in the geological field that includes, but is not limited to: Geological- and geotechnical core logging, underground face mapping, regional surface mapping, greenfields- and brownfields exploration. He has also been involved in technical reporting, resource and reserve audits, due diligence and desktop studies. He also has a background in X-ray analytical methods, specifically EMP and XRF.

Nicolaas has experience in various disseminated, semi-massive and massive sulphide deposits. He was involved in setting up a geometallurgical program for Cu-Pb-Zn-Ag deposits in Peru and Cu-Ni-PGE deposits in South Africa. He has completed a full reserve and resource audit for a South African client and assisted with setting up an MRM department, reviewing COP's and SOP's to meet mineral reporting code standards and site implementation.

Membership in Professional Institutions & Societies:

Class	Professional Society	Year of Registration
PrSciNat	South African Council for Natural Science Professionals	2013
Member	South African Geological Society	2003
Member	South African Spectroscopic Society	2013
Associate	South African Institute for Mining and Metallurgy	2012
Member	Mineralogical Society of South Africa	2017



Education:

Degree / Diploma	Field	Institution	Year
PhD	Geology	University of Pretoria	2012
BSc (Hons)	Geology	University of Pretoria	2004
BSc	Geology	University of Pretoria	2003

Selected and Most Recent Projects Completed:

Year	Client	Commodity	Project Description
2017	E&R Mining	Manganese	Brownfields Exploration
2016	ADNOC	Oil & Gas	Storage Site Investigation
2016	AssMang	Manganese	Expansion and Modernisation of Black Rock Mine
2016	Kalagadi Manganese	Manganese	Business Plan Review
2015	Bokoni Platinum	Platinum	Resource and Reserve Audit
2013	Vulcan	Poly-metallic	Geometallurgy Study
2012	ASA Metals	Chrome	LOM & Decline Study
2012	Auroch Gold	Gold	Due Diligence
2011	Mimosa Platinum	Platinum	Pre-Feasibility Study
2011	Red Pepper Mining	Gold	Greenfields Exploration
2011	Baran Trading	Lime	Market Study
2010	Corridor Mining	Gold	Greenfields & Brown Fields Exploration
2010	GEM Diamonds	Diamonds	Due Diligence
2010	Exxaro	Coal	Due Diligence
2011	Lesotho Highlands	Water	Pumping Scheme Geotechnical Site Investigation
2009	TransHex Diamonds	Diamonds	Indicator Mineral Check Study

Previous Employment Record:

Period	Company	Job description
2017	SRK Consulting	Title: Consulting Geologist Site Exploration Project Execution
2016-2017	Fugro ME	Title: Consulting Geologist/Geotechnical Site Project Management and Investigations
2015 – 2016	Advisian	Title: Senior Associate Business Development and Geological/Geotechnical Consulting
2013 – 2015	WorleyParsons	Title: Senior Geologist Contractor Management, Geological/Geotechnical Consulting
2010 – 2013	TWP Projects	Title: Mining Business Analyst Studies, Reviews, Due Diligence, Geological Consulting
2009 – 2010	GeMet	Title: Senior Geologist Greenfields/Brownfields Exploration and Core-yard management
2005 - 2009	Stoneman X-Ray Analytical Facility	Title: Senior Technical Assistant Sample preparation and operation of EMP and XRF instruments