

STUDY OF THE SOUTH AFRICAN NANOTECHNOLOGY SYSTEM

DERRICK LOUIS VAN DER MERWE 99159032

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PROJECT REPORT SUMMARY

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DERRICK LOUIS VAN DER MERWE 99159032

Supervisor: Prof. A.J. Buys

Department: Department of Engineering and Technology Management

UNIVERSITY OF PRETORIA

Degree : MEng (Technology Management)

Abstract

The study of the nanotechnology system in South Africa is an analysis of the South African nanotechnology innovation system, with a discussion of background information regarding nanotechnology awareness, involvement, funding, personnel, education, networking and equipment, and illustration of the level of nanotechnology activities for each product life cycle and per institution. The document contains a classification of nanotechnology industries regarding time to market, market potential, disruptiveness and complexity, identifies innovation hampers for the South African nanotechnology community and ranks nanotechnology national and international nanotechnology buyers, suppliers, competitors and relationships. Lastly, innovative strategies are formulated from information gathered on internal South African nanotechnology strengths and weaknesses, and external nanotechnology opportunities and threats.



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"All of the information which all of mankind has ever recorded in books can be carried in a pamphlet in your hand—and not written in code, but a simple reproduction of the original pictures, engravings and everything else on a small scale without loss of resolution."

Richard Feynman 1959, the father of nanotechnology.



Abstract

The study of the nanotechnology system in South Africa is an analysis of the South African nanotechnology innovation system, with a discussion of background information regarding nanotechnology awareness, involvement, funding, personnel, education, networking and equipment, and illustration of the level of nanotechnology activities for each product life cycle and per institution. The document contains a classification of nanotechnology industries regarding time to market, market potential, disruptiveness and complexity, identifies innovation hampers for the South African nanotechnology community and ranks nanotechnology national and international nanotechnology buyers, suppliers, competitors and relationships. Lastly, innovative strategies are formulated from information gathered on internal South African nanotechnology strengths and weaknesses, and external nanotechnology opportunities and threats.

"Nature already operates at a nano scale level and, by being able to operate ourselves at that level, we will get a greater understanding of the things that nature can do."

Dr. Peter Doyle, Unilever

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