

HENDRIK (HENNIE) SNYMAN

AWARDS, HONOURS AND ACHIEVEMENTS

- Science Alumni of Honour Award from the University of Waterloo, Ontario, Canada (2007)
- Honorary Award from Rotary Club Port Elizabeth for his services to transformation of higher education (2001)
- Academic of the Year, Port Elizabeth City Council (1990)

DEFINING MOMENT

Seeing the advertisement for the position of Rector at the Port Elizabeth Technikon.

WHAT PEOPLE MIGHT NOT KNOW

His sister Wilna Snyman is the actress who played matriarch Madel Terreblanche in the soapie, *7^{de} Laan*. He is a very ambitious golfer: at best his handicap was 16.

FOR THE YOUTH OF TOMORROW

Hendrik 'Hennie' Snyman was born in 1940 in Bloemfontein. The son of a railway accounts man and a kindergarten teacher, science was not an obvious career choice. However, both Hennie and his twin brother, Jan (who would become a mathematics professor), showed talent in scientific subjects at school, and there was never any doubt what they would study at university.

Despite growing up in an Afrikaans-speaking family, the pair did not enroll at a university where Afrikaans was the language of teaching. "We went to the University of Cape Town (UCT), which was a very good thing," says the retired professor. It meant he experienced first-hand the challenges of learning in a second language. "There were times I couldn't understand the examination questions." As a result, he learned what it is to be an outsider at a university, an issue that is very important in managing diversity at universities in South Africa today.

Those early lessons stood Snyman in good stead later in life as he migrated from academic leadership to institutional leadership – first as the Rector of the Port Elizabeth Technikon, and later overseeing its merger with the formerly white

University of Port Elizabeth (UPE) into what is today known as the Nelson Mandela University (NMU). "My greatest pleasure was to see the institution grow, to create a first-choice technological university in Africa."

Snyman graduated with a BSc in mathematics and physics from UCT in 1960. Initially, he and his brother were set on becoming teachers but their tutors kept suggesting they stay on in academia. After his Honours at UCT, Snyman moved to the Council for Scientific and Industrial Research in Pretoria to work on phase changes in inorganic compounds as part of the high-pressure physics group. There, he obtained an MSc in physics from the University of South Africa (Unisa) in 1963, the same year he married his wife, Loëla, whom he had tutored in physics at UCT as she studied to become a physiotherapist. The couple have three sons – Ben, Koos and Hennie Jr – all now living in North America with their families.

For his PhD, Snyman chose to go to Canada, to the University of Waterloo in Ontario to work under the supervision of Frank Boswell. Boswell had been part of the team that had developed the first electron microscope in North America at the University of Toronto. Using the technology, Snyman worked on epitaxy – the growth of a crystal on another crystal – in the case of his PhD, growing gold crystals on silver.

After a postdoctoral at the University of Virginia, Snyman returned to South Africa in 1969 to take up a senior lecturing position at UPE. He focused on thin film physics, what today might be more commonly known as nanotechnology. "We didn't even have a laboratory. I spent a lot of time organising, designing and planning the construction of a physics department."

It was the start of a successful career as a South African physicist. Specialising in solid state physics and electron microscopy, he enjoyed training young scientists and taking up coordinating positions, like the presidency of the Electron Microscopy of South Africa. In 1976, he left South Africa for a year at Cambridge University. By the time he got back the following year, he had been promoted to full professor at UPE. He began working on radiation damage and wrote a paper with his student Jan Neethling on proton implantation of gallium arsenide, which achieved wide acclaim.



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In 1985, Snyman was awarded a B-rating by the Foundation for Research Development (now the Nation Research Foundation). But while the work was stimulating, Snyman was uncomfortable with the political realities of the day. "The whole concept of apartheid appalled me," says Snyman. The leadership of UPE was dominated by the conservative Broederbond. As a supporter of the progressive party of the day, Snyman often locked horns with his colleagues over political issues. By 1985, South Africa had declared a state of emergency, and Snyman was feeling disillusioned. "My children were at the point of going to university, and we would pass the convoys of military vehicles on the way to rugby matches." He could not find solace in his research either. "Physics can be very lonely. You know more and more about less and less until you know everything about nothing. I felt there was more to life than looking through the microscope."

It was at this point that Snyman saw an advertisement looking for a rector at Port Elizabeth Technikon, one of the colleges for advanced technical education in South Africa. It was a chance to change tack, to do something new. Snyman took up the post in 1988. "The next 18 years were the happiest of my life." There was less rigidity at the technikons and Snyman set out to desegregate the college. First, simple things like opening the Rector's quarterly 'tea and cake reception' to everyone from the gardeners to the top management. And within a year he had council backing to desegregate the residences.

Snyman took up a seat on the Committee of Technikon Principals. It was obvious to him that the technikons would play an important part in expanding South African higher education with the advent of democracy. But many prospective students saw technikon diplomas as inferior qualifications to university degrees. Snyman served on the executive committee of the technikon principals' committee, including as its chairman twice, while it lobbied to upgrade South Africa's technikons to universities of technology able to issue university qualifications. "The fight for degrees was a tough one because the universities were against us," he recalls. Nevertheless, in the late 1990s the first democratic government endorsed the proposal to turn technikons into universities.

Snyman retired from the Port Elizabeth Technikon in 2005, the year in which it was merged with UPE and Vista University to form the Nelson Mandela Metropolitan University (NNMU, now NMU). He played an instrumental role in the merger and regards his contribution to democratising South African higher education as his life's most important work. He is optimistic about the future

of higher education in South Africa: "People forget that we have produced Nobel Prize winners in this country. Many of them went to government schools. If we could offer quality public education for the whites in the past, we can do it for the black youth of tomorrow."



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