Sophie Thoko Mgcina (1938 -)

AWARDED TO SOPHIE THOKO MGCINA FOR EXCELLENT MUSICAL CONTRIBUTION TO, AND ACHIEVEMENT IN, THEATRE AND FILM



Sophie Thoko Mgcina was born on 9 May 1938 in Germiston. She and her family were later forcibly removed to Alexandra township, where she attended St Michaels School. In 1957, aged 19, she embarked on a lifelong career in the performing arts when she made a lasting impression at a **bi**on of Southern African Artists talent contest. This marked the start of more than four decades of acting, composing, theatrical coaching and translating which have gained her national and international fame and respect.

Her greatest achievement remains The Long Journey of Poppie Nongena, the play adapted from Elsa Joubert's famed book Die Swerfjare van Poppie Nongena. In early performances of this production, she not only played two leading roles but also composed and directed the music.

The play became an instant hit when it premiered at the Market Theatre in Johannesburg in 1980. It was re-staged in ₩w York that same year and then again at the Edinburgh Estival in 1983, followed by a world tour in 1984. In ₩w York, Mgcina was given an file Award for best achievement, and was nominated for the Laurence file Award for best supporting actress.

But 'Poppie Magena' was only one of many achievements in her long career. She has played 'Petal' in the London production of King Kong and 'Mama Belle' in the adaptation of Ben Johnson's Volpone, and appeared in Holy Moses and all that Jazz, There's No Sugar Left, Brecht on Brecht and many other prestigious productions.

Her musical career is less well-known, but it is an important facet of her life's work. She wrote music for Jamie ys' s Dingaka, one of the first South African films to achieve international recognition, and various other foreign and local radio, television and theatre productions.

Mgcina has long been involved in language work. She has translated English songs into Zulu, Mosa and Sotho, served as a voice and dialogue coach on such films as Cry Freedom, done voice-overs on many productions and written a book on the pronunciation of South African accents.

Her role as an educationist tends to be obscured by her activities in the public eye. She became a teacher at the Ederated **bi** on of Black Artists Academy in 1980, was appointed its creative director and head of the Department of Music and Voice in 1986, and in 1994 was given the task of establishing the Ational School for the Performing Arts at Dorkay House.

The sustained excellence of her extensive and versatile body of work has made Sophie Thoko Mgcina a doyenne of South Africa's performing arts and an inspiration and example for those to whom she has passed on her knowledge and sense of dedication.

Allina Ndebele (1939 -)



AWARDED TO ALLINA NDEBELE FOR EXCELLENT CONTRIBUTIONS IN THE FIELD OF CREATIVE ARTS

Allina Ndebele was born on 10 December 1939 at Ekuhlengeni Mission, in the northern part of what is now KwaZulu-Natal. She was one of six children raised almost single-handedly by her mother because the migrant labour system had forced her husband to find work in Johannesburg.

Ndebele managed to obtain a junior certificate, but financial and legal constraints did not allow her further education. In 1962, she applied to Ceza Hospital for nursing training. While waiting to be accepted, she worked as an interpreter for occupational therapists, a Swedish couple named Pedar and Ulla Gowenius, who taught spinning, weaving, drawing and sewing. They awakened and nurtured Ndebele's latent talent and creative spirit.

She was the first to enrol when the Evangelical Lutheran Church Art and Craft Centre was established at Rorke's Drift in 1963, and soon won a scholarship to the Dals Langed Art School in Sweden to train as a teacher of weaving.

Back at Rorke's Drift, she spent 12 years devoting her life to teaching and guiding both students and established weavers. But her work left her no time to fulfil her own creative needs, and in 1977 she returned to her place of birth near the Black Mfolosi River. Unable to obtain a site for a studio, she constructed a small workshop in her father's kraal, installed two second-hand looms which had been her farewell present from Rorke's Drift and embarked on her life's work.

She started weaving classes for local women and, in the evenings, worked on her own tapestries. Her first inspiration came from the wonderful Zulu folk-tales she had heard from her grandmother as a child, the vivid pictures in her mind being transferred directly to the tapestry without any preliminary drawings. It was an arduous beginning. Dyeing the wool required a walk of almost two kilometres to the river, and the work on her tapestries had to be done by the light of candles or paraffin lamps because there was no electricity.

Recognition and reward did not come easily, but in 1985 she established herself as a recognised independent artist with an exhibition at the Pretoria Art Museum which was later viewed at several other art galleries and museums, and in 1987 at Sweden's Orebro Lans Museum. Since then she has exhibited as far afield as Washington DC and the Netherlands, and has received several awards.

Today Allina Ndebele's tapestries with their depictions of African myths and legends as well as Bible stories can be seen in a number of major art galleries and collections. Each piece represents not just an irreplaceable part of the broader South African heritage, but a small monument to the indomitable spirit of an artist who overcame so many obstacles to bring her art to her country and to the world.

Henry 'Mr Drum' Nxumalo (1917 - 1957)

AWARDED TO HENRY 'Mr DRUM' NXUMALO FOR EXCELLENCE IN SOUTH AFRICAN JOURNALISM



Henry Numalo was born in 1917 at Mvutshini, Margate, in what was then Atal, the first child of Lazrus and Josephine Numalo. He attended the Excadale Mission School, where he showed such promise that the missionaries arranged for him to board in Durban so that he could further his education.

He began submitting his writings to various newspapers while still at school. Although opportunities for Black journalists were very limited, The Post newspaper in Johannesburg, a regular user of his contributions, offered him a job.

When World War II broke out, Numalo -then 22 and already an experienced journalist who counted many highly respected African intellectuals and writers among his friends and acquintances -saw an opportunity to go abroad, and he duly enlisted in the South African Army.

This took him to Egypt, where South African forces were heavily involved in combat. He somehow managed to visit London, where he made contact with many people whose views and friendship were to stand him in good stead. According to one of them, Peter Abrahams, Nu malo had the sense that great things were about to happen in Africa and that a responsible and independent press would play a very important role in the process of change.

The early post-war years were lean ones for Black writers and journalists like Numalo. Mainstream newspapers, consistent with the policies of racism and apartheid, offered few opportunities for Black reporters, while Black newspapers were either very small or controlled by White business interests -and often trivial and sensational. Independent investigative journalism of the type that Numalo envisaged simply d id not exist at the time.

Then in 1951, the millionaire Jim Bailey established Drum magaine under the editorship of Anthony Sampson and invited Numalo to become assistant editor. Drum was the antithesis of the entire South African press of that time, and was eventually read all over Africa. It provided a racy and irreverent blend of humour, sentiment, fiction, sport, scandal, weighty commentaries on continental affairs by renowned thinkers and devastating expose of labour abuses and political and systemic injustice.

Numalo was directly and indirectly responsible for much of the magaine' s sparkling content. He persuaded the intelligentsia to contribute, directed the efforts of staff members and wrote many of the feature articles himself, often literally risking his life in ventures into the type of investigative journalism that, he believed, was desperately needed in Africa. A number of Drum's writers were to become household names in South Africa, but they would all agree that the magaine's most brilliant star was Numalo himself, whose nickname was 'Mr Drum.'

D blw Year's Eve of 1957, six years after helping to found Drum, Henry klumalo was engaged in investigating an abortion racket run by a wellknown doctor when he was murdered by unknown assailants. His legacy lives on in the free and independent South African press of today.

Lucas Radebe (1969 -)



AWARDED TO LUCAS RADEBE FOR EXCELLENT ACHIEVEMENT IN THE FIELD OF SPORT

Lucas Radebe was born on 12 April 1969 in Diepkloof, Soweto, and lived there to the age of 15, when his parents sent him to what was known as 'Bophutatswana' because of the ongoing violence in their home area. An ardent soccer fan, he began to play for the ICL Birds in the Bophutatswana Soccer League, first as a goalkeeper and later in the midfield.

In 1989, he was noticed by talent scouts for the Kaizer Chiefs club, and was promptly signed-up. An intelligent and acrobatic footballer, Radebe soon became one of the club's star players, and in 1992 reached the pinnacle of his sporting career by being selected for the national South African soccer team, Bafana Bafana, in spite of having been shot in the back by an unknown assailant less than a year earlier.

In 1994, Radebe joined Leeds United in England, and, after a troubled start, went on to become a favourite with the Leeds fans, who nicknamed him 'the Chief.' In 1998 – after playing in the South African team which had won the African Nations Cup in 1996 – he was made captain of the Leeds team. After returning to South Africa to lead Bafana Bafana in that year's World Cup tournament, Radebe concentrated on putting Leeds on the road to victory. The team came fourth in the 1998 – 1999 English Premiership and third the following year, qualifying for the coveted European Cup, now known as the Champions League.

In 2000, Radebe suffered knee and ankle injuries from which he took almost two years to recover, but by 2002 he was fit again, and after four matches in the Leeds reserve team was selected once more as Bafana Bafana's World Cup captain.

Radebe, now South Africa's most-capped soccer player, is at home in a variety of positions: centre-back – his main position – right-back, left-back, defensive midfield, goalkeeper and sweeper.

Radebe's success on the soccer pitch tends to overshadow another aspect of his life – his work for a number of educational, social and charitable initiatives, including the Starfish charity for HIV and AIDS orphans and the 'Reach for a Dream' Foundation for which the University of Cape Town conferred an Honorary Master of Social Sciences degree on him in 2005. He has also served as the Fédération Internationale de Football Association (FIFA) ambassador for the SOS Children's Villages and in 2000 received FIFA's Fair Play Award for his efforts to rid soccer of racism.

In a career spanning over 20 years, Lucas Radebe has risen to the heights of his chosen occupation, enhanced the image of his home continent's footballers, fought against racism in soccer, inspired hundreds of thousands of young fellow countrymen and ploughed back the fruits of his endeavours into helping ill and deprived children, not only in South Africa but elsewhere in the world. He has brought honour to himself, his family and to his country.

Archibald Campbell Mzolisa Jordan (1906 - 1968)

THE ORDER OF IKHAMANGA IN GOLD

AWARDED TO ARCHIBALD CAMPBELL MZOLISA JORDAN FOR EXCEPTIONAL CONTRIBUTIONS IN LITERATURE

Archibald Campbell Mzolisa Jordan was born on 30 October 1906 at the Mbokothwane mission station in the Tsolo district of Pondoland, the son of an Anglican minister. He was educated at St John's College in Umtata and Lovedale College at Alice. He was able to follow his dream of becoming a teacher when he won a scholarship to Fort Hare University College, where he obtained a Bachelor of Arts degree in 1934 – the start of an exceptional academic, political and literary career.

He taught for 10 years in Kroonstad, where he mastered Sesotho and was elected president of the African Teachers' Association. Some of his poetry was published in the Imvo Zabantsundu newspaper. In 1940, he started working on his only novel, Ingqumbo Yeminyana, a tragic epic about the conflict between Western-style education and traditional beliefs. This novel was to become a landmark in isiXhosa literature.

In 1945, having earlier obtained a Masters degree focusing on the Nguni and Sesotho groups, Jordan began teaching in the Department of African Languages at Fort Hare. In 1957, the year he achieved a Doctorate with a phonological and grammatical study of isiXhosa, he was appointed to a lecturer's post in African languages at the University of Cape Town.

There he evolved a new method of teaching isiXhosa to speakers of other languages and became an inspirational teacher of isiXhosa culture and language, as his students would later testify. But his tenure was brief. Like many others, Jordan became involved in opposition to the government's racial policies, and when he took up a Carnegie bursary for research work in the United States of America (USA), he was refused a passport.

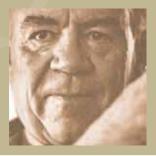
Jordan opted to leave South Africa on an exit permit and settled in the USA, where he was made a professor in African languages and literature at the University of California's Los Angeles campus, and later at the University of Wisconsin in Madison. There, after a long illness, he died in 1968.

Yet his voice continued to be heard long after his death. In 1972, his critical study of isiXhosa literature was published, and in 1973 a collection of short stories in isiXhosa was translated into English under the title Tales from Southern Africa. His great novel Ingqumbo Yeminyana was published in English as The Wrath of the Ancestors (1980), in Afrikaans as Die Toorn van die Voorvaders (1990) and in Dutch as De Wraak van het Voorgeslacht (1999). In 2004, 36 years after his death, the University of Port Elizabeth conferred a Doctorate in Literature on him.

In geographical terms Archibald Campbell Mzolisa Jordan travelled far afield during his time; spiritually, however, he remained a son of South Africa whose life was dedicated to examining and preserving the culture of the isiXhosa people, although never to the exclusion of his fellow citizens of other origins.

Nicolaas Petrus van Wyk Louw (1906 - 1970)

THE ORDER OF IKHAMANGA IN GOLD



AWARDED TO NICOLAAS PETRUS VAN WYK LOUW FOR EXCEPTIONAL CONTRIBUTION IN LITERATURE AND ADVOCACY OF LANGUAGE RIGHTS FOR THE AFRICAN LANGUAGES

Nicolaas Petrus Van Wyk Louw was born in Sutherland, on the western edge of the Great Karoo, on 11 June 1906. He was educated at the South African College School, Cape Town, and the University of Cape Town.

At 23, he became a lecturer in the university's Department of Education. In 1949, he was appointed professor of Afrikaans at the Gemeentelijke Universiteit in Amsterdam, returning in 1958 to head the Department of Afrikaans and Dutch at the University of the Witwatersrand, where he remained till his death in 1970.

During all this time, Louw produced one literary work after another, all resounding with his deep love for South Africa. His main proccupation was the survival and progress of Afrikaans, but at the same time he was not narrow in his vision; although right-wing in his earlier years, like many Afrikaners in the wake of the Anglo-Boer War and subsequent attempts at the suppression of Afrikaans culture and language. But he changed as South Africa changed around him.

He supported language rights for speakers of African languages, and his single most famous work, the epic poem Raka recounts a Black hero's desperate struggle against a nightmarish beast to save his people's heritage of language and art – a metaphor as powerful now, in the era of globalisation, as it was then.

At the same time, 'Wyk' as he was widely known, became a leading voice on matters of conscience in the Afrikaans intellectual community. As early as 1952 he was on record as issuing a remarkably percipient warning, in the light of later events, against any tendency for a nation to regard survival per se as more important than the survival of justice.

Later he criticised, sometimes indirectly and sometimes openly and vehemently, various aspects of the South African government's racial policies, and in 1966 was publicly attacked by the then Prime Minister, Dr Hendrik Verwoerd, for his prophetic stage play Die Pluimsaad Waai Vêr.

Van Wyk Louw is widely regarded as one of South Africa's foremost literary figures. His rich legacy includes five volumes of world-class poetry, stage plays such as Dias and Germanicus, and 12 volumes of essays. He won the prestigious Hertzog Prize an unprecedented five times, and his honorary degrees included a rarely-bestowed doctorate from the Rijksuniversiteit of Utrecht in the Netherlands.

Three decades after his death, the name of Nicolaas Petrus Van Wyk Louw – poet, dramatist, thinker and man of conscience – remains an honoured one in South Africa's literary and political annals.

Tebello Nyokong (1951 -

THE ORDER OF MAPUNGUBWE IN BRONZE

AWARDED TO TEBELLO NYOKONG FOR OUTSTANDING CONTRIBUTIONS IN THE FIELD OF SCIENCE



Tebello Nyokong was born in Lesotho on 20 October 1951, but spent most of her first eight years outside her country of birth. In primary school she spent alternate days tending sheep. Far from discouraging her, this increased her self-confidence because she concluded that she could do any-thing a boy could do.

In high school, she chose arts subjects, but just two years before her matric year she changed to the sciences. She managed to overhaul the backlog of work, developing an enduring love for chemistry as she worked. She received her Cambridge Overseas School Certificate in 1972.

In 1977, she graduated from the National University of Lesotho, having spent her spare time doing research on the role of chemistry in everyday African life, and obtained a Canadian International Development Agency Scholarship to undertake post-graduate studies. Four years later, she graduated with a Masters degree in Science, specialising in Chemistry, and after further study received a Doctorate from the University of Western Ontario in 1987. She then applied for, and was given, a Fulbright fellowship for post-doctoral study at the University of Notre Dame in the United States.

On her return from abroad, Nyokong taught briefly at the University of Lesotho before joining Rhodes University in 1992 as a lecturer. Impressed by the quality of her work, the Foundation for Research Development (now the National Research Foundation) soon provided her with a rating which allowed her to set up a research laboratory at the university. It was the start of a rapid climb to the positions of senior lecturer, associate professor and fully-fledged professor.

Nyokong is currently engaged in ground-breaking research on a new cancer diagnosis and treatment methodology called 'photo-dynamic therapy' which is intended as an alternative to chemotherapy.

The new therapy is based on using the dye which is used to colour blue denim clothing, and which is inert and harmless by itself but can be activated by exposure to a red laser beam. The system, which has been approved in some countries, reportedly does not destroy hair or healthy cells or cause nausea.

Nyokong's early work on the system so impressed the National Laser Centre that in 2002 it allocated her a long-term loan of equipment worth R3 million which was essential for her next research phase.

In addition to working on photo-dynamic therapy, Tebello Nyokong, the personification of the New African woman, continues to do outstanding work in training chemists, particularly women, in the sophisticated skills needed to keep South Africa at the cutting edge of scientific development.

Himladevi Soodyall (1963 -)

THE ORDER OF MAPUNGUBWE IN BRONZE



24

AWARDED TO HIMLADEVI SOODYALL FOR OUTSTANDING CONTRIBUTIONS IN THE FIELD OF SCIENCE

Himladevi Soodyall was born in Durban in 1963 and attended Gandhi-Desai High School. After matriculation, she enrolled at the University of Durban-Westville, obtaining both Bachelor and Honours degrees in Science before moving to Johannesburg in 1986 to register for a Masters degree in Science, specializing in biotechnology at the University of the Witwatersrand.

Soodyall joined the then South African Institute for Medical Research (SAIMR) in 1987 as a medical scientist, working with Professor Trevor Jenkins in the Department of Human Genetics. Under his guidance and supervision she completed her part-time doctoral research in the field of human population and evolutionary genetics, obtaining a doctorate in 1993.

She was awarded a Fogarty International Fellowship from the National Institutes of Health in the United States and spent the next four years at Penn State University, Pennsylvania. There she carried out post-doctoral research with Professor Mark Stoneking, one of the first researchers to advance the 'Out of Africa' hypothesis on human origins.

In 1996, Soodyall returned to the SAIMR and set up her own laboratory, conducting population and evolutionary genetics research within the Department of Human Genetics. In 1999, her work was recognised when she received the President's Award from the National Research Foundation (NRF) and the university's Vice-Chancellor's Award for Research.

In 2001, she was appointed director of the Human Genomic Diversity and Disease Research Unit, which the Medical Research Council had established in partnership with the University of Witwatersrand and the National Health Laboratory Service (NHLS), as the SAIMR is now called. She is currently a principal medical scientist at the NHLS as well as an associate professor at the University of Witwatersrand.

In her research, Soodyall employs the tools commonly used in molecular biology to study segments of the human genome in living people and to reconstruct the prehistory and evolution of modern humans. By using different types of DNA markers, her research has shown that living Khoi and San populations have retained some of the ancestral DNA signatures found in modern humans, making southern Africa the most likely geographic region of origin of the human species.

As a result of her work, Soodyall has been invited to participate in the global Genographic Project, a five-year project which was launched on 13 April 2005 by the National Geographic Society in partnership with IBM and the Waitt Family Foundation, as the principal investigator for sub-Saharan Africa.

In addition to her outstanding work on human origins, Himladevi Soodyall is tireless in her efforts to bring understanding about her research both to scholars and to the general public, works to advance research in South Africa and is actively involved in broadening public understanding of science.

Frank Reginald Nunes Nabarro (1916 -

THE ORDER OF MAPUNGUBWE IN SILVER

AWARDED TO FRANK REGINALD NUNES NABARRO FOR EXCELLENCE IN THE FIELD OF SCIENCE AND FOR INSPIRING ALL SOUTH AFRICANS



Frank Reginald Nunes Nabarro was born on 7 March 1916. In 1935, he obtained a first-class Honours degree in Mathematics from New College, Oxford University, followed by a first in Physics in 1937 and another first in Mathematics in 1938. At the University of Bristol, his work under Professor N F Mott, a future Nobel Laureate in Physics, earned him the Oxford Bachelor's Degree in Science (then equivalent to an MSc anywhere else). This would be followed by a Masters degree in 1945.

When World War II broke out, he was involved in the aerial defence of London and joined the Army Operational Research Group, headed by the eminent South African physicist, Brigadier B F J Schonland, later founding president of the Council for Scientific and Industrial Research (CSIR). His work on the explosive effects of shells resulted in him being made a member of the Order of the British Empire.

From 1945 to 1949, Nabarro was a research fellow at the University of Bristol and then became a lecturer in metallurgy at the University of Birmingham, for which the university awarded him a Doctorate in Science in 1953. In the same year he was invited to become professor of Physics and head of the Physics Department at the University of the Witwatersrand. Nabarro rebuilt the Physics Department into one of the strongest in the country and made it a leader in metallurgical research. His own research centred on 'creep' or gradual metal failure under an imposed stress, and crystal dislocations which resulted in the deformation of metals.

Nabarro served as Dean of Science from 1968 to1970 and was Deputy Vice-Chancellor from 1978 to 1980. He was responsible for drawing up what was probably the first academic plan at any South African university. It required the acceptance of the challenge of combining community service and academic excellence, and he predicted that by 2000 half of the university's student body would be Black. The prediction was widely derided, but became fact as early as 1997.

Nabarro's work – which includes some 160 research papers, two major books, the editorship of many works and visiting professorships at a number of renowned institutions of learning abroad – has earned him a number of honours. He is, for example, a Fellow of the Royal Society of London and a Foreign Associate of the United States National Academy of Engineering, the only one in Africa. He has received Honorary Doctorates from the Universities of the Witwatersrand, KwaZulu-Natal, Cape Town and Pretoria and has received several medals.

Frank Reginald Nunes Nabarro's most tangible direct legacy to South Africa, however, is found in the significant contributions to science and industry by many of his former students.

John Maxwell Coetzee (1940 -)

THE ORDER OF MAPUNGUBWE IN GOLD



AWARDED TO JOHN MAXWELL COETZEE FOR HIS EXCEPTIONAL CONTRIBUTION IN THE FIELD OF LITERATURE AND FOR PUTTING SOUTH AFRICA ON THE WORLD STAGE

John Maxwell Coetzee, born in Cape Town on 9 February 1940, has produced a large body of academic, biographical and literary comment and criticism, but is best known for his series of novels.

At the beginning of the 1960s, Coetzee worked in England as a computer programmer before studying literature at the University of Texas and then teaching literature and English at the State University of New York in Buffalo. Here he evolved his distinctive writing style: spare, cerebral and often enigmatic, with a recurring theme of the outsider who is at the mercy of events around him.

His fiction debut was Dusklands (1974), about a Vietnam War-era American civil servant who dreams of evolving an unbeatable system of psychological warfare, although his own life is disintegrating. This was followed in 1977 by Heart of the Country, an enigmatic Samuel Beckett-like monologue about a spinster on a remote South African farm who is revolted by her father's love affair with a young Coloured woman and comes up with a bizarre form of retaliation.

Both these novels elicited critical praise, but it was not until 1980 that Coetzee's first major international breakthrough came with his novel Waiting for the Barbarians, a story set in an outpost of an unnamed country ruled by a cruel regime, which was widely assumed to be a metaphor for South Africa (in 2005 the book was turned into a full-length opera with music by composer Philip Glass). His next novel, The Life and Times of Michael K (1983), won the prestigious Booker Prize. The book chronicled the struggles of a mentally retarded gardener (living in Cape Town on the brink of racial war) in trying to get his dying mother back to the farm where she was raised.

In 1984, Coetzee became professor of English Literature at the University of Cape Town, but his next novel did not appear till 1994, when he published The Master of Petersburg, in which the main character is the Russian writer Dostoevsky in disillusioned middle-age. In 1999, Coetzee made history by winning the Booker Prize for the second time with his novel Disgrace, about a discredited professor who is forced to face various post-Apartheid problems after his daughter is raped.

In 2002, the year Coetzee emigrated to Australia, he was awarded the Nobel Prize for Literature. In part, the Nobel Prize citation reads: 'Coetzee's interest is directed mainly at situations where the distinction between right and wrong, while crystal-clear, can be seen to serve no end. It is in exploring weakness and defeat that Coetzee captures the divine spark in man.'

Soon after becoming a Nobel laureate, Coetzee published another novel, Elizabeth Costello: Eight Lessons, an abstract book consisting of eight essays about a fictitious Australian writer and intellectual.

J.M Coetzee is an author whose fiction is not anchored in any particular era. He is unashamedly a thinker's writer. He has never made a deliberate bid for popular acclaim in either word or deed.

Aaron Klug (1926 -)

THE ORDER OF MAPUNGUBWE IN GOLD

AWARDED TO AARON KLUG FOR HIS EXCEPTIONAL CONTRIBUTION IN THE FIELD OF MEDICINE AND FOR PUTTING SOUTH AFRICA ON THE WORLD STAGE



He began to concentrate on Chemistry, and this led him to Physics and Mathematics. By the time Klug graduated with a Bachelors degree in Science, he had decided to carry out research in Physics, and obtained a scholarship from the University of Cape Town which enabled him to register for his Masters degree.

Klug stayed on to work on the X-ray analysis of small organic compounds, in the course of which he developed a method of using molecular structure factors for solving crystal structures, and became interested in the structure of matter.

In 1949, he enrolled at Trinity College, Cambridge, and obtained a Doctorate in Physics, then spent a year in the university's Colloid Science Department, working on the problem of simultaneous diffusion and chemical reaction. Klug's approach was to adapt techniques he had earlier developed to address the same problem in steel. He also demonstrated a technique which made use of computer simulations to analyse experimental kinetic curves.

This work had stirred Klug's interest in biological matter. Persuaded that his future lay in X-ray analysis of biological molecules, Klug obtained a Nuffield Fellowship to Birkbeck College in London.

This was the start of a long journey into various aspects of molecular biology and related subjects, such as the underlying principle of a method of three-dimensional image reconstruction in electron microscopy which later formed the basis of X-ray CT scanning. He also discovered the 'zinc finger' family of transcription factors, which is now widely used to regulate gene expression.

Various high honours have been bestowed on Klug. He was awarded the Nobel Prize in Chemistry in 1982, made a member of the exclusive Order of Merit and knighted in 1988. He is also the recipient of a number of academic honours. In 1995, he was elected President of the Royal Society, he is an Honorary Fellow of Peterhouse and Trinity Colleges, Cambridge, and a 'Foreign Associate' of the United States National Academy of Sciences and the French Academy of Sciences, and has received a number of Honorary degrees.

Aaron Klug's great achievements have evoked pride in his adopted country, where his life-journey to scientific renown commenced.

Sheikh Yusuf (1626 - 1699)

THE ORDER OF THE COMPANIONS OF O.R TAMBO IN GOLD

AWARDED TO SHEIKH YUSUF FOR EXCEPTIONAL CONTRIBUTION TO THE STRUGGLE AGAINST COLONIALISM

Sheikh Yusuf, also known as Abadin Tadia Tjoessoep, was born in 1626 in Goa in eastern India. A devout maternal nephew of King Biset of Goa, he spent years in Arabia studying under the tutelage of several pious teachers.

At the time, the area was in a state of turmoil as the Dutch and English East India Companies vied for control of the lucrative trade in spices and gold, sometimes with, and at other times against, the various local potentates. When Sheikh Yusuf left Jeddah in 1664 he was unable to return home because the Dutch had captured Macassar while he was in Arabia.

Instead he sailed to Banten in Western Java, where he was welcomed by the ruler, Sultan Ageng, who gave Sheikh Yusuf his daughter's hand in marriage and made him his chief religious judge and personal adviser. Sheikh Yusuf lived in Banten for 16 years, revered throughout the East Indies for his piety and wisdom, till Sultan Ageng's son, Pangeran Hajji, rose against his father in 1680, possibly at the urgings of the Dutch East India Company (DEIC).

Sultan Ageng rallied his forces and in 1683 besieged Pangeran Hajji in his fortress at Soerdesoeang. Pangeran Hajji asked for and received Dutch military aid. Sultan Ageng was defeated but managed to escape capture, along with an entourage of about 5 000, among them the 57-year-old Sheikh Yusuf, the Sultan's two sons, Purbaya and Kidul, and about 1 300 soldiers.

Sheikh Yusuf remained loyal to Sultan Ageng in the ensuing war, but was taken prisoner when the Sultan was defeated. Initially he was held at Ceylon, but was a man of such influence that it was decided to exile him to a place remote from the East Indies, the small outpost at the distant Cape.

In 1694, Sheikh Yusuf arrived at the Cape on the ship Voetboog, accompanied by 49 followers, wives and children. He was housed at the DEIC's expense on the farm Zandvliet, just outside Cape Town, to minimise any influence he might exert on the DEIC's slaves, who were mostly of East Indies origin.

The plan failed. Zandvliet became a place of pilgrimage for muslim people in the Cape. Here he died in 1699, but after more than three centuries his memory and his works live on.

The Muslim community to whom he provided guidance, faith and hope flourishes in South Africa today, his name is constantly evoked, and his tomb is the jewel in a ring of kramats, or shrines. The name 'Zandvliet' disappeared many years ago, when the area was renamed 'Macassar' in honour of Sheikh Yusuf's place of birth.

He was not only of noble birth but of unusual piety, a great warrior, a great prince and also a priest deep in the knowledge of holy things, the historian lan D Colvin wrote of Sheikh Yusuf almost a century ago. 'Let us hope that in his exile his faith consoled him for the outrages of fortune.'