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*Who's Who*  
*2007/8*

**National Science and Technology Forum**

the ***Who's Who***

of Science, Engineering, Technology and Innovation  
(SETI) in South Africa

Today's research... tomorrow's innovation



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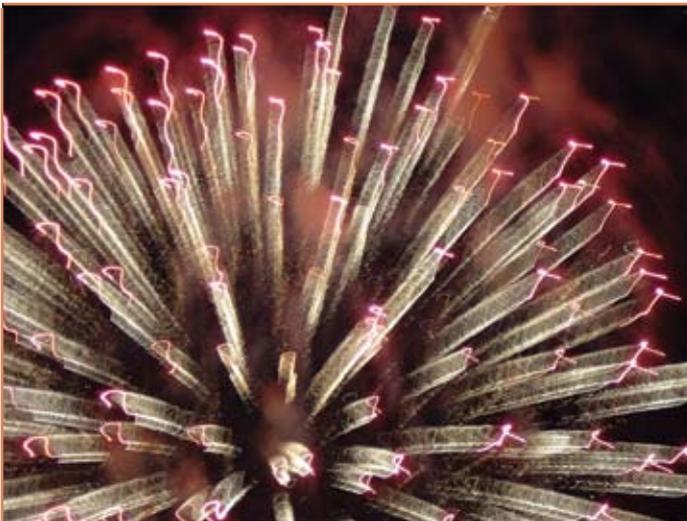
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# Contents

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1	Message from the Chairperson
2	Message from the Executive Director
3	Message from the Adjudicators
7	Purpose of the Awards
7	Categories
8	Criteria for Assessment of Nominations
10	The Adjudication Panel and Panel of Experts
11	The Finalists – Individuals
19	The Finalists – Innovation Teams
20	Achievers in Mathematics, Science and Technology Education
20	Past Winners



Photographer: Johan Cilliers  
Title: Fireworks in the night sky

## Message from the Chairperson



This year we are proud to be able to celebrate the 10th anniversary of the National Science and Technology Forum (NSTF) Awards. This is a celebration not only because we have reached the “double digits” but it is also a celebration in terms of the stature that these Awards have attained nationally. The NSTF Awards have now recognised Science, Engineering and Technology (SET) Excellence for a decade. In so doing, they have also served to highlight the accomplishments of our top achievers as well as to publicise the importance of scientific investigation and science education, nationally. As part of our 10th Anniversary, we invited all our past winners to this year’s Awards ceremony. You will see from the list of names that these truly represent a list of the “Who’s Who” in Science and Technology today, in South Africa.

While celebrating the first ten years of accomplishment of the NSTF, it is also apt to capture the opportunity to look ahead. The next decade holds some significant challenges both for the NSTF and the Science community in South Africa. We are able to celebrate the fact that our economy has grown tremendously in the last decade and there are few scientists in South Africa who would deny that support for Science in our country, post 1994, has ever been better. Yet we are also very aware of the fact that economic growth has exacerbated the skills shortages, especially in SET in our country. The NSTF Awards serve to celebrate excellence and to focus on our top achievers. We hope that this will help to promote appreciation of often unsung champions who are so essential to building the structure of our economy. In this regard, one might consider the fact that SET will most likely never arouse the passion associated with a soccer world cup, but that soccer stadiums could never be built without SET skills. Our newspapers are packed with features covering sporting icons. Yet we have to question who the bright young minds of our next generation would wish to emulate? The NSTF plays a special role in recognising and promoting role models in Science, Engineering and Technology and the awards ceremony is a component of this important goal.

While we celebrate the achievements of the SET community with our awards, it is important to recognise that the process leading to making these awards is complex and time consuming. Firstly, we must rely on the scientific community to nominate candidates to be considered for awards. This is perhaps the most important element of the process and we must continue to strongly encourage our community to participate. Thereafter, we enter the difficult task of selecting finalists and ultimately winners. Choosing these exceptional achievers has been no easier this year than it has in the past. In this regard, I must thank the adjudication committee who, under the vigilant eye of Mr Denis Hunt, have had the difficult task of selecting this year’s winners. Moreover, they have also had the responsibility to retain a high level of confidentiality and thus to keep us in suspense right up until the very last moment.

The Department of Science and Technology (DST) is one of the more important supporters of the NSTF and the NSTF Awards. We appreciate this support, which has been provided every year since the inception of the Awards event and especially the support that we have received this last year. In this regard, the Minister of Science and Technology, the Honourable, Mr Mosibudi Mangena is the official patron of the NSTF Awards and he has supported this process enthusiastically ever since his appointment. I thank him for agreeing to give the Keynote address at the dinner and presenting the Awards at this event.

I would also like to use the opportunity to recognise the superb services provided by our Executive Director, Ms Jansie Niehaus, Mrs Wilna Eksteen and the NSTF Secretariat. This remarkable team provides the “face” of the NSTF and, without their tireless efforts, this event could not come close to being the wonderful celebration that it is. This year we also have the pleasure of thanking the volunteers of the Youth into Science Programme, who have worked behind the scenes to make the event a success.

Holding an event such as this would not be possible without our sponsors. Many of them have been staunch supporters of the NSTF Awards ever since their inception. While I am sure they might gain far greater short term returns in supporting a major sporting event such as a soccer match, I am also equally convinced that their support of the NSTF is helping to promote SET and thus building the South African economy. My personal thanks, therefore, go to our sponsors for having the longer term vision to support us in this endeavour.

On the occasion of our tenth anniversary I take great pleasure in celebrating with all of our past winners and I equally congratulate the winners of the 2007/8 NSTF Awards.

A handwritten signature in black ink, appearing to read 'BD Wingfield', with a stylized flourish at the end.

**Prof BD Wingfield**  
Chairperson

# Message from the Executive Director



The tenth anniversary gives us cause to reflect on the unique role of the NSTF Awards. What is it that sets these awards apart from other awards processes and celebrations? What have these awards meant to the past recipients of the NSTF Awards? The Awards give recognition to excellence and exemplary efforts. The Award winners inspire others to follow, and attain greater heights. The extent of this is difficult to measure, and surely other awards processes have a similar effect.

The NSTF Awards were started as a joint initiative, uniting the 'Science and Technology community' in the effort to select and acknowledge worthy practitioners in the various fields of science, engineering and technology. The Awards have continued in that spirit for 10 years - furthermore a variety of organisations, sponsors and sectors being responsible for this annual event.

We think this is the strength and unique contribution of the NSTF Awards – it is a **community** effort. Every year we appeal to the Science, Engineering, Technology and Innovation (SETI) community at large to participate and support the Awards, and every year it is a collaborative effort that makes the event possible. This is our wish – that finalists and winners of the NSTF Awards will enjoy being recognised and celebrated by a community as diverse as the South African nation itself, and that outstanding effort is appreciated from a variety of perspectives.

Our sincere thanks go to the members of the adjudication panel, representing all sectors within the NSTF, who have reviewed the nominations to establish the finalists and winners, and to the members of the Review Panel of Experts. Thank you to the nominees and nominators, who made the substantial effort of submitting the necessary information for a nomination, and had the courage of their conviction to do so. Finally, a special thanks to our sponsors, listed elsewhere, without whose help this would not have been possible.

As usual, there are special guests of the NSTF at the Gala Dinner this year: girl learners, teachers and schools who have excelled in mathematics, science and technology. These include nine girl learners who have excelled in those subjects in the Grade 12 examination, a group of girls who performed well in various Olympiads and competitions, the three best educators in mathematics and science, and the best Dinaledi schools, identified by processes within the Department of Education.

A happy tenth anniversary celebration to all our Sponsors, Partners, Adjudicators, Nominees and Nominators and all NSTF member organisations, throughout the years!

A handwritten signature in black ink, written in a cursive style. The name 'Niehaus' is clearly legible, with a large, flowing 'N' at the beginning.

**Ms Jansie Niehaus**  
Executive Director, NSTF



## Message from the Adjudicators

The NSTF Awards for 2007/8, presented at a Gala Dinner on 27th May 2008, at Emperor's Palace, Gauteng in Kempton Park, represent the tenth year in succession that this high-profile event has been held. The event is supported by the Ministry of Science and Technology and other key stakeholders and the 71 previous winners of these awards are widely recognised as worthy recipients.

These awards are unique in South Africa, recognising the outstanding contributions of individuals and groups of individuals to SETI and therefore afford an opportunity for celebration among all practicing scientists, engineers and technologists across the system of innovation.

For these awards an on-line "Declaration of Intent to Nominate" was introduced, which closed on 12th November 2007. E-mail or hard-copy submissions of the full nominations were called for to be submitted by 8th February 2008. In response, 61 were received.

For these awards, categories D, E and F were revised this year to recognise and celebrate three individuals or teams who have developed innovations in South Africa based on research and development carried out in South Africa through either:

- a corporate organisation or institution (Category D), or
  - a Small, Medium and Micro Enterprise (SMME) (Category E), or
  - a non-governmental organisation / non-profit organisation (NGO/NPO) (Category F),
- that have made outstanding contributions to SETI.

We continue with the three categories dedicated to contributions by individuals (A, B and C), and Category G which specifically recognises research capacity development in science, engineering and technology. Categories H and J are awards for black scientists who are role models for others. We also continue with the new category introduced last year - Category K, which acknowledges communicators (including writers, editors and journalists) who make outstanding contributions to science, engineering and technology through communication.

The 2007/8 call for nominations attracted 33 nominations in categories A to F (some individuals in more than one category), 23 in the categories G, H and J, and 5 in category K.

An adjudication panel of independent judges representing all sectors within the NSTF, from Eskom and the NRF for categories G, H and J and from SAASTA for category K, reviewed the nominations to establish the finalists and winners. A panel of experts was appointed to assist the adjudication panel by reviewing and providing validation of the selections made.

It is only through the efforts of individuals, either on their own, or collectively in organisations and between organisations, that science and technology will flourish. The evidence of the contributions has to be looked for in the outputs, but it is not the outputs as such that are recognised by these awards – there are many other awards that recognise outputs. It is either the individual or the team that we recognise. We are therefore no longer making awards to organisations as such, but rather the people in them, and have continued to categorise the teams through the types of organisation they serve. In making the awards, particularly to individuals, the adjudication panel has to be sensitive to the probability that recognition is also due to the members of the supporting team and in choosing one, recognition is due to the other/s. An award to the other/s in another category would be a duplication and, as such, is avoided.

Where the panel considered that a nomination would be more appropriate in a category other than the one chosen, they considered them in that category. The periods of time to be considered for the different categories differ and when this was done, the information supplied may have been inadequate for a proper consideration to be made. However, where possible, due allowance was made for this. Where more than one category is selected by the nominator for their nominee, nominators should pay attention to the need to supply adequate detail or complete two motivations. A nominee is restricted to winning one award only in categories A to F and in G, H and J. In addition, awards are generally not made for contributions which duplicate those already recognised in past years.

The panel does not have the resources to seek out more information than is presented. Hence it is essential that we stress the importance of a properly completed and motivated nomination. It is difficult to give recognition to achievements that are not covered in the nomination which might be known to one or another member of the panel.

### Why the Criteria?

Our criteria for adjudication have provided the panel with a uniform framework for assessing nominations.

The wording of the criteria is sometimes better suited to hard science than it is to social science and some revisions might be considered. Some would even say that it is impossible to compare contributions from the different disciplines. We have undertaken to try to do this and our approach to reward outstanding contributions, from whichever sphere they come from, gives the NSTF a position in SETI which is powerfully unifying. Nevertheless it is a challenging task.

The reasoning behind the choice of the criteria therefore needs some re-emphasis and this is offered again without apology. Whilst in summary form they are common, we have expanded on the criteria in a unique way for the categories which are similar. These are set out in the 4 separate nomination forms designed for:

- categories A, B, C, H, and J;
- categories D, E and F;
- category G; and
- category K.

We wish, amongst other things, to encourage the sharing of and exploitation of knowledge. Research which remains locked up behind the doors of the laboratory or in notebooks or behind patents is of little benefit to society. Sharing needs to be in both the scientific and in the popular domain.

Society as a whole needs to benefit from research and the results must be exploited in a manner which is sustainable. Perhaps more effort should be expended on assessing whether some element of research output could be further developed than is evident. Perhaps some research managers should give more attention to the problems being encountered in the world outside the university and should try to determine areas in need of research and development from the user's perspective.

Benefits of research need to be quantified in monetary terms. We do not expect that scientists on their own can establish the economic benefits of their work. However in today's climate of competition for funds, scientists should endeavour to establish what benefits could arise and what they might be worth.

We expect all SET people to be actively engaged in the mentoring of others and therefore the student list is of vital importance to all nominations.

For universities and business establishments the rules are the same and whilst there obviously needs to be protection of patent and development rights, this should not be to the exclusion of societal demands.

In the innovation categories there is a tendency for nominators to focus on new work which is not yet proven or commercialised, whilst established work, which is proven and commercially successful and fulfils the criteria i.e. it represents a contribution to S&T, is unfortunately overlooked and not mentioned.

**Denis Hunt**  
Chair of the Panel

## Purpose of the Awards

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*To recognise and celebrate individuals and teams of individuals for their outstanding contributions to SETI.*

The National Science and Technology Forum (NSTF), through its annual awards events, recognises and celebrates both individuals and the teams of individuals who have developed innovations for the mobilisation of their knowledge through outstanding contributions to SETI, which promote sustainable economic growth for South Africa and improve the quality of life of its people.

In this context:

- Science refers to the systematic study of the nature and behaviour of the material and physical universe, defined, in the broadest sense, to encompass both the natural and human sciences;
- Engineering is considered as the practical application of this knowledge especially in industry and commerce but also in human scientific fields;
- Technology is seen as the tangible products of, and the means of conversion of, science to engineering and other applications; and
- Innovation is seen as the process of transforming an idea, generally through research and development into a new or improved product, process or approach which relates to the real needs of society and which involves scientific, technological, organisational or commercial activities.

The generic value chain which links these elements together has been given expression in the definition of our National System of Innovation and spans the stages of inputs, processes, outputs, impacts and outcomes. The SET value chain specifically includes:

- Research, development and creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of people, culture and society and the use of this stock of knowledge to devise new applications;
- Technology transfer activities associated with research and experimental development and contributing to the dissemination and application of scientific and technical knowledge; and
- Scientific and technical postgraduate education and training.

The **Purpose of the Awards in Categories D, E and F** was revised to focus on Innovations as being outputs of teams in organisations which have been successful in development of research and development carried out in South Africa. The three categories are meant to cater for all possible groupings.

The **Purpose of the Award in Category G**, Research Capacity Developers, is to recognise individuals based in South Africa, regardless of nationality, citizenship or gender who have, during their careers, demonstrated outstanding leadership, thereby increasing the participation of black researchers in their chosen scientific, engineering or technological fields. The awards recognise individuals who have either:

- trained and guided significant numbers of black post-graduate students to the completion of masters as well as doctoral studies; or
- impacted on the climate of a department or school to significantly increase the diversity of students completing both masters and doctoral studies at the school.

The **Purpose of the Award in Category K**, Science Communicator, introduced last year, is intended to encourage South African researchers, writers, educators and communicators (including journalists) to promote science and technology through conventional and/or innovative means, in order to:

- raise public awareness of Science and Technology issues;
- raise public awareness of how the quality of people's daily lives are affected by such issues;
- raise public awareness of the opportunities for getting involved in Science and Technology issues;
- raise public awareness of career opportunities in Science and Technology; and/or
- engage the public in Science and Technology in innovative ways.

# Categories

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## Categories A, B and C: Awards for Individuals

These awards are made to those three individuals who have made outstanding contributions to SETI in South Africa:

- Category A: Over a decade or more, described as a lifetime, in any field of activity including research and its outputs or through activities in areas other than research and its outputs in any sector or discipline of SET. It includes therefore all other contributions such as managerial, technical, commercial and financial activities that are often necessary for the successful development and diffusion of new or improved products, processes or services. In this regard the period may be either some portion of a lifetime or the entire lifetime and this needs to be defined in the nomination.
- Category B: Through research and its outputs over the last five years or less in any sector or discipline of SET.
- Category C: Through activities other than research and its outputs over the last five years or less. It includes therefore all other contributions such as managerial, technical, commercial and financial activities that are often necessary for the successful development and diffusion of new or improved products, processes or services.

*Note: Categories B and C, taken together, are meant to be comprehensive for the time period, and therefore any contribution to SET in the time period should fit into either one or the other.*

## Categories D, E, and F: Awards for Innovations

These three awards are made for an outstanding contribution to science, engineering and technology from either an individual or a team where it can be demonstrated that:

- either research carried out in South Africa has led to new science, which in turn has led to new engineering or medical or social concepts; or
- engineering or medical or social concepts which have been uniquely developed in South Africa; and
- have been applied and have led to successful innovation/s.

These may take on the form of either a project, or a product, or a range of products or a methodology or any other form of applied output completed in the recent past where for :

- Category D: The individual or team is part of a corporate organisation or institution (this includes large companies, science councils, universities, etc, unless the unit where the innovation has been developed can fit into E or F); or
- Category E: The individual or team is part of a SMME, operating as a business for profit, defined as having less than 50 employees or an annual turnover less than R30m over the last three years. A company wholly owned by a corporate, or a corporately-controlled company would not qualify under the SMME category; or
- Category F: The individual or team is part of a Non-Government Organisation (NGO) or Community Based Organisation (CBO). These could be associated with a corporate organisation or institution through funding or other inputs but must at least operate at arms length.

*Note: The coverage is meant to be comprehensive and therefore the individual or team should fit into one or other of the categories. Where the team embraces components in more than one category of organisation the dominant category should be chosen for the entry. It is recognised that activities in different sectors are often not comparable but due allowance is made for this in making assessments.*

## Category G: Awards for Research Capacity Developers

These awards, known as the [Eskom Research Capacity Development Awards](#), are made to those two individuals (a male and a female) in South Africa who have made outstanding contributions to the successful training and mentoring of black researchers/students in science, engineering and technology over the last five to ten years. The recipients of these awards each receive a research grant to cover research costs.

## Categories H and J: Awards to Black Researchers

These awards, known as the [TW Kambule NRF Research Awards](#), are made to those four black individuals in South Africa who have made outstanding contributions to science, engineering and technology and who represent role models for others to follow:

- Category H: These awards are made to senior black researchers (a male and a female separately) over the last five to ten years; and
- Category J: These awards are made to distinguished young black researchers normally under the age of 40 (a male and a female separately) over the last two to five years.

The recipients of these awards each receive a research grant to cover research.

## Category K: Award to Science and Technology Communicator

The award is open to anyone who has:

- had articles published in any South African print medium; and/or
- had insert broadcasts on any South African radio or television programme; and/or
- communicated Science and Technology regularly in other innovative ways (e.g. drama, cartoons, exhibitions, public lectures) during the past 5 years or less.

Entries may include communication on:

- life sciences; and/or
- physical sciences; and/or
- social sciences; and/or
- engineering sciences; and/or
- mathematics; as well as
- policy, health and environmental issues related to science and technology.

# Criteria for Assessment of Nominations

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The criteria for the selection of the award winners in **all categories** are summarised as:

- The contribution to the advancement of science/technological innovation/new knowledge generated as evidenced in:
  - the inputs to this contribution;
  - the research process; and
  - the outputs;
- The practical application/implementation;
- Commercial or economic impact;
- Relevance to South Africa and its people and resultant contribution to S&T policy;
- Promotion of public understanding of S&T;
- Promotion of education in this field as a contribution to the public understanding of SET;
- Social and economic sustainability; and
- National and international recognition.

The criteria are expanded and clarified in the applicable nomination forms which apply uniquely and separately to categories:

- A,B,C, H and J;
- D, E , and F;
- G; and
- K.

In assessing nominations in **Category G** the following factors are considered together with the achievements of the nominee measured against the above criteria:

- The number of black South African postgraduate students trained who completed their studies;
- Assistance to students to present and publish research work;
- Providing mentorship, support and the development of essential skills in the world of business and work; and
- Continued interest shown in the individuals' professional advancement.

The specific criteria for selection in **Category K** are set out in the comprehensive definition of the Category which can be found on the NSTF Awards website.

## Adjudication Panel and Review Panel of Experts

The 2007/8 adjudication panel comprised of the following:



Chief Adjudicator and Chairperson:  
Mr Denis Hunt (South African Chamber of  
Commerce and Industry)



Professional Bodies (Scientists):  
Prof Chrissie Rey, SASPP



Business Sector:  
Ms Karen Nel (Design Biologix)



Professional Bodies (Engineers):  
Prof Alex Visser (SAICE)



Education Sector:  
Prof Frikkie van Niekerk (University of  
North West)



Professional Bodies (Engineers):  
Alternative  
Prof Elsabe Kearsley (SAICE)



State Corporations Sector:  
Dr David Browne (Telkom)

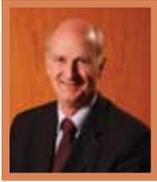


NGO and Civil Society Sector:  
Mr Chris Motupi (PROTEC)



Science Councils:  
Prof Benito Khotseng (University of the Free State)

Government Sector:  
Dr Velaphi Msimang (DST)



For Category G - Eskom:  
Mr John Gosling



For Categories H and J - NRF:  
Ms Rakeshnie Ramoutar



For Category K - SAASTA:  
Mrs Ina Roos

### Review Panel of Experts

Prof Wieland Gevers  
Dr G von Gruenewaldt  
Prof Belinda Bozzoli

Past winner and past Deputy Vice-Chancellor, University of Cape Town  
Formerly NRF  
Deputy Vice-Chancellor for Research, University of the Witwatersrand

# The Finalists: Individuals

The finalists in each of the categories are listed below together with a summary of the contribution.



**Prof Leonard J Barbour**

**SARChi Research Professor: Department of Chemistry and Polymer Science, University of Stellenbosch**

**Category B**

Hydrogen storage has been identified as one of the key enabling technologies for the widespread use of H<sub>2</sub> fuel cells in stationary, portable and mobile applications. The nature of H<sub>2</sub> makes it difficult to concentrate and it has a low energy density. Physical adsorption into nanoporous substrates has become the focus of research activity worldwide. For the past five years Prof Barbour has focused on the study of unconventional porosity of materials, with the objective of discovering materials which can store gas and particularly hydrogen. A team has been established at Stellenbosch University which is exploring the field of crystal engineering. The work on certain crystals being undertaken is unique. His outputs include unique software and instrumentation as well as new insights in the field.



**Dr Marthinus S Basson**

**Executive Director: BKS (Pty) Ltd, Pretoria**

**Category A**

Dr Basson's professional contribution to water resources management on behalf of governments and international agencies and others in South Africa and abroad over a period of more than 20 years has received substantial international recognition. It includes significant advances to the technology of water resource management, its widespread application, the sharing of technology and training, and key strategic contributions on a national, regional and continental level. Although a great deal of what he achieved was as an individual and advisor, he often found himself as leader of a team where he provided initiative, leadership and guidance. These contributions are particularly noteworthy having been achieved from a position in private practice.



**Prof Christian T Chimimba**

**Associate Professor: Department of Zoology and Entomology, University of Pretoria**

**Category H**

Prof Chimimba's research is mainly in biosystematics where he applies morphometric, DNA sequencing, cytogenetic and GIS techniques in order to focus on species of concern to medical, veterinary, agricultural, economic and nature conservation interests, particularly insofar as they impact on rural communities, but mainly on small mammals in South Africa. His work also focuses on the sub-Antarctic Southern Ocean islands. Prof Chimimba's overall research is centred around four major themes, namely: biosystematics; conservation biology; invasive species biology and management; and the potential influence of climate change on biodiversity and ecosystem functioning. His work is particularly directed at rodents where *ca* 50 species have been recorded in South Africa. These rodents, through periodic population eruptions, cause problems in the field and in human dwellings, both in the countryside and in cities and can cause enormous damage. His findings have sensitised the relevant authorities such as agricultural, health, municipalities, airports, harbour authorities and local communities to start formulating strategies, policies and screening processes among others in order to deal with these problems.



### Prof Charles de Koning

Professor: Department of Organic Chemistry, University of the Witwatersrand

Category B & G

In the period Prof de Koning has made significant contributions to the field of synthetic organic chemistry. Forty-three publications have emanated from his laboratories, many of these in high impact organic chemistry journals with more than 300 citations recorded. A focus has been on organic synthesis and in particular those having an aromatic or hetero-aromatic nucleus. Thirty-three MSc graduates and PhD graduates, including five black women and eight black men, have graduated under his supervision. He received the 2007 mid-career Nature Science Creative Mentorship Award for his mentoring abilities. In 2007 he was recognised by the NRF for the research he was doing at the interface of biology and chemistry and was awarded a five year grant to lead a team of researchers on the biological evaluation of synthesised compounds: a range of compounds of different structures has already been explored.



### Prof Pat G Eriksson

Professor and Head of Department: Department of Geology, University of Pretoria

Category A

Prof Eriksson established an international collaborative effort known as the Global Pre-Cambrian Sedimentation Syndicate (GPSS) which has interacted to study the evolution of the Pre-Cambrian Earth with special emphasis on basin analysis. The wide range of aspects covered has provided a powerful synergy in the exploration of the subject and valuable input to mining exploration. The outputs are principally in the form of published papers and communications to the mining industry. These have uniquely established inter alia that the principle of Uniformitarianism in Geology is applicable to the Pre-Cambrian sedimentary basin record, i.e. the same processes and products have occurred on Earth at different sites, but it is the rate at which processes occur and the rate at which products form which vary over geological time. The novelty of the work is in the number of different aspects of geology which have been examined. For example the plate tectonic paradigm has been examined in the case of sedimentary basins for the effects of climate change, sea level influence and the consequence of these on the sedimentary processes.



### Prof Daniel G Hattingh

Professor: Department of Mechanical Engineering, Nelson Mandela Metropolitan University (NMMU)

Category B

With the increased use of alloys, new materials and the need to weld different thicknesses, welding technique development has provided challenges to industry. Under the direction of Prof Hattingh the novel Friction Stir Welding process has been explored at NMMU. The two primary developers, in Plymouth and South Carolina, provided inputs to local experimental work and new techniques have been developed. A portable Friction Taper Stud Welding platform was developed and is now being applied to the welding of 9–10 CrMo plate. Through an allocation of eight days at the European Radiation Facility, Synchrotron, diffraction strain scanning has been used to determine the residual stresses in 5083 alloy and others so that the relationship between the characteristics of the components and their application could be established, in order to optimise the processes and further, to provide functional control measurements and parameters for the application. The local research team was invited to present a paper on their work at the International Institute of Welding. The technique is now better understood and can be more widely applied with significant applications on HP pipework for Eskom.



### Mr Mark Horan

GIS Programmer: School of Bioresources Engineering and Environmental Hydrology, University of KwaZulu-Natal (UKZN), Pietermaritzburg

Category K

Mr Horan has contributed to the pursuit and understanding of SET through his participation at festivals, shows, school gatherings, open days and university expos. He has a unique ability to engage with a wide variety of audiences on a range of SET topics and issues and has devised practical ways of illustrating complex scientific and technological concepts and ideas. He has been instrumental and passionate in promoting the College of Agriculture, Engineering & Science at UKZN in this way, masterminding many of their exhibits and models aimed at marketing SET programmes and careers. This work is conducted in addition to his day-to-day responsibilities in UKZN's School of Bioresources Engineering & Environmental Hydrology. His personality and drive to showcase science is infectious and he has been successful in encouraging many staff members to participate in SET events and learners and students alike.



### Dr K R Kemm

CEO: Stratek, Pretoria

Category K

Dr Kemm has been a prolific science and technology communicator for many years in both the spoken and written word. He has given speeches and presentations in a dozen countries and has regularly appeared on radio and TV in South Africa and overseas, promoting South African technology achievements. Furthermore he has over 1 000 published written articles to his credit. For a dozen years he has written a weekly newspaper column in Engineering News, which has accumulated a large readership domestically and internationally. He has also written a book on South African technology achievements. Dr Kemm produced three TV series on South African technology achievements, which were flighted on local TV.



### Prof Maryke T Labuschagne

Professor and Head of Plant Breeding: Department of Plant Sciences, University of the Free State (UoFS)

Category G

Plant breeding is a necessary skill to support agricultural development and a continuous stream of innovation is required. In the last five years, two black PhD and three black South African MSc students, and in the last 10 years 14 black PhD, 8 black MSc, 15 white MSc and 4 white PhD graduates completed their degrees under Prof Labuschagne's supervision. The research by the South African students has led to a firm research relationship between the Agricultural Research Council and the UoFS. The research by the local and international students has in the last 10 years led to 82 publications, and to the establishment of collaboration with universities and research institutes in Malawi, Kenya, Uganda and Tanzania. In particular, the genetic diversity research has led to collaboration with international research organisations and has generated overseas funding. Her unit is attracting black students from South Africa and Africa in increasing numbers and they are becoming part of the global scientific community through collaborative research, leading to better expertise in plant breeding and food security in South Africa and the continent.



Mr Rajesh Laloo

Research Group Leader, Bioprocess Development: CSIR Biosciences

Category C

Mr Laloo has led a Bioprocess Research Development competency area within the CSIR Biosciences Group for two-and-a-half years. The basket of projects undertaken represents different levels of technology complexity and implementation challenges which were important in establishing expertise in a skills scarce area and were also aligned to satisfy Black Economic Empowerment, SMME growth, job creation and environmental imperatives. Projects were secured through competitive processes including a mixture of private sector, Innovation Fund, BRIC, THRIP, DST, EU, Kellogg Foundation and CSIR funding streams. In these projects, the nominee's inputs, over and above research and development, span market opportunity analysis, new business development, opportunity creation, funding and sustainable business unit creation, techno-economic evaluation, project management and maintenance of systems to best current practice. Through his leadership, this competency has allowed for innovation and knowledge generation in bioprocess technology.



Ms Allyson Lawless

Chair SAICE Section 21 Company Board and MD: Allyson Lawless and Associates

Category C

During her year as the first woman President of the SAICE, Ms Lawless became acutely aware of the skills shortage in the civil engineering profession and undertook a project across the country, including interviews, questionnaires and workshops of and with students, graduates and other sources of input. This culminated in the publication of 'Numbers and Needs: Addressing Imbalances in the Civil Engineering Profession' and a second, similar analysis of the local government situation. These have changed perceptions regarding scarce skills in South Africa where for the first time the extent of the engineering skills shortage has been measured and published. The work is frequently quoted when the topic is addressed at the highest level. The interventions suggested in the books are being very successfully implemented, e.g. the ENERGYS project and the SAICE has itself established a section 21 company for this purpose. UNESCO has proposed that the work should serve as a model for studies in other African countries, as well as in certain first world countries.



Dr Virna D Leaner

Senior Lecturer, Medical Biochemistry: Faculty of Health Sciences, University of Cape Town

Category J

Dr Leaner's widely published research addresses the molecular biology underlying the development of cancer, in particular that of cervical cancer, one of the major diseases affecting women in South Africa. The main objective of her work is to characterise markers of cervical cancer and the role of transcriptional regulation in the development of the disease. Using cell culture model systems, she and others, have shown that extensive transcriptional changes occur in cells during the process of oncogenesis. It is these changes that are of interest as potential markers and therapeutic targets.



### Prof Amanda Lochner

Professor: Department of Biomedical Sciences, University of Stellenbosch

Category A

Prof Lochner's research, spanning a career at the University of Stellenbosch from 1964 to a current position on contract, has focused mainly on ischaemic heart disease, the incidence in South Africa of which is amongst the highest in the world. The main aims of her research have been: (i) identification of factors responsible for the development of cell death in myocardial ischaemia and reperfusion (ii) development of interventions aimed at protection of the ischaemic myocardium (including optimisation of protection during open-heart surgery) and (iii) elucidation of intracellular signalling pathways in myocardial ischaemia and reperfusion. Latterly her research has also focused on elucidating the phenomenon of ischaemic preconditioning (an intervention which markedly reduces infarct size), the cardiomyopathy of type 2 diabetes and the effects of obesity on the heart. Her group has recently received "Research Niche Area" status from the NRF, which is aimed at increasing the number of postgraduate students and in so doing, building the scientific community in South Africa.



### Prof Johann R E Lutjeharms

Professor: Department of Oceanography and Ocean Climatology, University of Cape Town

Category A

Over a lifetime of dedicated and innovative research, in both deep sea as well as coastal waters, Prof Lutjeharms has revolutionised our understanding and knowledge of all the surrounding oceans, i.e. from the Southern Ocean to the equatorial regions of the Indian and Atlantic Oceans and how they affect our weather and climate and has stimulated a growing national as well as international interest in the region. The effect of changes in the physical environment, including climate change and environmental degradation on the well-being of the South African people is being increasingly recognised and he has been able to provide decision makers with knowledge to inform their activities. He was one of the pioneers of the use of satellite remote sensing techniques in combination with in situ observations.

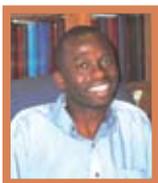


### Dr John Manning

Senior Specialist Scientist: Compton Herbarium, Kirstenbosch, SANBI

Category B

Dr Manning is involved in the SANBI programmes to meet South Africa's obligations under four international conventions. His work involves metrical analyses of patterns of variation across plant species using DNA sequencing and the application of phylogenetic analyses; extensive field studies of pollination and reproductive biology; techniques using light and electron microscopy; and studies of anatomy and cytology. He has played a pivotal role in documenting and describing the diversity of South Africa's flora, including the description of 30 new South African plant species and two new plant genera during the last five years and he has undertaken comprehensive studies and revisions of several plant genera with substantial publication output. Associated with this research has been the production of eight books including six wild flower identification guides much used by conservation practitioners, students and the public. His latest "Field Guide to the Fynbos" is, just months after publication, into its second printing.



### Prof Tshilidzi Marwala

Category G

Professor: Systems and Control Engineering, School of Electrical and Information Engineering, University of the Witwatersrand

Prof Marwala is involved in the development of a set of intelligent computer tools that are used to monitor bridges, buildings, as well as industrial processes and more recently in the medical field such as the detection of epilepsy. His work on modelling, based on probabilistic theory, has extended from stock markets using computational intelligence; and condition monitoring in mechanical and aerospace structures; to the formulation of ISO standards on condition monitoring; highway bridges in the USA; and railways in the UK. Recent applications of the techniques include the development of a computer tool to predict inter-state conflict. Prof Marwala's extensively published and cited work has attracted attention from numerous prestigious centres and numerous awards. Twenty-one black MSc and three black PhD students have graduated from his group, with one PhD student being current.

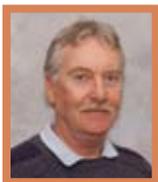


### Dr Odireleng M Ntwaeaborwa

Category J

Senior Lecturer: Department of Physics, University of the Free State

Dr Ntwaeaborwa is engaged in research on the synthesis and characterisation of luminescent nanomaterials (nanophosphors) by a sol-gel process with the principal objective of being able to produce nanoparticulate phosphors with high quantum efficiency and evaluating them for use in light emitting devices. He spent six months at the University of Florida in 2004 studying sol-gel synthesis and characterisation of nanophosphors with Prof PH Holloway. They were able to demonstrate increased photoluminescence quantum yield of trivalent Ce, Eu, and Tb by energy transfer from ZnO nanoparticles in the amorphous SiO<sub>2</sub> matrix. He then spent three months at the University of Pennsylvania (UPenn) in 2005 studying the chemical vapour deposition growth of carbon nanotubes with Prof AT Johnson. He visited Florida for the second time from 03 December 2007 - 28 February 2008 to study the synthesis of luminescent nanomaterials (ZnO doped with Mn<sup>2+</sup>) by thermal decomposition method.



### Prof Ron D Sanderson

Categories A & G

Head of Department: Department of Chemistry & Polymer Science, and Director: Institute of Polymer Science, University of Stellenbosch

For the past 30 years Prof Sanderson has shaped polymer science training and research in South Africa and in Africa. He leaves a legacy of student training at a level supported by UNESCO, with graduates sought after by South African companies and international institutions alike. Over the past 10 years his institute has produced 12 black MSc, two MTech and nine PhD graduates. In addition Prof Sanderson has promoted/co-promoted 84 MSc and 47 PhD students over his career, with 13 MSc and 16 PhD students currently under his guidance. Extensive publication and patents have resulted. Early successes by his research group included the preparation of glass fibre materials and the development of rocket propellants for defence purposes. Current focus in water treatment research is on low fouling membranes, infrasonic backpulsing and novel capillary membranes for conventional water treatment and desalination. Research has also been carried out on thin films or membrane coatings with practical outputs for the paint and paper industries. Research in the polyolefin area has led to the establishment of a new chair with valuable outputs in the petrochemical industry.



### Dr David Simelane

Categories H & J

Senior Researcher, Entomology: Weeds Research Division, Plant Protection Research Unit, ARC

Dr Simelane has made distinguished contributions to research on, and the development of safe and effective new agents for biological control of invasive alien plants. One of these outputs, the host-specific lantana herringbone leafminer fly, interferes strategically with transport of photosynthates, and suppresses growth and reproduction of the target weed, markedly and sustainably, in subtropical areas of South Africa, neighbouring countries and Australia. His intensive doctoral studies on a subterranean beetle recently culminated in the release of the first root attacker for lantana, which is expected to further mitigate the severe environmental damage caused by this weed, and improve the livelihood of commercial and small-scale farmers. He has also accepted requests, and is leading research on several additional target weeds, for a major client.



### Prof Dan J Stein

Category B

HoD: Department of Psychiatry, University of Cape Town and Director: MRC Research Unit on Anxiety and Stress Disorders, Parow

In South Africa, neuropsychiatric disorders account for the largest portion of our burden of disease after HIV/AIDS, and anxiety disorders (ads) are the most common of these. The mission of Dr Stein's unit and the focus of his research have been to investigate the psychobiology of ads in order to understand the causes and develop new treatments. The unit has focused on a number of themes, including developing animal models of ads, using brain imaging to delineate the neurocircuitry that underpins ads, investigating the gene variants that contribute to the etiology of ads, conducting randomised clinical trials and health systems research aimed at determining the prevalence of ads in South Africa, exploring the association of ads with HIV/AIDS, decreasing stigmatisation and facilitating earlier diagnosis and treatment of these conditions.



### Prof Hendrik C Swart

Category G

HoD: Department of Physics, University of the Free State (UoFS)

Prof Swart currently leads a research niche area at UoFS and participates in the IRDP (one of the NRF's capacity building programmes). His main research topics are the degradation of phosphors for field emission displays and the development of processes whereby various types of semiconductor nano-particles and thin films are synthesised and deposited to provide properties such as colour, luminescent intensity and life-time. Prof Swart is also involved in some industrial projects in collaboration with other institutions. Most of these projects are built around surface segregation and oxidation. He has made a substantial contribution to research capacity building through student training/supervision that is in line with equity and the redress requirements of the NRF IRDP programme, with a throughput in the period of three MSc and three PhD graduates. Another three PhDs are current.

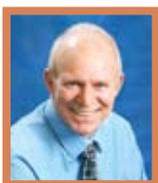


Dr Robert Tshikhudo

Senior Scientist: Mintek

Category J

In the nanoscience and nanotechnology field, Dr Tshikhudo has developed biocompatible gold and silver nanoparticles (known as monolayer protected clusters or MPCs) that address a number of problems often encountered in pharmaceutical and biological systems such as stability solubility. Nanoparticles were designed having versatile surface chemistry, and are useful tools for many applications. Importantly, he developed a generic platform allowing the attachment of biomolecular functionality of choice on nanoparticle shells where the attached biomolecules retain their biological activities. Robust, simple and cheap point-of-care diagnostic kits for the detection of malaria, TB, and other diseases are currently under development at Mintek using these nanoparticles, such that they can be used by an individual in the field without the need of a trained professional, and will serve as a first line screening test, in particular for rural areas.



Dr Anthony Turton

Strategic Leader: Water Resources, CSIR

Category C

Dr Turton has made a unique contribution to water research in Southern Africa where notably, under his leadership, a CSIR team developed the Trialogue Model for water governance. The model has been applied to trans-boundary river basin management, nationally and internationally and is being employed in the Western Basin in South Africa as a solution to acid mine drainage. He has spearheaded the process of the re-integration of the South African water sector into the community of global water professionals, taking the CSIR to the Board of Governors of the World Water Council and executive directorship of the International Water Resources Association. His research into trans-boundary issues is internationally cited. His high level of intellectual leadership has made him an internationally sought after speaker and consultant editorial board member, and educational activist.



Mr Chris van Blerk

Head Marketing and Communication: Faculty Veterinary Science, University of Pretoria (UP)

Category K

Chris van Blerk has contributed to the successful introduction of an awareness and marketing campaign for the Faculty of Veterinary Science of UP, emphasising its status, courses and training, research, facilities and community outreach projects, and in so doing, promoting the veterinary profession as a whole. With the assistance of an effective marketing mix strategy, every communication product was developed against the background of, and taking into account the country's prime transformation goals in the field of higher education to increase the participation rate of the student cohort in general, in science-orientated careers, and to increase access to higher education by members of previously disadvantaged communities. This was done through high-quality, visual and innovative communication products, accurate media coverage, the faculty's website and various other effective marketing tools.

## Finalists: Innovation Teams



### Cyanide Environmental Control Project: Cyanide Centre, Mintek (Mr Peter Lotz)

Category D

MINTEK's team of scientists and engineers, in collaboration with the gold mining industry, has developed a unique set of products and services to assist with risk minimisation in the use of cyanide. The knowledge generated during early phases of research was applied to produce on-line analysers, assist with compliance audits and discharge monitoring services based on accredited analysis. These services found acceptance and are applied throughout the gold mining industry of Africa and further afield. Whilst substantial amounts of revenue were generated for MINTEK (thus supporting the sustainability of further research and the business development), industry benefited from reduced reagent additions, minimised risk exposure and the improved ability to achieve compliance with the International Cyanide Management Code. The success encourages duplication of the development model into other areas of improved sustainability.



### electronic Water Quality Management System (eWQMS): eManti Management (Pty) Ltd, Stellenbosch

Category E

A unique, web-based electronic Water Quality Management System (eWQMS) has been developed by eManti Management Pty Ltd, which is being rolled-out via a successful public-private partnership with the Department of Water Affairs (DWA) and the Institute of Municipal Engineering of Southern Africa (IMESA) to all 170 local government water service authorities (WSAs). The system distributes a complete water quality management system over the internet. Web technology makes it possible to introduce and apply standards to water samples as they are uploaded to the system, allowing for decisions to be made immediately and water quality to be managed appropriately. The initiative has received sector-wide support evidenced by increased use of the tool. Some 90% of all WSAs load data monthly, compared with 60%, six months ago. Use of eWQMS has been clearly demonstrated to both enable municipalities to more effectively and efficiently manage drinking water services, and to provide strategic data and information to water services sector parties including DWA, SALGA, the Department of Health and the public.



### Fablabs Project Programme: Fablab, Innovation Hub, Pretoria (Lindi Mophuti)

Category F

Fablabs is a "technology for the community" concept developed at MIT in the USA which brings advanced manufacturing technology platforms to ordinary people, empowering them by providing opportunities to participate in an environment that enables the freedom to experiment, with the added benefit of peer-to-peer learning. The platforms (now expanded to seven across the country) also provide the means to stimulate creativity and innovative problem solving, thus fostering techno-preneurship. Various upliftment projects have included: development of a windmill for generating electricity; the manufacture of press-fit furniture; casting of various shapes; building your own calculator; outreach programmes to previously disadvantaged schools; teaching children about engineering; equipping teachers with teaching aids manufactured in the FabLab.; Fabkids project; and a wave generator for electricity. The success of the FabLab is evident in that technology is harnessed to empower people economically as well as intellectually.



FARMOVS - PAREXEL Team: Chemistry Department,  
University of the Free State (UoFS) (Prof van der Westhuizen)

Category D

The team of scientists at the Department of Chemistry, UoFS, in partnership with a team at the laboratories of the company FARMOVS – PAREXEL, have undertaken the synthesis of isotope labelled internal standards and metabolites in the support of novel bio-analytical clinical trials for the registration of new medicines locally and internationally. The internal standards are required in order to calibrate the analytical methods. The availability of sophisticated and rare pharmaceuticals and the ability to synthesise these is necessary to expand the pharmaceutical industry in South Africa. Some 18 standards have been produced for the manufacture and certification of analyses for 17 new products. Ten further standards are in the process of development. A particular focus has been the exploration of indigenous medicinal plants which has been funded by the EU and carried out in collaboration with nature conservation in neighbouring countries. A unique feature has been the output of students: Five Masters degrees have been completed; seven are in progress; and six PhDs have commenced.



Research and Education Programme:  
Forestry and Agricultural Biotechnology Institute (FABI),  
University of Pretoria

Category D

The team of FABI, now one of the leading plant biotechnology groups in South Africa, having been established for 10 years and, through its mobilisation of knowledge and training of human capacity, has contributed to 19 major research programmes directed at the forestry and agricultural industries. It has award-winning accomplishments in post-graduate training and is continuously making substantial contributions to building and supporting the forestry and agricultural sectors in South Africa through world-class research providing practical science-based solutions. Some of the major innovations include: a project to reduce the impact of a new pine-killing wasp; an innovation to improve pulping through the discovery of novel genes in trees; diagnostic tools for pathogens such as the fungus which causes pitch canker; screening protocols for tree pathogens now used routinely; the refinement of biological control products e.g. for the bronze bug; injection of fungal pathogens; and the identification of resistant trees. Equally importantly, FABI has become a major source of professionals. The team comprises some 17 academic members, 34 technical staff with over 100 postgraduate students from South Africa and abroad. Some 61 PhD graduates and 104 MSc graduates have qualified through the Institute.



Technology Research Activity Centre Programme of SET  
Education Support, (TRAC): Department of Civil Engineering,  
University of Stellenbosch

Category F

TRAC South Africa is a national, non-profit programme, the objective of which is to support physical science, mathematics, and technology education in South African secondary schools. The TRAC Programme seeks to enable and encourage learners to enter into careers in science, engineering, and technology. TRAC is also involved in education intervention programmes, where the main aim is to uplift the standard of physical science education in South Africa. This is done with teacher training programmes, vocational guidance assistance, as well as classroom intervention in schools where the resources are limited or lacking. The TRAC emblem has become a familiar hallmark in the endeavour to improve what is being done to enhance science and mathematics amongst school learners, especially in the rural areas. In 2006, in excess of 68 000 learners were exposed to the TRAC programme, whereas during 2007, 109 000 learners were exposed to the programme and 2 831 teachers were trained by TRAC.

# Achievers in Mathematics, Science and Technology Education

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The attendance of these top performers at the NSTF Awards event is sponsored by BHP Billiton and the Department of Education.

## **The top performing schools in Mathematics and Science in South Africa, as identified by the Department of Education:**

Bankuna High School  
Eunice High School  
Grey Boys' High  
Grey College  
Hoërskool Diamantveld  
Hoërskool Middelburg  
Jeppe High School for Girls  
Letsatsing High  
Makgetse High School  
Mbilwi High  
Paul Roos Gymnasium  
Pietermaritzburg Girls' High  
Pinetown Girls  
Thengwe High School  
Waterkloof High  
Westville Girls' High

## **National winners of the Aggrey Klaaste Mathematics, Science and Technology Educator of the Year Awards:**

Retired Educator – Mr Johan Posthumus  
GET Educator – Ms Thanjamah Pillay  
FET Educator – Mr Paul Phillip Wilton

## **Top female matriculants in each province, who obtained the highest marks in Mathematics and Science, as identified by the Department of Education:**

Mcizana Thandokazi – Eastern Cape  
Lorato Bontle Yvonne Tau – Free State  
Amanda Zibuyile Mdakane – Mpumalanga  
Hilda Asante – North West

Tshimangadzo Rakhuu – Limpopo  
Nomnyaka Thandeka Pearl James – Northern Cape  
Londeko Mmatsepo Nxumalo – KwaZulu-Natal  
Ashlee Lorette de Klerk – Western Cape  
Nthabiseng Dinah Moche – Gauteng

### **Girls who have excelled or shown outstanding promise in a variety of SET competitions:**

Mathematics Olympiad – Kylie Fenner  
National Natural and Life Sciences Olympiad – Annamaria Kolatsis  
National Natural and Life Sciences Olympiad – Cara Govender  
National Science Olympiad – Physical Science – Holly Anna Bird  
National Science Olympiad – Biology – Keren Turton  
Technology Olympiad – Thembelihle Charmaine Mabaso  
Technology Olympiad – Nelisiwe Gladys Shezi  
Computer Olympiad – Ingrid Gael Salisbury  
Eskom Expo for Young Scientists – Mamokone Mirriam Lelimo  
Minquiz™ – Carmien Tolmie

## 2006: Thirteen Awards

### **The Individual winners:**

- Category A - Prof Douglas Butterworth
- Category B - Prof Tshilidzi Marwala
- Category C - Dr Paul Bartels
- Category G - Prof Sunil D Maharaj (Male winner)  
Prof Annemarie Hattingh (Female winner)
- Category H - Prof Pragasen Pillay (Male winner)  
Dr Saloshna Candeyar (Female winner)
- Category J - Prof Thokozani Majozzi (Male winner)  
Dr Heidi Segal (Female winner)
- Category K - Dr George N Classen

### **The Organisational winners:**

- Category D - Winetech
- Category E - Hazleton Pumps
- Category F - Paraffin Safety Association

## 2005: Eleven Awards

### **The Individual winners:**

- Category A - Prof Timothy D Noakes
- Category B - Prof Gideon P Greyvenstein
- Category C - Dr Khotso Mokhele
- Category G - Prof Candy Lang (Female winner)  
Prof Neil Coville (Male winner)
- Category H - Prof Phuti E Ngoepe (Male winner)
- Category J - Dr Tania S Douglas (Female winner)  
Prof Deresh Ramjugernath (Male winner)

### **The Organisational winners:**

- Category D - CYFSD
- Category E - Cerdak (Pty) Ltd
- Category F - Mindset Network

## 2004: Thirteen Awards

### **The Individual winners:**

- Category A - Prof George F R Ellis
- Category B - Prof Paul van Helden

- Category C - Dr Steve J Lennon
- Category G - Prof Priscilla Reddy (Female winner)  
Prof Jonathan D Jansen (Male winner)
- Category H - Dr Olive Shisana (Female winner)  
Dr Giovanni Hearne (Male winner)
- Category J - Dr Debra Meyer (Female winner)  
Prof Vikash Sewram (Male winner)

**The Organisational winners:**

- Category D - Kirstenbosch Research Centre, KUMBA Resources Research and Development (joint winners)
- Category E - Groupline Technical Ceramic Pty (Ltd)
- Category F - Agribusiness for Sustainable Natural African Plant Products

## 2003: Twelve Awards

**The Individual winners:**

- Category A - Professor Wieland Gevers
- Category B - Dr Debbie Glencross
- Category C - Mr John W Gosling
- Category G - Professor Coleen Moloney (Female winner)  
Professor Krish Bharuth-Ram (Male winner)
- Category H - Professor Anusuya Chinsamy-Turan (Female winner)  
Professor Mohamed Iqbal Parker (Male winner)
- Category J - Dr Mamokgethi Setati (Female winner)  
Professor Tshilidzi Marwala (Male winner)

**The Organisational winners:**

- Category D - Centre for Augmentative and Alternative Communication
- Category E - BreatheTex Corporation (Pty) Ltd
- Category F - SASOL SciFest

## 2002: Six Awards

**The Individual winners:**

- Category A - Dr Kelvin Kemm
- Category B - Prof Sarah Howie
- Category C - Prof Peter Clayton

**The Organisational winners:**

- Category F - Africabio
- Category E - Röth Medical Components
- Category D - ARC Exotic Diseases Division, Onderstepoort Veterinary Institute

## 2001: Six Awards

### **The Individual winners:**

- Category A - Prof MN Bruton
- Category B - Profs C Vaughan and G de Jager
- Category C - Dr Janice Limson

### **The Organisational winners:**

- Category D - The Weeds Research Division, ARC
- Category E - Sunspace
- Category F - Unizul Science Centre

## 2000: Five Awards

### **The Individual winners:**

- Category A - Prof JF Sellschop
- Category B - Dr Michel Albers
- Category C - Ms Sadi Motsuenyane

### **The Organisational winners:**

- Category F - PROTEC
- Category D - SASTECH

## 1999: Three Awards

### **The Individual winner:**

Mr Derek Fish (University of Zululand Science Centre)

### **The Organisational winners:**

CSIR  
Expo for Young Scientists

## 1998: Two Awards

### **The Individual winner:**

Prof Mike Wingfield (FABI, University of Pretoria)

### **The Organisational winner:**

Radmaste Centre under Prof John Bradley



CD available on request from the NSTF Secretariat