



## <<< Are you Engineering Active? >>>

**AS ENGINEERS** we are surrounded by talk of the shortage of engineering skills, lack of interest by the school leavers to enter the world of engineering and of course rapid changes in technology, to present a challenge to those who made the choice.

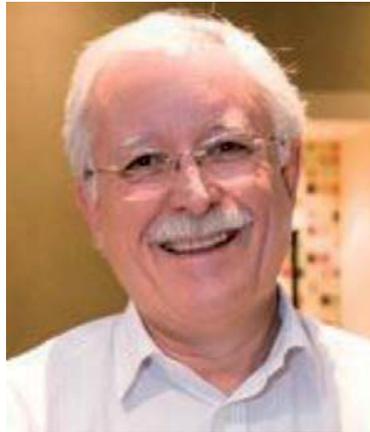
While the clever people solve the shortage problem, we need to do our bit as engineers to be both efficient in our daily tasks as well as being a team player and ambassador for engineering. This will not only make you a sought after resource, but also create an environment that potential engineers start wanting to associate with.

To achieve this level of excellence you need to be part of a network of like-minded people. If you are lucky enough to work in an environment where you are part of an electrical team then the sharing of knowledge and the team effect should be good. In most cases however the Electrical Engineer is working as a single entity in an organisation, or is a one man consultancy.

A good friend of mine started his consultancy about 20 years ago after being in a big electrical engineering department of a company. After a month he came round to visit and declared that he had made a big mistake. In that first instance there was no one to talk to at tea time, and secondly there were no fellow engineers to share knowledge and experiences. He felt that he had stopped growing as an engineer.

This problem is bigger now than ever. The consulting electrical industry has fragmented into smaller groups, Transnet typically used to have an electrical division with a chief electrical engineer. This is now changed as in many environments, to engineers being part of profit centres without a dedicated electrical engineering team.

It must feel like a rugby player having to train and play with a soccer team. When he gets the ball he is allowed to play like a rugby player until he passes it to another player. The end result is that he does not grow as a rugby player.



Mr Rob Anderson is the author of this article. He is a SAIEE KZN Centre Committee Member and in charge of the Marketing and Communication Portfolio.

I was lucky to grow up in a family of four generations of engineers. Engineering was discussed over dinner and on many occasions I was dragged to a new substation or cable laying project to see progress. It was easy to join an Electrical Engineering team.

So how does the modern electrical engineer ensure he is a team player and ambassador? If we don't the profession will lose its stature and we will be the loser as individuals.

For me it seems obvious, you have to join the SAIEE and become an Active Engineer in the Institute. This does not mean you have to spend your time on committees; it would be good if you did, give us a call, however:

### SAIEE President's Address

In his address (Durban and Pietermaritzburg on 12 and 13 June), Paul van Niekerk stated that the objectives of the SAIEE are to assist government with Electrical Engineering issues, and to further the objectives of Electrical Engineering, and more specifically to support and encourage Electrical Engineers.

Following last year's theme of **Energy Efficiency**, this year's theme will be **'Independent Power Production and infrastructure development.'**

He is pictured here addressing delegates at the eThekweni Electricity Springfield Training Facility.

### As an Active Engineer you need to:

- \* Make sure you are registered with ECSA
- \* Join the SAIEE; it will reduce your ECSA fees.
- \* Attend talks and get CPD points at the same time.
- \* Attend CPD courses, and learn.
- \* Meet the other members and get their contact details.
- \* Read the monthly newsletter.
- \* Send information and articles to the secretary for publication.
- \* And then if you are really Engineering Active you will be part of a big team of like-minded people. It is really useful when you require technical help, a new job or someone to bounce an idea off.
- \* You have the network of Engineers at your disposal.

As a fellow Electrical Engineer I have to implore you to become *Engineering Active* and prove to the community at large that we are an important profession. You will reap the benefits.

### KZN SAIEE Centre newsletter

**THIS IS YOUR NEWSLETTER** and we invite you to make suggestions and submit items of interest and photographs.

Advertising is welcomed and we are considering a "vacancy" column where, at a nominal fee, companies may invite candidates to respond to jobs available.

**For advertising opportunities contact Gill Nortier at [saiee@iafrica.com](mailto:saiee@iafrica.com)**



(Full report and pictures on page 3)



# SAIEE 2013 Proposed Programme KZN CENTRE

Date	Presentation / Tutorial / Visit
July	
18/07/13	<b>Chairman's Invitational Lecture:</b> What's all this hype about a standard in Asset Management and what does it mean in South Africa? by Dean Griffin
August	
15/08/13	<b>Presentation:</b> 3D modeling, segmentation, quantification and visualization of cardiac MRI by Yarish Brijmoham
September	
? /09/13	<b>2013 Bernard Price Memorial Lecture</b> - Durban Presentation: *date & title to be confirmed
? /09/13	<b>2013 Bernard Price Memorial Lecture</b> – Pietermaritzburg Presentation: *date & title to be confirmed
October	
17/10/13	<b>Presentation:</b> Introduction to Fibre Optic Communication by Subhash Jagannath
? /10/13	<b>CPD Course:</b> *date & title to be confirmed
November	
? /11/13	<b>CPD Course:</b> *date & title to be confirmed
21/11/13	<b>Breakfast Presentation:</b> *title to be confirmed

## Rob Anderson Profile



**ROB** is a Professional Electrical Engineer with many years experience in the consulting industry.

Starting with his Higher National Diploma in Heavy Current Engineering, he spent nine years with Murray and Roberts, a contractor on major projects in the Petroleum and Paper Industry. Here he gained experience before moving to the Consulting Engineering field in 1983.

He spent time with CA du Toit and Partners where one of his particularly interesting projects was the refurbishment in 1985 of the Natal Playhouse.

In 1987 Rob obtained his Pr. Tech. Eng. Qualification.

As head of the Electrical Division at Keeve Steyn (now Goba Hatch), a highlight of this time was the electrical design component for the Inanda Pump Station for Umgeni Water. Rob left to start his own consulting practice in 1997.

He obtained his Pr. Eng. Qualification in 2000.

Rob has kept his association with the Civil Engineers, providing valuable electrical input to a variety of projects.

He has also developed his interest in applying good engineering principles, design, installation and management, to the Security Industry. This is an ongoing project of his and has resulted in many interesting opportunities, one being the 2010 World Cup security and people counting system, which was then extended to the COP 17 bicycle management system.

Over the last 11 years Rob has led a number of security industry projects in secure estate/national key point environments and public open space.

It has also led to some interesting international opportunities.

Rob's experience has also included the presentation of a course on measuring electrical quantities for the architecture students at UKZN.

He is a moderator for the Electrical Machines 2 and 3 courses at the DUT which enables him to keep in touch with the education of future engineers.

An ongoing and varied career with many interests which Rob continues to develop as he identifies the next challenge.

### SAIEE KZN Centre

## Chairman's Invitational Lecture



Dean Griffin

“What's all this hype about a standard in Asset Management and what does it mean in South Africa”?

by Dean Griffin  
(PRAGMA)

**18th JULY, 2013**

**Springfield Training Centre from 17h30**

## SYNOPSIS OF ADDRESS BY 2013 SAIEE PRESIDENT, PAUL VAN NIEKERK:

# Independent Power Production and Infrastructure Development

**THE STATED OBJECTIVES** of the SAIEE are to assist the South African Government with issues related to Electrical Engineering, and in particular to further the objectives of Electrical Engineering, and more specifically to support and encourage Electrical Engineers.

The SAIEE Presidential theme for the year 2013/14 is to be on Independent Power Production in South Africa and the issues related to 'grid Connection'. Following on from last year's theme of energy efficiency, the next step is power production; hence the 2013 theme which will be "Independent Power Production and infrastructure development."

There is a strong focus on infrastructure development and the consequential increase on demand for energy. "For the year 2012 and beyond, we invite the nation to join government in a massive infrastructure development drive. We are going to launch a huge campaign of building infrastructure nationwide. This will boost the level of economy and create job opportunities", so said President Jacob Zuma in his State of the Nation Address on 9 February 2012.

Can Eskom as a vertically integrated National Power generation authority meet the power requirements envisaged in the National Infrastructure plan? Based on the new build programme, Eskom have submitted a request to NERSA to increase tariffs by 16% per annum for the next five years. If

this application is approved, it will make South Africa one of the most expensive investment destinations in the world. How will that affect the infrastructure development plans? What are the alternatives?

This paper will examine the need for independent power production, IPP's, and will cover the various issues and constraints related to Independent Power Generation ranging from Legal and Statutory constraints, such as the ISMO Bill, the second amendment to the national Regulatory Act through to Grid Connection requirements, for independent power producers and compliance with the Grid Code.

But primarily, what is the role of the SAIEE in this regard and what should the SAIEE be doing to assist with this National problem of meeting the demand for Electricity and to contribute maximally to the Govern-

ment's initiative to invest in infrastructure of all kinds, to achieve the vision and objectives of socio-economic development referred to above.

As engineering practitioners, we are essentially problem solvers, that is, we are concerned with transforming a situation from an initial state to a desired state via a solution path. The solution should be pragmatic and cost effective and most of all strategic.

What should the SAIEE be doing with respect to training, mentoring and professionalization of Engineers and Technologists and to prepare them for this challenge in the future?

**The SAIEE President's Address was repeated for the benefit of the SAIEE KZN Membership in both Pietermaritzburg and Durban on 12 and 13 June**



Photos taken at SAIEE President's Address on 13 June  
Janet Gillespie (SAIEE KZN Centre Past Chairman), Paul van Niekerk (SAIEE President)



Anthony Dold (SAIEE KZN Centre Past Chairman), Roy Wienand (SAIEE KZN Centre Past Chairman),  
Chris Ramble (SAIEE KZN Centre Past Chairman), TC Madikane (SAIEE KZN Centre Immediate Past Chairman),  
Janet Gillespie (SAIEE KZN Centre Past Chairman), Paul van Niekerk (SAIEE President), Pierre Ballot (SAIEE Past President)  
Veer Ramnarain (SAIEE KZN Centre Chairman)



# ULTIMATE GROUP



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Un-interrupted power supplies

**Are you dealing with the right people?**

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