

Technologists Keep The World Working.

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1. Notes and Pictures of the Awards Function held 30 November 2018.



The Past IPET President Mr RJ Molisane (left) introducing the newly elected President Mr WCC Mynhardt (right).



President Mr WCC Mynhardt, Past President Mr RJ Molosane, Vice President Mr M Engels. (Left to right).



The Treasurer and awards organizer, Mr JJ de Koker, addressing winners.



IPET President, Mr C Mynhardt, and the winners of the IPET Awards.

Front Row:

L-R: Mr. HG Wilmot (Durban University of Technology); Ms W Nazier (Cape Peninsula University of Technology); Mr. J Wium (Central University of Technology); Mr. WCC Mynhardt (President of IPET); Mr. SD Cesar (Highest overall achiever of BTECH (Male)); Ms Em Nel (Tshwane University of Technology)

Back Row:

l-R: Ms. S Mukuchiva (Nelson Mandela University); Ms. A Sigonya (Highest overall achiever of BTECH (Female)); Mr. LR Gama (University of Johannesburg); Mr. W Buys (Tshwane University of Technology); Mr. FK Baakeel (Nelson Mandela University); Mr. GD Roos (University of South Africa)

2. Good to Know.

#. *Services Offered By Members.*

(Free ad for members)

Please visit our Website

<http://engineersdirectory.co.za/>

For all details.

Wherever possible support your fellow members!

#. **IPET Has a New Public Relations Officer (PRO).**

Mr Johan J de Koker has been tasked to be the new PRO.

He will endeavour to get various projects going in the coming months.

You can expect to see various things happening in the next few months.

We wish him well in this time consuming task.

*Every engineer does not have to invent his own wheel
he needs to put shoulder to the wheel and keep it rolling*

#. **South African Forum for Engineering.**

IPET is a member of SAFE. This Forum is a non-profit voluntary, non-statutory Engineering body with a membership consisting of Voluntary Associations, Learned Societies, Academic Institutions and Industry Associations. It should be noted that no other such non-statutory body exists representing the engineering disciplines, and that the interests of all parties are not effectively represented by any statutory body which will inherently be in a position of conflicting interests when dealing with any matters, which from time to time may be deemed to be contentious between the private and public sectors as they relate to the Engineering Profession.

Some 17 Voluntary Engineering Associations have been meeting over the past year and have signed a Memorandum of Understanding in order to collaborate on common issues.

The South African Schools Initiative

IPET supports the South African Schools Initiative - Khan Academy

The link to the presentation on the Khan Academy is below

<https://youtu.be/nTFEUsudhfs>

3. **CPD News.**



Members at the CPD Course.

IPET was pleased to announce that the first free CPD with a payment of only R200 per head to cover catering was presented on the 8th Nov 2018 at the Hilti Building in Midrand. The course titled Concrete Anchor Design Principles earned attendees One category A CPD credit. (Course SAICEcon-16/01952/19).

Member's attention is drawn to the September Newsletter which gives a useful interim report on CPD course providers. See website www.ipet.co.za.

4. **Adverts of interest to members.**

The Mechanical Designer's Handbook for Projects in South Africa 1st Edition

Price (including delivery in the RSA) R675

Order directly from Author:

Email: vdmtek@gmail.com

Mobile: 082 775 9274

Phone: 018 468 1804

Author	A.J. van der Merwe (Pr Tech Eng)
Format	Book – A4 Paperback / Softback
Publisher	A.J. van der Merwe
Printing and binding	DTP 2 Print & digital Finishing Centre
Editor	C.W.R. Oertel
Edition	1 st
Date of Publishing	1 May 2018
Pages	195
Language	English

This handbook is specifically written for technologists, designers and drafting technicians in the engineering project environment in Southern Africa. It is also a useful reference to students in mechanical and structural engineering.

The text introduces the reader to design office management, layout drawings from flow sheets and P&IDs, the understanding of survey drawings, basic structural design of steelwork to SANS 10162, machine design, belt conveyor design to international standard ISO 5048 and fluid design, including pump selection. Fifty two step by step examples simulate typical situations in practice and guide the reader to quick and accurate solutions. After more than 25 years in the design and project management environment, the author based the contents of this handbook on practical “hands on” experiences and gladly shares this knowledge with upcoming professionals.

IPET is prepared to place small *text only* adverts in the Newsletter if they are deemed to be of direct interest and value to members. The Editor and Executive's decision on any particular advert is final. The adverts may not exceed 400 words and are, for the time being, free. Adverts from any company for engineering vacancies (jobs) are **FREE!**

Please pass on this offer to your companies HR department or Bosses.

Adverts from members who are seeking employment are also accepted and are **FREE!**

Only Text based adverts will be included in the Newsletter and placed in the version of the Newsletter that is put onto the IPET Website.

Any adverts must be submitted as MS Word Documents and not other formats such as Pdf etc. No Graphics accepted! As our country is experiencing a difficult economic and financial crisis our organisation is trying to assist members where practical. Requests for advertising should be addressed to the Institute of Professional Engineering Technologists

IPETP O Box 1824

Randburg

2025

Tel / Fax 011 787 9706

E mail engineer@netactive.co.za

www.ipet.co.za

5. Unemployed Survey.

With a South African unemployment rate of some XX %, IPET would like to assist members, and the country as a whole, by setting up a database of skilled unemployed members who are prepared to work hand in hand with the Department of Public Works (and others).

Any member interested please supply IPET with the following details.

Last Name	
Initials	
IPET Membership number	
ECSA registered number	
ID number	
Discipline b(Civil, Electrical etc)	

Speciality (Structures, Roads, Electronics etc)	
E mail address	
Telephone	
Province in which you reside or are willing to work in. (South Africa if all provinces)	

SEND TO IPET AT engineer@netactive.co.za AND mark it MARCH SURVEY. If this is not followed the item may be discarded as SPAM.

Thanks
IPET Admin.

6 *Snippets.*

The following mini articles, notices and news follow the trend of interesting scientific, engineering developments and general interest items that we come across. Read and enjoy!

Please feel free to contribute by sending your items to share with our members!

Ed

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The United Nations Environment Programme (UNEP) has declared war on ocean plastic.

The UNEP has stated that more than eight tons of plastic enter the oceans every year – equivalent to one garbage truck per minute. The Director Erik Solheim said it is time that all tackle the plastic problem that blights the oceans. Plastic pollution is surfing onto Indonesian beaches, settling onto the ocean floor at the North Pole, and rising through the food chain onto our dinner tables.

In SA, Plastics SA says in its National Plastics Recycling Survey 2017 that the industry recycled 334 727 tons – or 43.7% – of all plastics.

The plastics recycling industry in SA supports 5 837 formal jobs, says the organisation.

Polystyrene recycling.

Following success with various recycling projects over the last 11 years, the Polystyrene Association of South Africa (PASA) hopes to increase its collection and recycling rate of post-consumer polystyrene through establishing recycling hubs.

During 2017/2018 about 6300 tons of polystyrene as diverted from landfills.

PASA in an effort to deal with logistical challenges of recycling polystyrene plans to establish three major Trading Hub Clusters in the Western Cape, Gauteng and KZN.

PASA has also developed a second initiative that will see small-scale municipal polystyrene recycling hub facilities for small- to medium-sized municipalities situated in outlying areas of the country.

Each municipal polystyrene recycling hub will integrate the collection and recycling of polystyrene into a usable form. Lightweight cement blocks and screed will be manufactured on site, which will be used to build houses and clinics in each district.

1000 Cell Phone Towers for 5G.

Helios Towers who recently entered the South African market wants to build a thousand towers here in the next 3 years.

It entered South Africa recently by striking a local partnership and buying an independent tower operator, giving it a foothold in a country expected to lead sub-Saharan Africa in rolling out faster, fifth-generation (5G) networks.

The country has about 30 000 towers with only about 10% of those run by independent companies.

National Treasury Reprioritising?

National Treasury will be reprioritising resources towards President Cyril Ramaphosa's infrastructure fund and away from the wage bill, Finance Minister Tito Mboweni said recently, with government committing R100-billion over the next decade towards the building and operation of key infrastructure assets. In several instances, the private sector will be responsible for the design, build and operation.

(Ed. good news)!

Closing of the Jhb M2 Motorway.

The Johannesburg Roads Agency (JRA) closed the M2 motorway between the Crown interchange and Martizburg street to allow for bridge rehabilitation to resume.

The road closure from February 28 until the end of October 2019. This follows after Johannesburg Mayor **Herman Mashaba** raised concerns about the stability of the Kaserne and Selby sections of the M2 bridge, which poses a danger to road users. The damage, he explained to media recently, comes as a result of a lack of maintenance over the years, as well as a considerable increase in road traffic since the bridge's construction. The city has previously revealed that 78% of its bridges are in a bad condition and need urgent rehabilitation. An estimated R6.5-billion is needed to refurbish and rehabilitate all bridges in the city.

(Ed: Good news for some, bad news for motorists).

Scientists turn carbon dioxide back into coal?!

Scientists have harnessed liquid metals to turn carbon dioxide back into solid coal, in research that offers an alternative pathway for safely and permanently removing the greenhouse gas from our atmosphere. The new technique can convert CO₂ back into carbon at room temperature, a process that's efficient and scalable. A side benefit is that the carbon can hold electrical charge, becoming a supercapacitor, so it could potentially be used as a component in future vehicles.

The research team led by RMIT University in Melbourne, Australia, have developed a new technique that can efficiently convert CO₂ from a gas into solid particles of carbon.

Published in the journal Nature Communications, the research offers an alternative pathway for safely and permanently removing the greenhouse gas from our atmosphere.

"While more research needs to be done, it's a crucial first step to delivering solid storage of carbon."

The research was conducted at RMIT's MicroNano Research Facility and the RMIT Microscopy and Microanalysis Facility, with lead investigator, Honorary RMIT and ARC Laureate Fellow, Professor Kourosh Kalantar-Zadeh (now UNSW).

The research is supported by the Australian Research Council Centre for Future Low-Energy Electronics Technologies (FLEET) and the ARC Centre of Excellence for Electromaterials Science (ACES).

The collaboration involved researchers from Germany (University of Munster), China (Nanjing University of Aeronautics and Astronautics), the US (North Carolina State University) and Australia (UNSW, University of Wollongong, Monash University, QUT).

(Ed: Wow – watch this development)!!



No 7. The Joke Column.

Warning / Disclaimer.

Sensitive readers are warned that the following may erroneously be taken to contain sex, violence, strong language, gender, race, ethics etc. Readers are warned not to read or have any of the following read to them. Recommended readers age is limited to 140 and 161 years of age. A further requirement is you must have a sense of humour. No Persons or animals are intended to be harmed in any way by this column.

"Being British is about driving a German car to an Irish pub for a Belgian beer, then going home, grabbing an Indian curry or a Turkish kebab on the way, to sit on Swedish furniture and watch American and Australian shows on a Japanese or Korean TV, which will soon be powered by a Chinese power station."

And the most British thing of all? "Suspicion of anything foreign."
And arguing about Brexit!!

Britain has Brexit
South Africa has BrokeIT!!
Is this because SA is CrookIT?
No, lets show the world we can FixIT!!

The Bad News is the S#\$&* is hitting the fan.
The Good News is the fan is not working!
Eishkom again!!

The first computer dates back to Adam and Eve. It was an Apple with limited memory, just one byte. And then everything crashed.

We live in a society where pizza gets to your house before the police.

Part 8.

Unsubscribe Option.

As a member of IPET you should want to receive the E News. If however u do not want to receive the IPET E News as an E Mail then you have the option to unsubscribe.

To unsubscribe send an email with "IPET unsubscribe newsletter" in the text to engineer@netactive.co.za

Part 9.

O. & O. E.

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