

Engineering Council of South Africa



e-Bulletin: Edition 1, 2012

Dear Colleagues,

If 2011 and the former part of 2012 was spent researching and conceptualising solutions, the latter is characterised by birthing, nurturing and gaining momentum. *"Ke Nako!"*

In the words championed during the State of the Nation Address by His Excellency Jacob Zuma, President of the Republic of South Africa on the occasion of the Joint Sitting of Parliament, Cape Town; *"for the year 2012 and beyond, we invite the nation to join government in a massive infrastructure development drive... The massive investment in infrastructure must leave more than just power stations, rail-lines, dams and roads. It must industrialise the country, generate skills and boost much needed job creation."*

United Nations Secretary-General Ban Ki-moon reaffirms the notion that all parties must rise to take an active stance against the eradication of extreme poverty and the emancipation of the human race. "Eradicating extreme poverty continues to be one of the main challenges of our time, and is a major concern of the international community. Ending this scourge will require the combined efforts of all, governments, civil society organizations and the private sector, in the context of a stronger and more effective global partnership for development," continues Secretary-General Ban Ki-moon.

It is against this backdrop that [Christopher Campbell Pr Eng, ECSA President](#) reaffirms ECSA's commitment to join in answering the call of our Honourable President. "It is time for the Profession to holistically and systemically adopt an active rather than passive role as we answer the call for contributing to solutions concerning the dire shortage of engineering practitioners and the development of a profession that will truly represent the demographics of our transformed society without compromising the quality of expertise available to all of our citizens" he said. "We will furthermore continue to build on the respect and esteem with which South African Engineering Professionals are regarded internationally, while remaining grounded by our truly South African humility," he added.

"It starts by motioning active participation at grassroots levels among local senior representatives of Voluntary Associations at the recent Presidents Forum, co-ordinating value adding input to the National Planning Commission's National Development Plan and identifying the key levers to addressing the challenges for developing engineering capacity both in the immediate and long term. The latter is a subject of urgent engagement and collaboration with Government and Industry. It is also worth mentioning that ECSA continues to attract multi-national and international delegations such as the Engineering Council of Zimbabwe (ECZ), Beijing Association of Science and Technology (BAST) and the Chinese Association of Science and Technology (CAST). ECSA has come a long way and is moving forward in a bid to be the engineering professions thought leader within the South African context and a valued partner with Engineering bodies in the African diaspora." concludes Campbell.

Christopher Campbell Pr Eng
ECSA: President



ECSA hosts “Captains of Industry”

It was a first of its kind – and according to the feedback received from the stakeholders who attended; it was the first of many more of such interventions. ECSA hosted a round-table discussion on “*Addressing South Africa’s National Infrastructure Delivery Challenges*” on 28 March 2012. The invitees were none other than leaders in industry and government, whom we refer to as “Captains of Industry”.

“This is a first for ECSA. It enhances the profile of ECSA within the engineering profession. In the long run, I see such an initiative encouraging industry to promote registration among their staff members,” says Christopher Campbell Pr Eng, ECSA President. Also pleased about the event was Naren Bhojaram Pr Eng, President of the Consulting Engineers South Africa (CESA).

“A lot of value came out of this initiative. It is a step in mobilising the industry to harness it. The industry needs this to pull together even more effectively. The challenge for ECSA and all of us here is to ensure that this was not a once-off experience. It must not be a dying exercise. So long as the topics are continuously relevant to the needs of the ‘Captains of Industry’, the intended audience will be there,” says CJ Venter Pr Eng (Director, Bigen Africa).

According to Millard Arnolds (Executive Director, Murray and Roberts Construction) this initiative represented delivery aspirations being transformed into reality. He saw this as a channel towards engaging with society and government. Nigel Harvey (Managing Director, Murray & Roberts



ECSA hosts “Captains of Industry” on 28 March 2012

Contractors, Middle East) continued in pointing out that it is critical that this remained a two way communication process as that is what will make the wheels turn and that there should be people in government to listen.

Adrienne Bird of the Department of Higher Education and Training (Acting Chief Executive Officer Quality Council for Trade and Occupations, QCTO) expressed her view that this is a very interesting initiative that needs to be managed well as there are different levels of interests being represented. “It is tricky in that there are clear conflict of interests among the representatives in the room that need to be well managed. Fortunately ECSA is ideally located as the mediator,” concludes Ms. Bird.

A drumbeat is more than a catchy slogan.
It drives us towards achieving what we set out in the Business Plan.

The brand new ECSA drumbeat slogan crafted by staff members is:
“Striving for Engineering Excellence!”

Appointment of New Council Members to ECSA, In Terms of the Engineering Profession Act, 46 of 2000

On the 31st of January 2012, the Honourable Minister of Public Works, Mr T.W. Nxesi, appointed the following 42 persons as members to the ECSA Council. The remaining eight members are yet to be announced by the Minister.

No.	STATUTORY CATEGORY	APPOINTED MEMBERS
1.	Section 3(1)(a):Professionals	Mr Derek Matthee
2.		Dr Zwanani Mathe
3.		Mr Nicholas Van Den Berg
4.		Ms Malani Padayachee-Saman
5.		Dr Allyson Lawless
6.		Mr Ranthekeng Moloisane
7.		Ms Anne-Marie Sassenberg
8.		Mr Mbuleni Ngcobo
9.		Ms Tumisang Maphumulo
10.		Ms Thandiwe Nkambule
11.		Mr Yashin Brijmohan
12.		Mr Pelei Petlane
13.		Prof Barend Van Wyk
14.		Mr Christian Stuurman
15.		Mr Philippus Erasmus
16.		Ms Revona Botha
17.		Prof Beatrys Lacquet
18.		Ms Philisa Mangakane
19.		Mr Kenneth Greenwood
20.		Mr Roman Vogt
21.		Mr Nkosinathi Myataza
22.		Mr Kudzai Nyangoni
23.		Mr Cyril Gamede
24.		Prof Tshildzi Marwala
25.		Prof Leonard Masu
26.		Mr Onkgopotse Leburu
27.		Dr Keith Jacobs
28.		Mr Kanak Mistry
29.		Mr Richard Jennings
30.		Mr Dirk Van Niekerk
31.	Section 3(1)(b):State	Mr Camagu Soga
32.		Ms Henriette Anderson
33.		Mr Mongezi Gxamza
34.		Mr Adrian Peters
35.		Mr Lungile Dhlamini
36.	Section 3(1)(c): Public	Mr Rashid Patel
37.		Mr Anirood Singh
38.		Mr Mphikeleli Jele
39.		Mr Melusi Mofokeng
40.		Mr Buoang Mashile
41.		Ms Trusworthy Zuma
42.		Dr Nomzamo Tutu

The term of office of the Council members will be four years effective from the date of appointment. The date of the first meeting of the new Council is to be determined by the Minister and will take place once the remaining eight members have been appointed.

ECSA hosts first Engenius Training Session for Young Future Professionals

They posed on the floor, made a few dance moves and laughed before posing for photos. One thing was clear – the Young Professionals (YPs) felt at home at the Engenius Training Session for Young Professionals on 7 March 2012, right here at ECSA.

This training was to empower YPs to be mentors, role-models and facilitators working towards drawing young minds – including primary and high school learners – into maths and science subjects and pursuing engineering as a career of choice.

The reason being that research* constantly affirms that when one looks at the skills pipeline challenges, it is of significance to start addressing issues from basic education levels and progress towards higher education.

“As YPs, it is easy to give up when we don’t get the necessary support to pursue our dreams and projects. This training was very useful because it encourages us and provides us with support,” said Ditiro Petelele and Gaopalelwe Mesaba. This was seconded by Sifiso Khathamzi who also expressed great delight at the video.

The training was the first of its kind and included sharing methodology and providing hands-on workshop worksheets, brochures,



Young Professionals (YPs) show-off their youth at the first Engenius Training Session for YPs held at ECSA on 7 March 2012

DVDs and support through collaboration with Engenius partner organisations.

“The idea of the engineering packs is great! It is a great idea. We just need more coordinated efforts to get even more primary schools on-board. All in all, presentation, training and event as a whole was great,” concluded Cherise Small.

The next Engenius Training Session will take place in Bloemfontein, Free-State province on 19 April 2012. For more information, [click here](#).

** Available upon request (e-mail phindiwe@ecsa.co.za)*

ECSA attracts a host of multi-national and international delegations

Deliberations between delegations from the Engineering Council of Zimbabwe (ECZ) namely Engineer Dawson Mareya, Engineer Ben Rafemoyo and Dr Sanzan Diarra and the ECSA delegation led by Dr Franks Pr Eng, were held at Bruma, Gauteng, South Africa on Monday, 27 February 2012. It is worth mentioning that this was not the first meeting, but a follow-up based on the MoU that was signed in Zimbabwe. Matters discussed included the accreditation of engineering programmes at Higher Education Institutions in Zimbabwe, ECSA’s education evaluation of Zimbabwean qualifications and sharing of expertise in areas such as specialised categories.

ECSA hosted the Beijing Association of Science and Technology (BAST) on 19 March 2012. The visiting delegation consisted of Mr. Wang Xueqin (BAST: Member of the Standing Board), Mr. Meng Qingjin (Director: Beijing Museum of Natural History), Ms. Zhang Xiaohua (BAST: Vice-Director), Ms. Pan Mei (BAST: Vice-Director), Mr. Zhao Yang (BAST: Assistant Director) and Mr. Tan Chao (BAST: Project Manager). The ECSA delegation was led by Dr Franks Pr Eng. A Letter of

Intent was proposed and is being considered. It underlines the mutual exchange of experiences in the promotion of technological transfer as well as the exchange of information and experiences in operation and management of scientific and technological organizations, among others.



BAST and ECSA delegation

ECSA plays proud host to Chinese Association of Science and Technology (CAST) on 27 March 2012. The CAST delegation of more than ten people was led by Prof. Chen Xi (Vice President and Chief Executive Secretary of CAST) and the ECSA delegation was led by Dr Oswald Franks Pr Eng. Matters discussed included an overview of the Washington, Sidney and Dublin Accords, organizational overviews and the proposed way forward. CAST was interested in becoming a signatory of the Washington Accord. ECSA, being a full signatory member of the Washington Accord, gave them insight on how this could be achieved.



ECSA plays proud host to the Chinese Association of Science and Technology (CAST)

ECSA hosted a delegation of four from the Botswana Engineers Registration Board on 13 December 2012. The delegation consisted of Major David Hobona (Vice Chairman and Head of Delegation), Mr Simon Mmopi (Board Member), Ms Lindah Moseki (Board Member) and Mr Armando Lionjanga (Registrar). Dr Oswald Frank Pr Eng led the ECSA delegation. Possible areas of collaboration and ways forward were explored.

ECSA hosted delegates from the University of Venda on 28 November 2011. The delegation from the institution was led by Prof. Peter Mbat, University of Venda: Vice Chancellor and Principal. The discussions included possible areas of collaboration, ECSA accreditation procedures and plans proposed by the institution.



University of Venda and ECSA delegates

ECSA and SAIMEchE host Project Director of Bloodhound Super Sonic Car (SSC)

ECSA in partnership with the South African Institution of Mechanical Engineering (SAIMEchE) hosted Richard Noble, Project Director of Bloodhound Super Sonic Car (SSC) on 27 February 2012.

Young and old filled ECSA's boardrooms to capacity as Noble's interactive presentation showcased how the Bloodhound SSC was forecasted to travel on land at 1600km/h.

The project was meant to inspire the next generation of youth to pursue careers in science, technology, engineering and mathematics (STEM) by captivating them into the world of endless possibilities made possible by STEM careers. ECSA is committed to attracting young talent to the industry and through such projects, aims to inspire the next generation.

"I found the event to be of value," said Brian Mtwa. Reynard Behrens who has a background in children's educational activities was also impressed with the function as a whole and Bloodhound project.

"I am from the Morris Garage Car Club and have been following such talks for a while. "I found this one to be very interesting and



Edgar Sabela, Richard Noble, Peter McKuchane, Anisa Nanabhay and Vaughan Rimbault

worth my while," says Pepi Gaspari who is an Architect.

Even though the function is over, the call to action stands: do something about it. Spread the word, donate, and volunteer your time. For more information on how you can get involved, [click here](#).

The South African Society for Engineering Education playing an active role in South Africa

The South African Society for Engineering Education (SASEE) was founded at its inaugural meeting on 27 August 2010,

Bruma, Gauteng. The constitution of the society was adopted by its members at the

first biennial general meeting on 12 August 2011 at Stellenbosch.

SASEE is a Voluntary Association, governed by the Board and its members. SASEE defines engineering education as the activity of teaching and learning engineering and technology, at all educational levels. The goal of engineering education is to prepare people to practice engineering as a profession, to spread technological literacy, and to increase student interest in technical careers through science and maths education and hands-on learning. The mission of SASEE is to foster excellence and innovation in engineering education. This mission is accomplished by:

- a) exercising leadership in the field of engineering education in South Africa and beyond,
- b) promoting excellence in teaching and learning, research, engagement at universities and practice in the world of work,
- c) fostering the public understanding of technology in South Africa, and
- d) providing regular forums for discussion for sharing, networking and disseminating engineering education information.

SASEE brings together people in South Africa and beyond who have an interest in engineering education which include engineering academics and educators at higher and further education institutions, academics from other disciplines who teach engineering students, engineering professional support staff, engineering librarians, professional engineers, certified engineers, engineering technologists, engineering technicians and industry.

The objectives of SASEE are to:

- a) advance engineering education in theory and in practice, and to promote research in the field of engineering education,
- b) encourage local, national and international collaboration through hosting forums in the field of engineering education,

- c) promote strategies to improve success of engineering students,
- d) promote the development of engineering curricula in South Africa by aligning them with national needs and international trends,
- e) promote the development and use of new teaching methodologies and measurement of teaching effectiveness,
- f) promote cooperation with the Engineering Council of South Africa and professional engineering related societies in South Africa,
- g) promote the development of a database on all aspects of engineering education within South Africa, and
- h) promote the understanding of technology in society as the application of knowledge, design, and production in the development and use of objects, systems, and processes to satisfy societal needs.

Membership is open to anyone with a keen interest in engineering education. The categories of membership include Individual membership; corporate membership for organizations and Institutional membership for educational institutions.

The first SASEE Biennial Conference was held on 10-12 August 2011 at Stellenbosch where more than 100 delegates attended, including international delegates. Keynote speakers included Prof Karl Smith from Purdue University in the USA, Prof Jonathan Jansen, Vice-Chancellor of the University of the Free State, and Mr Clem Sunter, formerly of Anglo American. Fifty-one papers were presented and three workshops held. The next SASEE Workshop on HEQF and Curricula Design will take place on 7-8 June 2012 at the Bluewaters Hotel, Durban. The Second Biennial SASEE Conference is scheduled for June 2013 at Potchefstroom.

For more information please visit our website at www.sasee.org.za. Alternatively, you are welcome to contact the SASEE General Secretary at info@sasee.org.za.

Have your say on our industry's vision and values...

As engineers and project and construction managers, we are able to exert a considerable influence on our collective built environment and consequently hold power to benefit the lives of those in the community who must use the infrastructure and buildings we design and create.

This is an exciting, but daunting prospect. Engineering and contracting firms recognize this challenge and often capture in their vision statements thoughts on how they intend to respond to it; for example these statements might articulate the need to build trust, enhance the built environment, empower people and demonstrate reliability.

Such vision statements are often supported by core values such as respect, ethical behavior and quality.

I am very interested in your perceptions of these vision and value statements of companies in the South African building industry, in particular how effective and

evident they are at project level. It is part of a Masters research project I am undertaking at the University of Cambridge for the course 'Interdisciplinary Design for the Built Environment' (IDBE).

I am surveying engineering, construction project management and construction management professionals registered with the statutory bodies in South Africa, i.e. ECSA and SACPCMP. Both registrars have been kind enough to offer to send this survey link to those registered with them.

I do hope that you will participate. It should take you no longer than 15 minutes to complete and it is anonymous. It will run until end-April. Please click on the following link to launch the survey and have your say. <https://www.surveymonkey.com/s/W8N3N3X>.

Susan Snaddon
Associate | Design Integration

About ECSA

ECSA is a statutory body established in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000). ECSA's predecessor was established by the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990).

For more information, [click here](#).

ECSA offices are located in Bruma, Johannesburg



We would love to hear from you!

For more information on e-Bulletin and/or to give us your feedback,
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