



SOUTH AFRICAN INSTITUTE FOR ENGINEERING AND ENVIRONMENTAL GEOLOGISTS



EDITORS MESSAGE...



"Tis the season to be jolly..."

Everyone's in a holiday mood and dreaming about the long lazy days at the sea...I'm sure!

Welcome to the last edition of the newsletter for 2005. I hope many of you have a chance to read this before going off on holiday.

Items included in this edition are info on the SACNASP Act, some news from Tuks as well as info on AEG's name change.

The 22nd SAIEG Annual General Meeting and Gold Award Ceremony will take place on 2 March 2006. Details will be forwarded to the membership in due course. Two deserving candidates have been awarded the SAIEG Gold Medal Award. Read on to find out more!

Member fees are once again payable and the new fee listing for 2006 is tabled under membership. Invoices are on the way and members are urged to please pay your fees on time.

PRESIDENT'S MESSAGE

I am surely not alone in wondering where the year has gone to.

It does not seem so long ago that we held our AGM and Dinner and yet here we sit at the end of another year and the planning for our next AGM and Dinner has already kicked off.

The past year has been a busy one for SAIEG – bearing in mind SAIEG Council and other contributors entirely comprises volunteers who freely give of their time but who must also juggle the demands of running businesses. We held a very successful workshop in August on 'Burning Environmental Issues' which was attended by over sixty persons – many of whom were not SAIEG members. In addition members have now received three newsletters in the course of the year. Already in the pipeline for the New Year is an update of our Members Directory as well as the first of the

hopefully-to-be-regular courses run by SAIEG. Watch this space for future details.

SAIEG is also facing a number of challenges. We are a small grouping with a total membership only in the order of 150. It is probably fair to say that the available skills are stretched quite thinly at the moment and that there is currently more work than we can cope with. Consider also that some of our members live and work overseas, others are retired and others again work in very specialized fields. These considerations make the pool of available skills seem even smaller. And yet the numbers of engineering geology graduates produced each year remains rather small.

How do we, as a profession, work towards sustainability in terms of numbers of graduates? How do we broaden the appeal of engineering geology amongst today's learners, and attract the brightest and the best? (see also a more-detailed article by Louis van Rooy in this newsletter).

It would be unrealistic to imagine our profession competing with financially more-lucrative and high profile professions such as law or business, but at the same time we should acknowledge that we are perhaps our own worst enemies when it comes to undercutting our opposition. There always appears to be another engineering geologist who is prepared to do a job for less. While this would appear to be normal competitive business practice, a point is also reached where the services offered are cut to the extent that clients might be receiving less than satisfactory service from our profession. How do we get client's to understand the real value of our contribution if we are prepared to undercut our professional colleagues, and negotiate our fees downwards?

Members are again encouraged to get involved in SAIEG's affairs. We need and welcome your inputs and comments (and even criticism!).

It remains for me to wish all our members all the best for the holiday season as well as for the year ahead.

Before I forget – the next AGM and Dinner are scheduled for 2nd March 2006. See you there!

All the best...

Gary Davis



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**Members are urged to visit the site and provide feedback.*

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MEMBERSHIP FEES

During the SAIEG Council meeting held on 7 November 2005, it was agreed to increase membership fees by a nominal amount of 5 %, which reflects a R20 – R30 increase. This is mainly to cover for inflation and possible fluctuations in the Rand / Dollar and the Rand / Euro exchange rates as a considerable portion of the membership fees now go towards affiliate subscriptions with the IAEG and the AEG.

The fees for the different categories of membership for 2006 are as follows:

Membership Status		With IAEG Bulletin	Without IAEG Bulletin
Honorary Fellow	HONFEL		
Fellow	FSAIEG	R675	R465
Member	MSAIEG	R620	R410
Assoc Member	AM	R580	R370
Assoc Member qualified	AMQ	R620	R410
Affiliate Member	AF	R470	R260
Retired Member	RT	R470	R260

Associate Members please note:

According to our constitution, you are given three years to upgrade to full Membership status once you have qualified. Otherwise you will automatically be upgraded to "Associate Member Qualified" status and then be invoiced accordingly. We therefore urge you (the Associate Members and the Associate Members Qualified) to apply for full SAIEG Membership status as soon as possible.

Invoices are on the way to you. Speedy payment within the required time period will be highly appreciated.

Payment Options

Cheques can be made out to "SAIEG" and posted to us at:

PO Box 2812
Pretoria
0001

Or you can transfer your contributions to*:
SAIEG Account No: 1602070423
Nedbank Hatfield

**Please remember to furnish us with proof of payment*

Members are requested to check their membership status and contact details. Any discrepancies must be brought to the attention of the secretariat.

Please note that students majoring in the fields of engineering and environmental geology can join SAIEG as affiliate student members at a **discounted rate of one third of the affiliate rate i.e. currently R87 per annum**. Further details are available from representatives at various tertiary institutions.

NATURAL SCIENTIFIC PROFESSIONS ACT OF 2003

INFORMATION ABOUT NEW ACT (ACT 27 OF 2003) AND ACTION REQUIRED FROM THE SAIEG COUNCIL AND FROM MEMBERS

A workshop was held on 1 July 2005 and further information was obtained from the SACNASP office. More information can be obtained from the SACNASP office or the website: www.sacnasp.org.za.

1. **Voluntary Associations**

The various natural science societies or learned societies are now referred to in the Act as "Voluntary Associations".

2. **Proposed requirements for recognition as a Voluntary Association**

The SACNASP Council must submit the framework for the requirements for recognition of a voluntary association to the Director General for approval. The voluntary associations (VA's) eg. SAIEG must then apply and will if recognised, be issued with a certificate of recognition. This certificate is valid for a period of five years. Application for renewal for another five year period must be done after five years.

The SACNASP Registrar will refine the draft framework and it will be discussed at the Council meeting on 18 October 2005. SAIEG will apply when the framework is available.

3. **Composition of Council and nomination procedure**



The SACNASP Council consists of between 20 and 30 members of whom:

- 12 – 18 must be professional or certificated natural scientists nominated by voluntary associations (VA's). The Minister must invite the voluntary associations (VA's) to nominate persons as members of the Council.
- 4 – 6 persons are in the service of the State.
- 4 – 6 are members of the public.

4. **Fields of practice**

The fields of practice in the natural sciences are listed in Schedule 1. This list can be amended.

Schedule 1:

- a) Agricultural Science;
- b) Animal Science;
- c) Biological Science;
- d) Botanical Science;
- e) Chemical Science;
- f) Earth Science;
- g) Ecological Science;
- h) Environmental Science;
- i) Food Science.



The voluntary associations (VA's) are to consider *inter alia*:

- Must a separate Professional Advisory Council (PAC) be established for their specific field of practice?
- How to deal with multi- disciplinary fields of practice.

5. **Identification of work**

One of the most important aspects of the VA's involvement is that of work reservation. The Act prescribes that the Council must consult with all the VA's regarding the type of natural scientific work which may be performed by registered persons.

This will be discussed by Council on 18 October 2005.

6. **Code of conduct**

The SACNASP Council must, after consultation with the Director General, VA's and registered persons draw up a code of conduct for registered persons.

The current code is a legacy from the first Council (Act 55 of 1982) and was published in Government Gazette No. 16486 of 23 June 1995.

7. **Professional Fees**

The Council must annually, after consultation with the VA's and registered persons, determine guideline professional fees and publish those fees in the Gazette (the present guideline fees were published in the in the Government Gazette No. 27047 of 10 December 2004).

8. **Registration requirements**

Categories for registered persons in the natural scientific professions are:

- a) Professional natural scientist; Pr.Sci.Nat.
- b) Candidate natural scientist; Cand. Sci.Nat; and
- c) Certificated natural scientist; Cert. Sci.Nat.

Basic requirements:

Pr.Sci.Nat:

4 year degree/ diploma from accredited university/ Technicon, plus experience: 4 year BSc- 3 years, MSc-2 years, PhD-1 year.

Cand.Sci.Nat:

4 year degree/diploma from accredited University/ Technicon, and intending to register as Pr.Sci.Nat after vocational experience.

Cert.Sci.Nat:

3 year degree/ diploma from accredited University/ Technicon plus experience: 1 year appropriate experience.

Grandfather clause:

A grandfather clause will also apply until December 2006.

A person may not practice in any of the fields of practice listed in Schedule 1 unless he or she is registered in a category.

The VA's were requested to advise the Council about registration requirements.

9. **Power of the Council with regard to education and training in natural sciences**

The Council may perform such functions within the framework of the SA Qualification Authority Act, 1995 (Act no. 58 of 1995) and the Higher Education Act (Act 101 of 1997) as may be required by those Acts.

10. **Renewal of registration**

A registered person must, at least three months prior to the expiry of his or her registration, apply in the prescribed manner to the Council for the renewal of his or her registration.

Re-registration therefore inevitable.



11. **Other important points taken from a presentation by the President of the SACNASP Council**

Who is entitled to what?

- Only registered persons may use the titles and affix the prescribed abbreviations after their names.
- “Certificated Natural Scientists” and “Candidate Natural Scientists” may only perform work in the Natural Scientific Professions under the supervision and control of a “Professional Natural Scientist”.

A Person who is not registered in terms of this Act, may not:

- Perform any kinds of work identified for registered persons;
- Pretend to be a person registered in terms of this Act;
- Use the name of any registered person on any name or title referred to in this Act.

Offences and penalties

A person convicted of an offence in terms of section 27(3) on identified work is liable to a maximum fine equal to double the remuneration received by him or her for work done in contravention thereof, or to a maximum of three years income.

Why register?

- No work identified under the Act may be done by persons who are not registered (Section 27);
- The name or title of “Natural Scientist” is reserved for persons registered in terms of this Act (Section 27);
- Only persons registered may practice in a consultancy capacity (Section 20).

Kobus Venter

NEWS FROM TUKKIES...

At the end of another academic year I would like to share some thoughts with the SAIEG Membership.

The Department of Geology had 4 engineering geology and 3 hydrogeology honours students that will hopefully complete their degree studies at the end of 2005.

All seven students could really choose where and who they want to work for. The hydrogeology students are all three entering private firms, with one not joining the mining company with whom he had a bursary for the past three years. The firm he is joining was prepared to loan him the full amount of the bursary to buy him out.

Of the four engineering geology students one is joining a mining company with whom she had a bursary for the past four years, one is carrying on with an MSc in hydro- and engineering geology and the other two are joining private firms.

From the number of phone calls I received during the past 6 months from members wanting to appoint engineering geologists and with my limited involvement in private consulting it is evident that there are presently more work than the available manpower can cope with. This is obviously a legacy from the past couple of years where most of the graduates in engineering geology were absorbed into the rock mechanics departments of the mining houses and the current economic growth experienced in SA.

At this stage there are only five students enrolled for the honours programme in engineering geology for 2006. If the economy keeps on growing at its present rate the demand for engineering geologists will probably stay the same or may even increase. It is therefore a bit disturbing that the number of students is still low and that the black students tend to rather follow the programme in geology, where there are bursaries available.

I am of the opinion that the profession and industry must get their act together and offer at least two bursaries for deserving third year students. This may even be specifically introduced to encourage black students to become engineering geologists.

On a totally different issue I want to report back on a student excursion we had during July. Myself and Kai Witthueser with the seven honours students left Pretoria on 2 July for Botswana.

We crossed the border at Stockpoort/Parr's Halt and arrived at Orapa Diamond Mine that evening. We spent an entire day with first introductory lectures on the geotechnical and hydrogeological aspects on the mine and after lunch visited the open pit and had a close look at some of the side slope instability problems experienced in the pit. That evening we had a game drive and braai courtesy Debswana.

From Orapa we visited the quarries and construction sections of the road upgrade project between Mopipi and Rakops. The Bangladeshi engineer was soon dubbed Gollum, a la Lord of the Rings, and his shadow travelled with us for most of the way.

The swamps were dry so we moved on to Gweta where we had a good look at the calcrete road quarries with the green calcrete of special interest. From Nata to Kasane the basalt quarries were inspected with nice examples of rapid deterioration of the aggregate visible. On the spur of the moment we decided to have a quick break and visited the Vic Falls where we stayed over for 2 nights. From Zambia we went back via the ferry at Kazangulu and stayed over on a farm near Francistown. During the following two days we visited the construction site of the Mtimbali Dam as well as the mining operations around Francistown. From here we headed home.

This excursion was made possible by the subvention received from the Met Fund. We have unfortunately

received notice that no contribution will be received from this source in future.

The students tried to get some sponsorship for the above excursion. Of the 12 firms and individuals approached only two actual contributions were received. This really doesn't inspire the students to join SAIEG or make them feel positive about the profession they are entering.

At the end of their honours year one would expect students to know how to describe a soil profile (we don't have soil profiles available on campus), to know how to describe a drill core (we need to visit a drilling site so they can get a feeling for how core is retrieved), they should have been exposed to construction sites (structures and roads), and so I can carry on. With the limited monetary resources at the University's disposal and the huge increase in geology student numbers, engineering geology tends to be overlooked when it gets to the allocation of money for site visits and excursions.

Individuals on their own and in larger firms and industry should really use their influence to assist in a tangible way in the training of engineering geologists. The students will most probably approach some firms and individuals again next year for monetary assistance to make field visits possible.

I however want to end on a positive note. Many thanks to everybody who assisted us in organising site visits and spent time lecturing to the students. There is in general still a lot of goodwill that still exists towards the training of engineering geologists.

Louis van Rooy
Department of Geology, University of Pretoria

SAIEG GOLD AWARDS

The SAIEG Council is once again proud to announce that the SAIEG Gold Medal, the premier award of the Institute, will be presented to two worthy individuals, Tony Williams and Tim Partridge. The award is given in recognition of outstanding lifelong service by an individual to the profession of Engineering Environmental Geology in South Africa and comprises a certificate and an engraved gold medal made for the purpose. The award will be presented at the 22nd AGM which will take place on 2 March 2006. Further details will be forwarded to members in the New Year.

AEG NAME CHANGE

For the second time in AEG history, a name change has been approved by the membership. The organization, originally founded in 1957 as the California Association of Engineering Geologists (**CAEG**), responded to growth and geographic expansion with the first name change in 1963 as **CAEG** became the Association of Engineering Geologists (**AEG**).

The updated name, **The Association of Environmental and Engineering Geologists**, became official at the AEG Corporate Business Meeting on

September 22nd in Las Vegas, NV. Independent legal counsel tallied balloting results, with 68% of the votes supporting the name change.

The name change reflects important changes in the public awareness of services provided by AEG members. The name change discussion first surfaced almost a decade ago as the field of environmental engineering gained recognition. AEG has been serving members of both the environmental and engineering geology for a number of years, and the name change serves to provide formal recognition of this support. It will also strengthen and support AEG's mission as it opens up opportunities to serve additional members in the U.S. and internationally.

To support the name change, it is important to reinforce those visual and graphic elements that the target audiences identify with the organization. One of AEG's strengths is an organizational history spanning almost a half century. The logo and acronym are synonymous with the organization. To support this, the acronym "AEG" will remain and the logo will remain virtually identical.

Successful organizational change is based on recognizing and responding to opportunities as the marketplace and needs of members, and the public they serve, change. The current name change reflects this. Just as important, however, is recognizing that the mission and values of AEG remain unchanged. This is the sign of a healthy and vital organization. As we approach the 50th anniversary of AEG, it is possible to anticipate that the vision of the founders will be carried forward for another 50 years as AEG continues to grow and proactively responds to the needs of the environmental and engineering geology profession. I look forward to serving this great organization.

Darrel Schmitz
President: Association of Environmental & Engineering Geologists



EASTERN CAPE GEOGATHERING 2005

This is an invitation to all GSSA members, friends and families who happen to be in the Eastern Cape over the festive season to come along to the annual Geogathering for a bit of fun and a break from the beach/turkey/mother-in-law.

Date: 28th December 2005 from 1200 onwards
Venue: Grahamstown Bowling Club, African Street, Grahamstown.

There will be a braai (braai packs will be available) and bar. Those who wish will be able to play bowls, and the club has plenty of sets for people who need them. Hopefully the weather will be better than 2004!!

For catering purposes mostly, please respond to Malcolm Roberts either by:
e-mail: malcolm@geoscience.org.za or
m.roberts@ru.ac.za or cell phone 084 434 6364

So, for those of you in the area during December, please come along and catch up with your pals!!

See you in Grahamstown!

FROM THE STOREROOM ...

SAIEG holds a collection of useful reference books and proceedings which are considered essential for any complete South African engineering geological library. These include:

Title	Author	Publ Date	Price (incl postage)
Cities of South Africa	AEG Symposium	1981	R50,00
Guidelines for Urban Engineering Geological Investigations	SAIEG/ SAICE	1997	R75,00
A Practical Guide to Soil Movement	SAIEG/ SAICE	1999	R75,00
Proceedings: 9 th IAEG Congress (with extended abstracts) - Engineering Geology for Developing Countries, Durban, 2002 (Compact Disc format)	Editors: Van Rooy, J.L. and Jermy, C.A.	2002	R120,00
Guideline for engineering geological characterization and development of dolomitic land	CGS/SAIEG Endorsed by SAICE (Geotech Div)	2004	R50,00
Geoscience Africa-Symposium Proceedings + short course notes and field trip booklet (including CD)		2004	R250,00

Please contact the secretariat for any of the above items.

LOCAL EVENT CALENDAR

2006

3 – 6 April

SAIMM Symposium: "Stability of Rock Slopes". BOE Conference Centre, Victoria and Alfred Waterfront, Cape Town. Contact: Sam Moolla: Tel: 011 834 1273; Fax: 011 833 8156; Email: sam@saimm.co.za; Website: www.saimm.co.za/rockslopes

INTERNATIONAL EVENT CALENDAR

2006

24 – 26 April

ITA-AITES World Tunnel Congress & 32nd ITA General Assembly. Seoul, Korea. Contact: Ms Song: jssong@hanjinpc.com. Website: www.ita2006.com

3 – 5 July

21st Colloquium on African Geology. Maputo, Mozambique. Contact: CAG21@uninet.co.mz / lopo@uninet.co.mz

6 – 10 September

IAEG 2006, Engineering Geology for Tomorrow's Cities, the 10th IAEG Congress. Nottingham, United Kingdom. Contact: info@iaeg2006.com / programme@iaeg2006.com; www.iaeg2006.com

2008

30 June – 04 July

10th International Symposium on Landslides and Engineered Slopes. Xi'an, China. Contact: ytsb@iwhr.com. Website: www.landslide.iwhr.com

END OF YEAR HUMOUR...

Are you totally obsessed with geology? If so, then you are a total immersion geologist. Here are the nine warning signs:

1. You judge a restaurant by the type of decorative building stone they use rather than their food.
2. You manage to turn any conversation into a discussion of geology, as in: "What did you think of the Rugby Cup game last night?" "I must have missed that conference. Who sponsored it? GSSA?"
3. You refuse to let nightfall stop your field excursions and continue looking at the outcrops using the headlights of your field vehicle.
4. You like rock music only because it's called "rock" music.
5. You will try to claw through the water flowing in a stream to get a better look at the bedrock at the base of the channel.
6. You will walk across eight lanes of freeway traffic to see if the outcrop on the other side of the highway is the same type of rock as the side you're parked on.
7. You name your children after rocks and minerals.
8. You're not sure if you have children.
9. You view non-geologists as subhuman.

Well, that's it for 2005. Here's wishing you and family a safe and joyous festive season. Safe driving if you're going away. Let's all come back recharged and ready to tackle the new year.



Merry Christmas and Happy New Year!
See you at the AGM.

Regards,
Ashika Sudu