

**More than 60 years of
South African Soil Science
under the banner of the
SSSSA**



**Information and reminiscences
by Giel Laker**

*(Photos and additional contributions by
Garry Paterson & Ruth Rhodes)*

November 2014

INTRODUCTION

On the 27th of April, 1953, five soil scientists met as the newly-formed council of the then 'Suid-Afrikaanse Bodemkundige Vereniging/Society of Soil Science of South Africa'. At that stage the society had very active members from the then Rhodesia. The Society eventually became known as 'Die Grondkundevereniging van Suid-Afrika/The Soil Science Society of South Africa'.

The Society is governed by its elected Council according to rules embedded in a sound constitution, which has been adapted as and when it is deemed necessary. One of the main changes was that the term that a person may serve uninterrupted on Council was limited. After a compulsory break from serving on Council for a term a person may be re-elected to Council. Prof. **Giel Laker** was not the first to take such a compulsory break, but was the first person to be re-elected back onto Council after his break. A logo for the Society, which we still have today, was adopted by Council. It represents green plants on brown soil and may be read as either a G, for "grond", or an S, for "soil".

The Society affiliated with the International Soil Science Society, now known as the International Union of Soil Sciences. The Society decided to automatically register all members of the SSSSA as members of the ISSS, and included their ISSS membership fees in the SSSSA membership fees. Almost all other countries left it to individuals to register for ISSS membership. The interesting scenario created by this was that South Africa was one of the countries with the highest number of ISSS members and a strong voting right. The ISSS had a very strong policy that no country where an ISSS congress was held, was allowed to exclude any country from participation on political grounds. So, even during years of the strongest political upheaval, South African soil scientists could attend all ISSS congresses, including one in Russia, with a field excursion to Siberia.

SSSSA INITIATIVES TO PROMOTE SOIL SCIENCE

From 2001, the SSSSA introduced a significant annual cash prize for the best soil science paper in the South African Journal of Plant and Soil. This was an attempt to boost the rating of the journal by the publication of a larger number of high quality papers. It would also make the research more "visible" to other South African soil scientists instead of having them "disappear" in overseas journals.

From 2006 to the present, the SSSSA has sponsored a prize for the best soil science-related project presented at the annual "Expo for Young Scientists". During the period 2006-2009, part of the prize was sponsorship enabling the winner and his/her parents to attend the next congress and display the project there. Thus, soil scientists could interact with the winners and their parents, stimulating an awareness of the importance and beauty of soil science. Since 2010, both senior (high school) and junior (primary school) prizes have been awarded.

SSSSA INITIATIVES TO REWARD GROUPS OR INDIVIDUALS FOR OUTSTANDING SERVICE TO THE SOCIETY AND/OR OUTSTANDING CONTRIBUTIONS TO SOIL SCIENCE

The SSSSA introduced a system of awards to give recognition to Society members who have rendered outstanding service to the Society and/or made outstanding

contributions to soil science. Although the website list names that have received **silver medals** as having been awarded for either service or contribution, the inscription on the medal plaques of some recipients actually read that they were received for outstanding service to the Society **and** outstanding contributions to soil science. The first silver medal was awarded in 1989 to **Mr Jakob van Woerkom**, previous SSSSA Secretary and the photo below shows him being presented with his medal by the then (and still!!) SSSSA Secretary, **Theo Dohse**, himself a recipient of a silver medal.



First SSSSA silver medal being presented to Mr Jakob van Woerkom

The highest medal honour is the Society's **gold medal**. These are awarded to groups or individuals for outstanding publications or contributions. From the awarding of the first gold medal up to the present only seven have been awarded, four of which to individuals, namely **Hennie van der Watt**, **Alan Bennie**, **Martin Fey** and **Chris du Preez**. Two persons have received both silver and gold medals, namely **Hennie van der Watt** and **Alan Bennie**.

Towards or at the end of a long career of dedication to the SSSSA and/or significant contribution to soil science, a member of the Society can receive **honorary membership** of the Society. Honorary membership is restricted to a small number, as dictated by the constitution. Up to 2009 the number was 10; the maximum is now 15.

SSSSA members should keep in mind that any member may at any time submit a motivated proposal to Council for the awarding of a medal to a specific member of the Society.



Some of the SSSSA Honorary Members at the 2009 Congress in Stellenbosch (L to R: Abel Botha, Giel Laker, Hilmar Venter, Robin Barnard, Rob Fitzpatrick, Penny Grant)

SOIL SCIENTISTS WHO HAVE MADE SIGNIFICANT CONTRIBUTIONS AND/OR OCCUPIED SENIOR POSITIONS OUTSIDE THE FIELD OF SOIL SCIENCE

This list does not include only members of the SSSSA, but also other persons with degrees in soil science who made significant contributions during the period 1953-2014. It is probably incomplete and could be added to.

Dr. Jons Terblanche graduated in soil science at the University of Stellenbosch. After 21 years of soil fertility research in deciduous fruit crops at the FFTRI, later ARC-Infruitec, he became Deputy-Director at that institute and thereafter Director of the ARC Institute for Citrus and Sub-Tropical Crops at Nelspruit. In 1992 he became Deputy-President of the ARC and from 1993 to his retirement President of the ARC.

Prof. Leopoldt van Huyssteen, a silver medal recipient and a past president of the SSSSA, became director of the ARC-Infruitec (Nietvoorbij), then Head of the Department of Soil Science at the University of Stellenbosch and Dean of their Faculty of Agrisciences. He then became Executive Director: Operations and Finance at the university and is presently Acting Rector and Vice-Chancellor of the university.

The brilliant **Jakob Deist** was Director of the Viticultural and Oenological Research Institute, later the ARC-Infruitec (Nietvoorbij). **Johan van Zyl** was Director of the ARC-ICSTC at Nelspruit and later of the ARC-Infruitec (Nietvoorbij). In the 1950s-60s **Dr. M.H. (Boy) Slabber** was Director of the Winter Rainfall Region of the Department of Agriculture. Several SSSSA members were Directors of our national soil research institute, presently known as the ARC-ISCW.

In the 1970s-80s **Hennie van der Watt** was member of the Scientific Advisory Council of the Prime Minister of South Africa – a full time position.

Meiring du Plessis, George Green, Peter Reid and **Sizwe Mkhize** were Research Managers at the Water Research Commission, where they played important roles in regard to funding of research projects conducted by SSSSA members. **Sizwe Mkhize** later held senior positions in the National Departments of Agriculture and Water Affairs respectively. **Hennie van der Watt** and **Giel Laker** were deans of the Faculty of Agriculture at the University of Fort Hare.

Former SSSSA presidents **Meiring du Plessis** and **Giel Laker** and former council member **George Green** were in 2011 the guest editors for the special issue of Water SA containing the papers of the “WRC 40-year celebration conference”. In 2007 **Giel Laker** was also guest editor of the special edition of Water SA on indigenous crops, water and human nutrition.

Several SSSSA members were/are good sportsmen and -women at senior club level. Some received provincial colours at school or junior level. Some attained significant achievements at the Comrades marathon (such as **Danie Beukes**) and the Duzi and Berg River canoe marathons. **Theo van Rooyen** and **Piet Nell** are members of the exclusive club of people who completed the Cape Argus cycle race 21 or more times. **Bertie Oberholzer** was a brilliant 880 yards athlete, who received South African university colours. We know of two soil scientists who received senior provincial colours: **Derek Scotney** represented the Natal cricket team as all-rounder and **Tesman Beyers** was a left-handed pitcher for the Western Province baseball team. The cherry on top is the only two people with a degree in soil science who became Springboks, namely **Clive Halse**, the fast bowler from Natal in 1964, and more recently, **Heinrich Schloms** in canoeing.

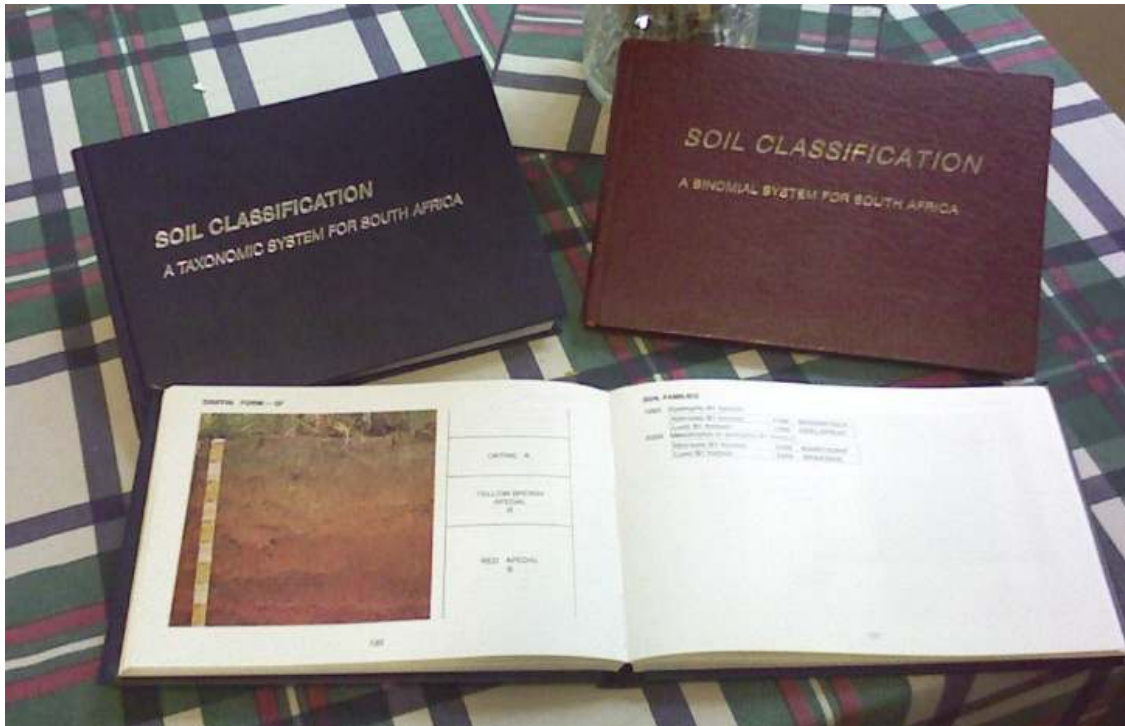
SOIL SCIENCE HIGHLIGHTS AND DISAPPOINTMENTS BETWEEN 1953 AND 2014 AND CHALLENGES FOR THE FUTURE

Highlights

Publication of several South African books in the field of soil science are definite highlights. The three volumes on “Soils of the Sugar Belt”, by **B.E. Beater** and published between 1957 and 1962, were forerunners of the later classification systems. A revision of “Soil Groups and Subgroups of South Africa” by **C.R. Van Der Merwe** was published in 1962. This monumental pioneering work in South Africa’s soil classification was first published in 1941. “Soils of the Tugela Basin”, published in 1969 by **J.J. Van der Eyk C.N. MacVicar** and **J.M. de Villiers**, was a major highlight. It was the first South African soil classification based on the principles of the “7th Approximation” and the first to introduce the form/series two-tier system. Then

followed publication of “Soil classification: A binomial system for South Africa”, the famous “red book”, in 1977.

The SSSSA and SSSSA members played a key role in the development of this classification system. It made a tremendous practical impact and was even hailed as ‘probably the most practical taxonomic soil classification system in the world’ by a soil scientist from New Zealand, visiting Cornell University while Giel Laker was there as post-doctoral associate. The authors of the book received a gold medal in 1987 from the SSSSA for it. It was superseded in 1991 by “Soil classification: A taxonomic system for South Africa” (see photo below).



SA Soil Classification System – “Blue Book” and “Red Book”

In 1984, the SSSSA published a somewhat experimental English “*Glossary of Soil Science terms*”, put together by an editorial committee consisting of **Hekkie Harmse** (Chairman), **Roelof du Toit Burger**, **Hennie van der Watt** and **Theo van Rooyen**. This formed the basis for the expanded, extremely useful, bilingual “*A Glossary of Soil Science/n Verklarende Woordeboek vir Grondkunde*”, which was published in 1990. It was compiled by **Hennie van der Watt** and **Theo van Rooyen**, with inputs from others. A second corrected, improved and expanded edition of the Glossary was published in 1995, by the same two authors. It included 300 new terms, meaning that nearly 2 400 terms that are defined in the publication. After the book was out of print, a .pdf version was placed on the SSSSA web site (www.soils.org.za), from where it may be freely downloaded.

The period 1953 to 1963 saw the publication of the 3rd, 4th and 5th editions of the book by **I. de V. Malherbe** known as “Soil fertility” in English and “Grondvrugbaarheid” in Afrikaans. The title of the book is misleading, since it was actually a comprehensive introductory soil science handbook, covering all fields of soil science from pedology to

mineralogy, soil physics, chemistry, microbiology and fertility. Only soil classification was not included. Giel Laker, who had it as a handbook when he was a soil science student, recently found that answers to present-day questions about certain aspects could be found only in that book. To date, it has been the only South African soil science handbook.

The “Soil Loss Estimator for Southern Africa” (SLEMSA) was published in 1976. It was initiated by **Derek Scotney**. In the 1980s, scientists within the FAO considered it to be probably the best soil erosion model available and Robert Brinkman requested a copy to use it in his post-graduate courses in the Netherlands. Ironically in South Africa the USLE and its variants are preferred above SLEMSA.

Publication of the land type maps and memoirs was a monumental highlight in South African soil science. In 2003 the land type survey staff of the ARC-ISCW (previously SIRI) received a gold medal from the SSSSA for the project (see photo below).



Awarding of the SSSSA gold medal for the completion of the Land Type Survey (L to R: Alan Bennie, Koos Eloff, Theo Dohse, Bennie Schloms, Jan Schoeman, Dave Turner)

In 2009, the book “Soils of South Africa” written by **Martin Fey** was published. In 2011, Martin was awarded a SSSSA gold medal for the book.

Establishment of the Water Research Commission in 1971 was a big highlight, heralding the introduction of major research funding for soil scientists.

There were several research highlights by South African soil scientists during this period. During the early 1960s, the very serious zinc deficiency problem in maize in the maize quadrangle was successfully solved. In the late 1960s/early 1970s, the serious soil compaction in the Western Highveld and the central irrigation schemes was successfully solved. An American delegation even came to see how we managed

this in sandy soils. Nampo later honoured **Alan Bennie**, **Dries van der Merwe**, **Giel Laker**, extension expert **Carel Koch** and participating farmers for their roles in this.

In the late 1970s, the development of the “profile-available water capacity” (PAWC) concept by **Malcolm Hensley** at Fort Hare was a major contribution, followed by further research into its application. It was a stimulus for the development of the brilliant BEWAB irrigation model by **Alan Bennie** at the UOFS, which he also disseminated effectively to farmers. It formed a major part of the motivation for his crowning as South Africa’s “Agricultural Scientist of the Year”, the only soil scientist to have achieved this thus far.

The University of Natal, with soil scientists from Cedara also involved, became renowned for their world class soil acidity research. This strong focus on the amelioration of both top- and subsoil acidity continues today at Cedara and SASRI.

At the University of Stellenbosch, cutting edge soil salinity research by **Weber**, **Moolman** and **De Clercq** was one of the main contributions. Soil science research at the ARC-Infruitec (Nietvoorbij) is valued highly in the international viticultural community.

Basic and applied research on soil erosion by cooperation between the ARC-ISCW and the University of Pretoria included major breakthroughs, like identification of the role of clay size quartz in aggravating erosion. Co-operative research by the Potchefstroom University for CHE and UP led to development of criteria for the adaptation of overhead irrigation systems to different soils. Research on in-field water harvesting by soil scientists of the ARC-ISCW stationed at Glen and the UOFS/UFS, with **Cobus Botha** and **Malcolm Hensley** as leaders, made major contributions.

Disappointments

Soil science is still very much a ‘Cinderella science’ that does not get the recognition it deserves in the public domain. It was once said that: “Soil science does not have an image”. An example of this is that the “Building the foundation for sustainable development in South Africa” document, South Africa’s national report to the UN Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, which was compiled without involving a soil scientist. Giel Laker was only requested at a very late stage to provide some comments and advice before the report was finalized.

It is also disappointing that no South African soil science handbook has been published since the one by Malherbe. It is significant that two years or so ago the students at the Potchefstroom Agricultural College staged a class boycott because of the lack of a proper South African soil science handbook.

Challenges

The main challenges confronting us as South African soil scientists are firstly to attend to the issues listed above, and secondly for the Soil Classification Working Group to finalize the much-needed third version of our taxonomic soil classification system as soon as possible.

CONGRESSES

The Combined Congress in George, January 2015, will mark the 50th anniversary of the first Soil Science Congress in South Africa. The Combined Congress which so many of us are used to attending these days is a big change, however, from the earlier years, when most Soil Science congresses were stand-alone meetings....

Well organized congresses form the mainstay of the SSSSA's activities. They afford the opportunity to members to present their latest research to colleagues and get inputs and feedback from them. Opportunities for informal exchange of ideas are also created.

Milestone congresses

The first national congress of the Society of Soil Science of South Africa (Die Bodemkundige Vereniging van Suid-Afrika) was held at the **University of Pretoria on 19-21 July 1965**. According to the published summary of the proceedings of the congress, the congress *"had as its primary objective the bringing together, for the first time, of most of South Africa's soil scientists. In this respect the Congress has been a resounding success."*

Sessions were arranged according to the Commissions of the International Soil Science Society and the programme of that congress is included at the end of this document. By the way, the Congress registration fee was R2!

The second milestone congress was the Silver Jubilee congress in **July 1978** (see photo below) at the **University of Natal** in Pietermaritzburg to commemorate the 25th anniversary of the founding of the Society on 27 April 1953. Ten invited papers reviewed the advances in the different fields of soil science in Southern Africa during the period 1953-1978.



Delegates at the 1978 SSSSA Silver Jubilee Congress, Pietermaritzburg

The Society was at that stage known as the Soil Science Society of Southern Africa and Rhodesian (as it was then) soil scientists, namely **Penelope Grant** and **Philip Watson**, presented two of the review papers. Awarding of a silver medal for the best paper presented at a congress was introduced at that congress. **Malcolm Hensley**, then from the University of Fort Hare, received the first medal (see photo below). The review papers formed part of the printed proceedings of the congress

The Society was at that stage known as the Soil Science Society of Southern Africa and Rhodesian (as it was then) soil scientists, namely **Penelope Grant** and **Philip Watson**, presented two of the review papers. Awarding of a silver medal for the best paper presented at a congress was introduced at that congress. **Malcolm Hensley**, then from the University of Fort Hare, received the first medal (see photo below). The review papers formed part of the printed proceedings of the congress.



Malcom Hensley (second from left) receiving his medal at the 1978 Congress

The congress held at the **University of Pretoria on 9-12 July 1990** commemorated 25 years after the first congress, incidentally held on the same campus. There were no special review papers. The guest speaker in the opening session was **Mr. Dries Bruwer**, a prominent farmer and then President of the Transvaal Agricultural Union, with an MSc (Agric) in Soil Science from the University of Pretoria.

The Golden Jubilee congress of the Society was held at the **University of Stellenbosch in January 2003** (see photo below). Although it was a combined congress, the whole opening plenary session was devoted to ten invited papers that reviewed advances in soil science in South Africa during the period 1978-2003. These papers were published as a special edition of the South African Journal of Plant and Soil.

The Diamond Jubilee in 2013 of the founding of the Society will be commemorated, together with commemorating 50 years after the first congress, at the Combined Congress in **George in January 2015**. The spotlight will be put on soil science and the society.



Delegates at the 2003 Congress, Stellenbosch

Combined congresses

The first combined congress in which the Society was involved was held in **Pretoria in 1977**. It formed part of “Agricultural Congress 77”, held during 10-14 January 1977. Various agricultural scientific societies held their congresses in the city during that period. The objective was to afford the opportunity to identify common interests and foster closer co-operation, liaison and understanding. The SSSSA did not arrange a truly national congress of the Society. In consultation with the Society of Engineering Geologists and the Geotechnical Division of the South African Institution of Civil Engineers, it arranged a congress with a narrow focus where only invited speakers presented their views under the themes “Soil Classification and Land Use” and “Urban Development in Relation to Land Use”. Despite the limited scope of the congress the papers were published as proceedings of the “seventh national congress” of the society.

The first combined congress as we know it today was held in **Durban in January 1980**. The Soil Science Society, Society for Crop Production and Rangeland (Pasture Science) Society were involved. The pasture scientists soon thereafter opted out and the Weed Science society joined the combination. At a later stage the Horticultural Science Society also decided to join. In 1980 the SSSSA Council decided to have congresses of the Society every 18 months, alternating between January and July, and not once a year. This was done to ensure that enough high quality papers could be presented at congresses. It was believed that it was not possible to produce enough high quality papers if a congress was held every year. The other societies held their congresses once a year in January. This meant that every second congress of the

SSSSA would be part of a combined congress, with a stand-alone SSSSA congress in a July in between. This went well up to 1992, after which a few hiccups occurred with July congresses. From 2005 the scenario changed again, with the SSSSA being part of a combined congress every year in January.

Publication of papers presented at congresses

Up to the 17th congress in Stellenbosch in 1992, full papers presented at SSSSA congresses were published as congress proceedings. Except for invited keynote or review papers it was not compulsory for authors to publish their papers in the proceedings. They could choose to publish their paper in the proceedings or submit it to a journal for publication. Even in the case of combined congresses the soil science papers were published as proceedings of a SSSSA national congress.

From the 18th congress onwards, only extended abstracts were published. In the case of combined congresses, the extended abstracts of papers from the different societies were published together. Initially extended abstracts were two to four pages in length. This meant that useful information, including one or two tables or figures, could be included. Currently abstracts are limited to one typed page.

Congress memories and trivia

One congress was held outside South Africa, viz. the fifth congress, which was held in the then Salisbury in the then ***Rhodesia in February 1973***. Rhodesia had a corps of good soil scientists who were very active in the SSSSA, with the dynamic Penelope (Penny) Grant the “leader of the pack”.

A cocktail function offered by the local city council was virtually a standard part of each congress that was held in a town or city. These were hosted by the mayor and his wife in their full regalia, including their golden chains. Of course, it always included a welcome speech from the mayor and a thank you speech from the SSSSA president. The moment that the mayor and his wife took up their places at the door to say farewell to the guests, the function was over and everybody had to leave. Old hands usually quickly moved through the hall to remind everyone that they had to put down their glasses and leave immediately so that the Society would not be embarrassed. The snacks at these functions were always excellent and drinks were free!

Many delegates from distant places travelled to congresses by train. They had to inform the organising committee when they would be arriving, so that arrangements could be made to pick them up at the station. So, in ***Bloemfontein in 1970*** Giel Laker received a phone call from the station at 2:30 am, asking who was supposed to meet the Stellenbosch delegation at the station. This was unexpected, because the Bloemfontein coach was always uncoupled and then parked near the shunting yard, from where it was taken back to a platform at the station by 5:30 so that the passengers could disembark. The Stellenbosch delegates obviously did not like the idea of spending the night amidst the clamour of the shunting yard. Giel duly collected them and took them to their hostel rooms at the University. He then “kindly” woke up Alan Bennie to tell him that he did not have to get up early to go and fetch the “Stellenbossers” from the station!

There have been some really memorable congresses, probably the most notable ones being the one at ***Blydepoort in 1975*** and the combined congress at the ***Wild Coast***

Sun in 1989. The pre-congress field trip for the Blydepoort congress was in the Kruger National Park, starting with an excellent buffalo fillet braai at Pretoriuskop. Delegates could relax and enjoy the park, because they travelled by bus from Johannesburg and Pretoria. At the congress, science had to take a backseat to enjoyment. One session was cut short at about 4:30 in the afternoon so that a party could begin. One very prominent senior soil scientist lost his wedding ring in the swimming pool one night. This prompted Malcolm Sumner to proclaim in his booming voice in the bus back to Johannesburg: “Never must a soil science congress ever be held again at any other venue than a university campus”.

At the Wild Coast Sun, naughty delegates found it more interesting at the swimming pool where the dancers took their topless tans than to listen to dry soil science presentations. Their biggest fun was to call serious scientists outside from their sessions under some false pretext to watch their reaction when they had to walk past the topless girls – trying to take a sneak peek without anyone noticing! The venue for the opening plenary session was also rather unique. There was not a conference hall that was big enough, so it took place in the Starlight Theatre, where the dancing girls normally performed. It had a huge pitch black stage, hundreds of spotlights and soft light pink seats – very intimidating to a speaker. Prof. Laker’s paper was selected as the soil science paper for this session and he now boasts that he “performed” in the Starlight Theatre of the Wild Coast Sun.

During the mid-congress field trip of the 1970 Bloemfontein congress, José Marques kept everybody in the bus laughing throughout the whole trip. By mid-afternoon everybody was so thirsty from the dry, dusty Free State air that the bus had to stop at the hotel at Modderivier station. Seldom, if ever, have a bunch of soil scientists drunk so much beer so fast. Of course, then past Petrusburg they started pleading with the bus driver to stop so that they could relieve themselves. The conservative bus driver pointed out to them that there were no trees or shrubs to hide behind. When the threat to his bus became too serious he stopped. So, they got out and lined up against the fence with their backs to the road. Two or three passengers who were not so affected remained in the bus together with Penny Grant, who remarked dryly: “Yes, like all the soils we saw today – poor water-holding capacity.”

Silver medals – an initiative to promote presentation of high quality papers at congresses

Presentation of high quality papers at congresses has from the start been a high priority for the SSSSA. In order to promote and encourage this, awarding of different categories of silver medals at congresses were initiated. The first recipients of each category of medal make very interesting reading.

The first medal to be instituted was a silver medal for the best paper presented at a congress. The first medal was awarded at the Silver Jubilee congress in 1978, where, as already mentioned, **Malcolm Hensley**, then Senior Lecturer at the University of Fort Hare, received this first silver medal. The paper dealt with his brilliant PAWC concept. *(At the Golden Jubilee congress in 2003 he was co-author of the winning paper. In 2013, the Diamond Jubilee year, he was again co-author of the winning paper - at the age of 81! Thus, he was author or co-author of the winning papers in all three of the milestone years up to the present!)*

It was then felt that young scientists were at a disadvantage and good ones could be discouraged. So, at the 1980 congress, a silver medal for the best junior paper was introduced. The brilliant **Hulme Moolman** was the first recipient. He later became Professor and Head of the Department of Soil Science at the University of Stellenbosch and also President of the SSSSA. He became a serious fighter for the maintenance of very high standards in papers presented at SSSSA congresses. His death at a young age after serious illness was a big blow to South African soil science.

With the increased importance of posters, a silver medal for the best poster presented at a congress was introduced in 1987. The senior author was **Guy Levy**, a brilliant young scientist from Israel who was temporarily at the ARC-ISCW to do his PhD in soil science at the University of Pretoria. His co-authors were **Pedro Berliner**, another Israeli at the ARC-ISCW, **Meiring du Plessis**, a later President of the SSSSA and **Hennie van der Watt**, the first individual to receive a gold medal from the SSSSA and presently an honorary member of the Society.

In 1992 a silver medal for the best paper on implementable technology was introduced. The senior author was **Jan Meyer**, presently an honorary member of the Society. His co-authors were **Tony Wood**, together with Jan from early on real “institutions” at SSSSA congresses, and **Rod Harding**.

Since 2007, awards for the ‘best soil science paper from industry’, ‘best soil science paper on developing (emerging) agriculture’ and ‘best paper presented by an MSc student’ have been introduced.

MORE CONGRESS MEMORIES



Typical Congress excursion (Stellenbosch, 2009)



Congress dinner (Durban, 2006)



Typical Congress function (braai in the Badplaas Nature Reserve, 2007)

MILESTONE CONGRESS AT GEORGE, JANUARY 2015: COMMEMORATING 50 YEARS AFTER THE FIRST CONGRESS AND THE SSSSA DIAMOND JUBILEE

The Combined Congress in George, January 2015, will mark 50 years after the first national Soil Science congress in South Africa and will also commemorate the Golden Jubilee of the SSSSA, which was in 2013. The two were too close together to celebrate separately and it would not be appropriate to pre-empt the congress celebration in 2013. Furthermore, 2015 is also the **International Year of Soils**. So, the George congress will be the ideal opportunity to launch a triple soil celebration.

SSSSA members are encouraged to use the George congress to contribute to the festivities by taking a moment during their presentations to share a special personal soil science memory or anecdote with their colleagues. They are also encouraged to engage in the exchange of ideas how soil scientists can hook onto the idea of the **International Year of Soils** to publicize soil science in their own areas. The Wednesday night will be a night off and it could be an ideal opportunity for interested soil scientists to get together informally at their own initiative. It could also be useful to receive some suggestions beforehand.

Ruth Rhodes has been designated by the SSSSA Council to co-ordinate the society's campaign. Suggestions can be e-mailed to her at ruth.rhodes@sugar.org.za.

In addition, the Society is always on the look-out for past memorabilia, such as documents, reports and especially photographs which help to give some life to the rich history of soil science. An example of this is the collection of papers from the first Congress of July 1965, supplied by **Giel Laker**, which have been converted to .pdf format so that they can be requested by any interested member. It is hoped that similar documents from other Congresses can also be archived.

Any contributions will be welcomed by the Council or by the Newsletter editor (garry@arc.agric.za).

APPENDIX

**1st SSSSA CONGRESS,
PRETORIA 1965**

PROGRAMME

SOCIETY OF SOIL SCIENCE OF SOUTH AFRICA.

PROGRAMME

of Congress held in „Nawe Kleinsaal“ of the
University of Pretoria, 19-21 July, 1969.

MONDAY 19th JULY.

9.00 a.m. Welcoming address (Dr. S.J. du Plessis, Chief, Director
of Agricultural Research).

Opening (The Hon. H. Martins, Deputy Minister of
Agricultural Affairs).

Chairman's address (Prof. W.J. Folscher, Chairman
S.S.S.A.)

10.30 a.m. Tea Break.

11. a.m. Commission on Soil Fertility and Plant Nutrition.

- ① Changing concepts of soil fertility (E.H. Orchard).
- ② = Evaluering van P- ekstraksienetodes vir gronde onder
labakverbouing (H.G. Snyman).
- ③ The influence of tobacco and oats on the nitrate nitrogen
content of a black clay soil (A.D.P. Botha).
- ④ Sporelemente in grond (G.P. de L. Beyers).

12.30 p.m. Lunch.

2.00 a.m. Cation balance in maize leaves and its effect on
yield (E.H. Orchard).

- ⑤ Voedingselementetatus van blare en bevelenskepe van
Valencialemons (A.A.B. Bruwer & W.J. Folscher).
- ⑥ Effekte van stikstof-begesting op oes- en blaarvoeding
by citrus. (D.H. Bester).
- ⑦ Plant Sodium: a guide to improving the reliability of
foliar diagnosis (R.T. Bishop).
- ⑧ Die bepaling van sporelemente in plante - die hede en die
toekoms (W.J.A. Steyn).

3.45 p.m. Tea Break.

4.00 p.m. *Eosfeestverwantskappe in 'n aantal gronde van die O.V.S.-Streek
(S.F. du Plessis)

* Die bepaling van die kalkbehoefte van grond (L.L. Eksteen).

4.30 p.m. Discussion period.

TUESDAY 20th JULY.

- 8.30 a.m. Commission on Pedology and Mineralogy.
- Pedologie en mineralogie (G.E. van der Merwe).
 - South African Soil series (G.N. Macvicar, H.F. Loxton & J.J. van der Byk).
 - Soil series and agricultural research in the sugar belt of Natal (B.E. Beater).
 - A physiographic classification of the soils of Natal (J.J. van der Byk).
 - The mineralogy of certain cover sands in the O.F.S. region (J.E.H. Piaget).
 - The properties and genesis of clay-pan soils of Natal (V.E. Roberts & J.M. de Villiers).
- 10.45 a.m. Tea Break.
- 11 a.m. → Kwantitatiewe bepaling van verweerbare primêre minerale in gronde met behulp van 'n petrografiese mikroskoop (E. Verster).
- Die gronde van die Nontgedacht Saveringetatsie, Ermelo (G.C.H. Venter, W.J. Pflücker & B.E. Oberholster).
- Interpretation of petrological analyses (A.V. Bette).
- 'n Studie van 'n granietgrond naby George. (J.J.M. Lambrechts).
- 12.00 Discussion period.
- 12.30 p.m. Lunch.
- 2.00 p.m. Commission on Soil Biology.
- Introduction (J.J. Theron).
 - Die onderlinge verhouding en wisselwerking tussen grond fauna en grond mikroflora (P.A.J. Byke).
 - Die invloed van worteltemperatuur, kalsium- en waterstof-ionkonsentrasie op knoppievorming en simbiotiese stikstofbinding by sekere Trifolium spesies (J.G.O. Small).
 - Hydrogenase activity in soils (G. Lenhard).
- Discussion period.
- 3.45 p.m. Tea Break.
- 4.00 p.m. General Session.
- Introduction (J. van Garderen).
 - (E.N. Orchard).
 - Oorsig van kassies verbruik in die Republiek van Suid-Afrika (G.J.O. Bessou).
 - Rasionalisasie van universiteitopleiding van grondkundiges (B.de T. Burger).
- Discussion period.
- 6.30 p.m. General Assembly and Dinner at the Union Hotel, Church Street.

3/.....

WEDNESDAY 21st JULY.

8.30 a.m. Commission on Soil Chemistry.

- Introduction (W.J. Fellecher)
- Positive and negative charges in some Metal soils (M.E. Sumner & J.C. Davidtz).
- Some aspects of zinc fixation in Orange Free State soils (D.A. Stanton).
- Exchangeable aluminium: I. The efficiency of various electrolytes for extracting aluminium from acid soils (J.B. Skoen & M.E. Sumner).
- The contribution of hydronium and aluminium ions to acidity in some Metal soils. (J. le Roux & J.M. de Villiers).
- Invloed van superfoefastbinding op foefastbinding deur n lateritiese grond (J.R. Sretler).
- The effect of water: soil ratios on the quantities and concentrations of the elements Ca, Mg, K and P in non-caline soils at equilibrium (E. Fischer).
- Aktiviteitskoeffisiënte van natriumchloried in senvoudige Donnasisteme (A. Streiniker & B. van der Watt).
- Ionic equilibria in a ferrallitic clay: specific adsorption sites for potassium. (M.E. Sumner & J.M. Marques).

10.45 a.m. Tea Break.

11.00 a.m. → Cation exchange capacity and degree of saturation with metal cations of highly weathered soils (J. le Roux & J.M. de Villiers).

→ Aspekte van herwinning van sekere brakgronde (R. du P. Burger & A.J. van der Merwe).

→ The decomposition of LDB in soil (P.J. van Wyk & L.P. Beethling)

→ The effect of carbon dioxide on the chemisorption of ammonia by base saturated clays (M.C.F. du Plessis & W. Krocotjs).

12.00 Discussion period.

12.30 p.m. Lunch.

2.00 p.m. Commission on Soil Physics.

→ Recent advances in soil physics (H.v.H. van der Watt).

→ Toegassing van hittegeleidingsvermoë van grond in ingenieurswese (M. van Rooyen).

→ The influence of the differential pressure on pressure maxima determinations (H.F. du Plessis).

→ Significance of the relative evapotranspiration concept in irrigation planning (J.M.B. Hill & M.E. Sumner).

→ Enige aspekte van watertafelbeheer op die Vaalhartsbesproeiingskruis (J. van Waerkom).

→ 'n Nuwe verdigtingemetode van grondstrukturevaluering (H.v. B. van der Watt).

3.45 p.m. Tea Break.

4.00 p.m. Closing

B.vdW/MV.