



# SASTA NEWS

Newsletter of the SA Sugar Technologists' Association

June 2009

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## SASTA ROADSHOW 2009

**B**ased on feedback from SASTA members, SASTA Council identified an opportunity to serve its members better by holding an annual "Roadshow" which will highlight a few papers from the annual Congress and bring the information and opportunity for discussion to those sugarcane farmers and other sugar industry personnel who were not able to attend Congress. The papers selected each year will be the presentations from Congress which are most applicable to growers, and which have practical applications in the sugarcane industry.

The first of these Roadshows took place on Thursday 19<sup>th</sup> February 2009 in Mpumalanga, targeting the growers and agricultural sector personnel from Malelane, Komatipoort and Swaziland. Future roadshows will target other growing regions.

The programme included twelve presentations from SASRI researchers and the local SA Canegrowers' economist from Mpumalanga. The sessions and discussion were chaired by Kerry Redshaw. Delegates enjoyed lunch over more informal discussions.

The efforts of all involved in setting up and making this day a renowned success are greatly appreciated by SASTA Council. The turnout at the Roadshow was excellent, with 98 people attending. SASTA would like to thank all those who attended for showing such great support. There has been very positive feedback from a number of growers who attended the Roadshow. Amongst the contributors were:

- SASRI and Canegrowers for supporting the Roadshow by releasing

staff to do the presentations and organising.

- Tsb Sugar for generously providing the venue, the air-conditioned Big Hall at Tsb training centre, Malelane.
- The presenters for their time and work and enthusiasm: Justin Murray, Peter Lyne, Neil Miles, Neil Lecler, Abraham Singels, Maurits van den Berg, Sandy Snyman.
- The organisers on behalf of SASTA: Danile Macdonald, Kerry Redshaw, Roger Armitage, Martin Eweg, Karlien TrumpeImann.

The titles and authors of the twelve presentations were:

South African sugarcane production and quality in the 2007-2008 milling season: An unfulfilled promise? Maurits van den Berg, Abraham Singels, Roger Armitage, Mike Way and Sharon McFarlane

Is there profit in cane trash? Another dimension to the assessment of trash-ing versus burning. Brian Purchase, Adey Wynne, Eddie Meyer and Rian van Antwerpen (Peter Lyne)

Evaluation of an operational irrigation advisory service to small-scale sugarcane farmers. Abraham Singels, Nkosinathi Kaptein and D Mthembu

Soil organic matter data: what do they mean? Neil Miles, Jan Meyer and Rian van Antwerpen

Drip irrigated sugarcane response to nitrogen applied in the dry form and by fertigation in late and early season cycles. Annett Wiegel, Jan Meyer, Suren Moodley, W Tonsing, Dave Nixon and Maurits van den Berg

Micropropagation of sugarcane via

Novacane®; preliminary steps in commercial application. Sandy Snyman, Gwethlyn Meyer, Marzena Banasiak, Tarryn Nicholson, Tania van Antwerpen, P Naidoo and Jan Erasmus

Mechanical design optimisation of a sugarcane haulage vehicle. Simon Cowling (and Peter Lyne)

Effect of surface applied pressure by vehicles fitted with pneumatic tyres on properties of a virgin soil. Rianto van Antwerpen, Peter Lyne, Eddie Meyer and Marinus Brouwers

Harvesting contractors: theory and evidence from Mpumalanga. Justin Murray

The feasibility of automatic on-board weighing systems in the South African sugarcane transport industry. Louis Lagrange, Troy Pletts, Carel Bezuidenhout and Peter Lyne

Benchmarking irrigation water use and sugarcane yield in an irrigation scheme. Kevin Greaves, Neil Lecler and Jeff Smithers

Automated short-furrow irrigation. Neil Lecler, D Mills and Jeff Smithers

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# 82<sup>nd</sup> SASTA Congress 26-28 August 2009

The 82<sup>nd</sup> SASTA Congress will take place between 26 and 28 August 2009 at the ICC in Durban. The main theme this year is around sustainable development and most of the Congress paraphernalia and branding have been sourced from developmental groups in the greater KwaZulu-Natal area. The Keynote Speaker this year is the world renowned Prof Ester Vorster, the Director of COE for Nutrition, North West University. The Technical Speaker is Dr Mieke Faber of the Nutritional Intervention Research Unit of the Medical Research Council.

The SASTA Annual General Meeting will follow the opening ceremony (Wednesday 26 August 2009 at 11:30) and SASTA members are encouraged to attend this key event on the SASTA calendar. The Congress program is again packed full of top-notch research papers in Agricultural and Factory sessions alike. In addition, two new categories, namely Practical Success Stories (agricultural) and Factory Operation Papers (factory), will be presented as part of the proceedings and the Factory Sessions will conclude with a workshop on the training needs in the southern African sugar industry.

SASTA Congress 2009 is an ECSA-accredited event carrying 24 hours (8 hours per day) CPD credits. Any registered engineers wishing to use Congress attendance as CPD credits should register for Congress, and inform [sasta@sugar.org.za](mailto:sasta@sugar.org.za) of their professional registration number and full names.

A provisional program and more information about the Congress are available from the SASTA web site and Congress registration can conveniently be done online. Visit [www.sasta.co.za](http://www.sasta.co.za). If you do not have access to internet, contact [Shingai@confco.co.za](mailto:Shingai@confco.co.za) to register for Congress by email or fax.

If you wish to take a stand at the trade exhibition, contact [Thuli@confco.co.za](mailto:Thuli@confco.co.za), or if you wish to advertise through sponsorship of items or Congress events and sessions, contact [Khurly@canegrowers.co.za](mailto:Khurly@canegrowers.co.za) or [Deidre@confco.co.za](mailto:Deidre@confco.co.za).

## New SASTA Members in 2009

Cele, Musawenkosi (CTS)  
Copeland, Mike (Wattermatters)  
David, Warren (THS – TEG)  
Deppa, Ntsapokazi (THS -TEG)  
Dlamini, Sifiso (Illovo – Sezela)  
Dovey, Peter (Yara)  
duClou, Heidi (SMRI)  
Egli, Stefana (SMRI)  
Erlendsson, Elli (Crookes Brothers)  
Gielink, Andrew (THS – TEG)  
Gillham, William (Canegrowers)  
Gcumisa, Morris (Illovo – Sezela)  
Harris, David (CTS)  
Joseph, Mark (Illovo – Sezela)  
Khomo, Buhlebenkosi (SASRI)  
Khomo, Vusamuzi (Illovo – Noodsberg)  
Landman, Minette (Canegrowers)  
Massey, Gavin (Illovo – Sezela)  
Mathaba, Vusi (CTS)  
Mbhamali, Ntokozo (SASRI)  
McKay, Russell (Canegrowers)  
Mhlongo, Jeffrey (CTS)  
Naidoo, Prabashnie (SASRI)  
Naidoo, Predhie (CTS)  
Naidoo, Rishen (THS - TEG)  
Ndebele, Mbongiseni (Canegrowers)  
Nothard, Brendon (Canegrowers)  
Ogle, Duran (THS – Maidstone)  
Phiri, Willard (SASRI)  
Rama, Sinthi (Illovo – Sezela)  
Rheinhardt, Charlie (SASRI)  
Saville, Guy (SASRI)  
Shah, Shaista (THS – Maidstone)  
Sheik-Hameed, Naeem (Illovo – Noodsberg)  
Trumpelmann, Karlien (Lowveld P&DC)  
Van Wyk, Paul (Tsb sugar)



# SASTA historical proceedings now available



The SASTA Council recently considered pursuing accreditation of the SASTA Proceedings as a peer reviewed publication to the benefit of the authors, especially those from scientific institutes. However, the issue quickly transcended and the debate was, instead, focussed on one of SASTA's main objectives, which is to promote the interchange of scientific knowledge and discussion and investigation of technical problems. It was, therefore, decided to make the Proceedings publically available to the benefit of the South and southern African sugar industries and, at the same time, give the authors maximum global exposure.

The historical SASTA proceedings dating back to 1923 is therefore now available on the SASTA website at [www.sasta.co.za](http://www.sasta.co.za) and is fully searchable through the Google search engine. As a courtesy, the historical proceedings will also be published on the proceedings DVD of this year's Annual Congress that takes place at the Durban ICC from 26 to 28 August 2009. So, don't miss out on this momentous opportunity.

Thanks are due to the Technical and Engineering Group (TEG) of Tongaat Hulett Limited and to SASRI's Knowledge Management Unit for the scanning of the historical proceedings. Visit the SASTA web site for more detail.

## New 5<sup>th</sup> edition of the SASTA Laboratory Manual

The 5<sup>th</sup> edition of the SASTA Laboratory Manual will be launched during the 82<sup>nd</sup> SASTA Congress held from 26 to 28 August 2009 at the ICC in Durban. The lab manual has been the flagship SASTA publication since the early 1960s and has been available on CD-ROM since 2005. This new version now also includes the recommended methods for refinery control as well as new innovative factory methods such as NIR spectroscopy and unleaded pol.

As usual, no plant or laboratory is complete without this manual, so make sure you obtain your copy from the SASTA exhibition stand during Congress. Alternatively, contact the SASTA Administrator for more information.

### Obituary: Dr James Allison

James Allison died in Pretoria on 8<sup>th</sup> February in his sleep. James was of South African farming stock, but after a Masters degree at Pretoria University, his whole career was in agricultural research. After a period in the late 1950s as a maize and sorghum breeder at the Motopos Research Station, James joined the University of Rhodesia as a lecturer and obtained a doctorate from London University. He retired from academia as Reader in Agriculture to join the then Experiment Station of the South African Sugar Association in 1976 to fill the post of Division Head of Plant Breeding & Protection. After retiring from the Experiment Station, James continued his research for some years on the Durban campus of Natal University as an Honorary Research Fellow. At the time of his death, James was completing another paper for publication.



# SASTA Questionnaire

## 2008: analysis of replies

**S**ASTA Council requested the input from 450 delegates at Congress 2008 and 720 SASTA members via the October 2008 newsletter in an attempt to get feedback and ideas on SASTA activities. Seventeen percent of delegates (76) and six percent of members (40) replied to the questionnaire, making the overall response rate about 10% (apparently quite normal for questionnaires).

The results of some of the questions posed are shown below. In each case the left hand column shows delegate replies and the right hand column shows member replies.

### Question 1: Does SASTA Congress offer you value for money?

	Delegates	Members
1 (poor).....2....3....4....5 (excellent)		
1.	1 /76 = 1.3%	2 /37 = 5.4%
2.	4 /76 = 5.3%	6 /37 = 16.2%
3.	12 /76 = 15.8%	5 /37 = 13.5%
4.	36 /76 = 47.4%	15 /37 = 40.5%
5.	23 /76 = 30.3%	9 /37 = 24.3%

### Question 2: How much value do you place on the social/networking opportunities offered by Congress?

	Delegates	Members
1 (poor).....2....3....4....5 (excellent)		
1.	1 /76 = 1.3%	0 /38 = 0.0%
2.	0 /76 = 0.0%	0 /38 = 0.0%
3.	10 /76 = 13.2%	5 /38 = 13.2%
4.	36 /76 = 47.4%	23 /38 = 60.5%
5.	29 /76 = 38.2%	10 /38 = 26.3%

### Question 3: Venue Choice: Do you prefer a formal venue such as the ICC with a prominent Trade Exhibition or something more modest with no Exhibition?

Formal (with Expo):	61 /76 = 80.2%	19/39 = 48.7%
Casual (no Expo):	12 /76 = 15.8%	20/39 = 51.3%
Don't mind:	3 /76 = 3.9%	

### Question 4: Would you like the SASTA AGM to be a separate Event with a guest speaker, cocktail party etc, or remain as a meeting only during Congress?

Separate Event:	14/73 = 19.2%	8/38 = 21.1%
Part of Congress:	59/73 = 80.8%	30/38 = 78.9%

### Question 5: SASTA wishes to attract more delegates to Congress, especially growers. What can SASTA do to encourage people to attend Congress?

Among the suggestions were:

- Marketing, publicity, advertising, and recruitment drives
- Lowering the costs
- Having a special "Farmers Day/Session/Workshop" with speakers on practical, farm-relevant issues.

### Question 6: If the SASTA proceedings were formally accredited by the Department of Education, would it influence your decision to publish and present your research at SASTA Congress?

Yes:	30/61 = 49.2%	4/37 = 10.8%
No:	31/61 = 50.8%	33/37 = 89.2%

### Question 7: What would you like to see more of at Congress?

Delegates wanted:

- more robust discussion and interaction between delegates.
- workshops on "hot topics" and sugarcane future in South Africa from millers' and growers' perspectives.
- more participation from the entire spectrum of industry especially the small scale growers and the new claimants on cane producing farms.
- papers on environmental issues and or health issues in relation to cane/sugar production.
- More practical, hands-on papers and less theoretical modeling.
- Encouragement of young engineers/technologists.
- More young engineers and foremen, delegates from lower levels of the organizations and not just the usual senior personnel of organizations
- More papers on Engineering
- More factory presentations
- Guest speakers from outside the sugar industry
- More time to interact with the people attending.





Council has already started addressing these needs by introducing the "Practical Success Story" session in Agriculture and the "Factory Operational papers" in the factory side of Congress 2009.

### Question 9: Are you a SASTA member? YES/NO

YES: 59 /74 = 80%                      40/40 = 100%  
NO: 15 /74 = 20%                      0/40 = 0%

### Question 10: If not, is there any specific reason why?

Main reason for the few who were not members was that they were not SA residents, therefore could not join SASTA.

### Question 11: Do you participate in the SASTA Council nomination and voting process? YES/NO

Yes: 24 = 33%                      20/33 = 61%  
No: 48 = 67%                      13/33 = 39%

### Question 12: If not, why not?

Reasons included: Unfamiliarity with other members, recency of joining, disinterest and non eligibility to take part (Full and Honorary members only)

### Question 13: What do SASTA members expect from their membership of the Association?

Summarising what respondents expected from their SASTA membership:

- Information sharing and platforms for discussion
- Access to information
- Networking opportunities with other personnel from the sugar industry
- Annual Congress, field trips, factory visits

Most respondents were satisfied that SASTA was providing them with what they expected. Council's decision to publish the SASTA Proceedings dating back to 1926 on the SASTA website, and to include the historical proceedings on the 2009 Congress DVD will help to satisfy another of the members' wishes.

### Question 14: Please rate on a scale of 1 to 5: How useful/relevant is the content of the SASTA newsletter?

1.	0 /65 = 0.0%	0/37 = 0.0%
2.	6 /65 = 9.2%	2/37 = 5.4%
3.	21/65 = 32.3%	3/37 = 32.4%
4.	33/65 = 50.8%	21/37 = 56.8%
5.	5 /65 = 7.7%	2/37 = 5.4%

### Question 15: Do you think that there are sufficient editions of the SASTA Newsletter produced per annum? YES/NO

YES: 49 /65 = 75.4%                      31/35 = 88.6%  
NO: 13 /65 = 20.0%                      4/35 = 11.4%  
Too new to comment: 3 /65 = 4.6%

## SASTA ACTIVITIES (OTHER THAN CONGRESS)

### Question 16: Do you participate in any of the SASTA Workshops/Field days? YES?NO

YES: 35 /70 = 50.0%                      28/35 = 80.0%  
NO: 32 /70 = 45.7%                      7/35 = 20.0%  
N/A: 3 /70 = 4.3%

### Question 17: What topics interest you that SASTA could consider for a Workshop/Field day?

Many suggestions were received, and the list will guide the Council in planning future SASTA activities. Many thanks for the input received.

### Question 18: What other activities could benefit/ be of interest to SASTA members?

Many ideas have been listed and will form a discussion document for the SASTA Council's next strategic planning meeting. The instigation of the Roadshow with the first one having taken place in February 2009, is one example of how the feedback has already been incorporated into SASTA activities.

### General Comments

The comments received were mainly complimentary, but both good and bad comments will be used for future planning. Sincere appreciation is due to those delegates and SASTA members who went to the trouble of replying to the questionnaire.

## Call for nominations for the Innovation Awards

Nominations are invited from SASTA members for candidates to be considered for the 2009 Innovation Awards, in either the Factory or the Agricultural sectors. Please send your nomination with a detailed motivation to [sasta@sugar.org.za](mailto:sasta@sugar.org.za).

The criteria which are considered by Council are: The design, development and implementation of an idea, machine, process or technique which has shown definite value in improving technology, cost-effectiveness or sustainability or safety of factory and agricultural operations. Corporate innovations will not be considered.

Closing date for 2009 nominations: 29 June 2009



# Fully Funded International Visitors Grant

The South African Sugar Technologists' Association has created a grant to support a visit by an international expert in one or more of the following research fields:

1. Fractionisation and characterization of sugarcane value products,
2. Integrated sugar production systems and techno-economic modelling, and / or
3. Environmental issues surrounding sugar production environments.

The visitor must be willing to spend at least two weeks in South Africa while working intensively with local scientists on an approved small project. The project should ideally be of pre-competitive nature and be of interest to the SA Sugarcane industry. To further enhance networking, local university academics and students should be attracted to the activities that will be carried out by the visitor. The small project that will be carried out must have a discrete outcome, such as a new set of standards, a scientific paper, etc... The visitor may also be asked to act as a keynote speaker at a coinciding SASTA workshop.

Local technologists or academics who have an active research profile in one or more of the above mentioned fields are invited to lodge an application with SASTA. The application must include the following information:

1. A two page motivation that will outline:
  - a. The need for such a project/why it is of interest to the SA Sugarcane industry
  - b. The current limitations in South Africa with respect to the field of study,

- c. The expertise and activities that are needed to address these limitations,
  - d. Why the particular visitor would be a suitable candidate,
  - e. The activities that will be undertaken and clearly stated deliverables of the visit, and
- f. The envisaged outcome(s) of the visit
  2. A detailed itinerary depicting dates, activities and places to be visited.
  3. Details of local academics, specialists and students who will be involved in the activities that will be carried out during the visit.
  4. A complete budget for the visit, including airfare, local travel, accommodation, workshop costs, etc... The budget should include the expenses of both the international visitor as well as local participants. No remuneration or consulting fees will be covered by this grant.

5. Detailed curriculum vitae of both the international visitor and the local host (grant applicant).

6. A letter by the international visitor stating his / her willingness to visit South Africa and to participate in the planned activities.

Applications must be submitted to SASTA before 31 July 2009. The grant is available to SASTA and non-SASTA members. Please address your application and any questions to:

**The SASTA Secretariat, Private  
Bag x02, Mt Edgecombe, 4300  
Email: [sasta@sugar.org.za](mailto:sasta@sugar.org.za)**

The outcome of the decision will be communicated to the applicant on or before 30 September 2009. The decision of SASTA council is final and no appeals will be entertained. The grant holder will be responsible for submitting a final report and project outcome to SASTA by no later than three months after the visit has been completed.

More information about SASTA can be obtained from [www.sasta.co.za](http://www.sasta.co.za).

## ANNUAL GENERAL MEETING OF THE SA SUGAR TECHNOLOGISTS' ASSOCIATION

Date: 26 August 2009 Time: 11:30-12:30

International Convention Centre, Durban  
Venue: SASTA Congress Plenary Hall

### AGENDA

1. Apologies
2. Minutes of AGM of 30 July 2008
3. Matters arising from the minutes
4. President's report 2009
5. Membership
6. Financial Statement
7. Election of auditors
8. Result of ballot for Council members 2009/2010
9. General

