

# **35th Annual Conference of the Australian Society of Sugar Cane Technologists 2013**

**(ASSCT 2013)**

**Townsville, Queensland, Australia  
16-18 April 2013**

**Editors:**

**R. C. Bruce**

**ISBN: 978-1-62993-915-5**

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



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For permission requests, please contact Australian Society of Sugar Cane Technologists  
at the address below.

Australian Society of Sugar Cane Technologists  
PO Box 5596  
Mackay Mail Centre  
QLD Australia 4741

Phone: (07) 4959 9100  
Fax: +61 7 4959 9100

[assctadmin@ozemail.com.au](mailto:assctadmin@ozemail.com.au)

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**THIRTY-FIFTH CONFERENCE  
TOWNSVILLE, 2013**

**PROGRAM**

The Official Opening, Annual General Meeting and all Technical Sessions of the Conference and the Industry Equipment Exhibition will be held at the Townsville Entertainment and Convention Centre, Entertainment Drive, Townsville.

**TUESDAY, 16 April 2013**

Registration at the Townsville Entertainment and Convention Centre,  
Entertainment Drive, Townsville, from 7.30 am

**MORNING SESSION – 9.00 am**

Chairman: Mr L Santarossa

**WELCOME AND OFFICIAL OPENING**

**Councillor Jenny Hill**

**Mayor, Townsville City Council**

**KEYNOTE SPEAKER**

**Mr Tom McNeill**

**Director, Green Pool Commodities, Brisbane**

9.15–9.30	President's address Mr L Santarossa
9.30–10.30	Keynote address, 'Global pressures, global prices for Australian sugar'. Mr Tom McNeill, Green Pool Commodities
10.30–11.00	<i>Official opening of Industry Equipment Exhibition and morning tea</i>

**GENERAL SESSION**

Chairman: Mr Paul Giordani

Paper	11.00–11.30	CaneLCA – A life cycle assessment (LCA)-based eco-efficiency calculator for Australian sugarcane growing, by MA Renouf '3
Paper	11.30–12.00	Development of a tool for rapid life cycle assessment of sugar and associated energy products, by PA Hobson, MA Renouf '3;
Paper	12.00–12.30	Downscaled rainfall projections for the Burdekin, Mackay and NSW, by Y Everingham, J Sexton, B Timbal '3;
	12.30–1.30	<i>Lunch</i>

**AFTERNOON SESSION–1.30 PM**

**AGRICULTURE SESSION**

Chairman: Mr Greg Shannon

- Paper 1.30–2.00 Sugarcane yield monitoring: a protocol for yield map interpolation and key considerations in the collection of yield data, by RGV Bramley, TA Jensen '4:
- Paper 2.00–2.30 Understanding the barriers to the implementation of precision agriculture in the Central Region, by J Markley, J Hughes 62
- Paper 2.30–3.00 Integrating the Weedseeker technology into weed management strategies in sugarcane, by E Fillols, C Baillie, S Underdown, T Staier '73

**MANUFACTURING SESSION**

Chairman: Dr Geoff Kent

- Paper 1.30–2.00 Effect of trash on the coagulation and flocculation of sugarcane juice, by CCD Thai, WOS Doherty '84
- Paper 2.00–2.30 Trialling a Technopulp belt press filter at Pioneer Mill, by D Sockhill, R Borg, J Gilberd, R Broadfoot, H Bakir '92
- Paper 2.30–3.00 Advances in head design for large suspended batch centrifugals, by DJ Henkel, WB McDaniel '9:
- 3.00–3.30 *Afternoon tea*

**AGRICULTURE SESSION**

Chairman: Mr Greg Shannon

- Paper 3.30–4.00 Does harvesting sugarcane crops more frequently increase biomass production? by B Salter, G Park, B Schroeder '': 6

**MANUFACTURING SESSION**

Chairman: Mr Bruce Tyson

- Paper 3.30–4.00 Routine data generation for sugar mill and refinery applications using a laboratory-based near infrared (NIR) instrument, by DA Donald, BG Graham, SP Staunton, JM Simpson, MG O'Shea '": 4
- 4.00–4.30 Short poster presentations
- 4.30–5.00 Section AGMs
- 5.00–6.00 Poster viewing
- 6.15– *Welcome function - Jupiters*

**WEDNESDAY, 17 APRIL 2013**

**MORNING SESSION—8.00 am**

AGRICULTURE SESSION (Concurrent A)

Chairman: Dr Andrew Ward

- Paper: 8.00–8.30 Modelling sugarcane yield response to applied nitrogen fertiliser in a wet tropical environment, DM Skocaj, AP Hurney, NG Inman-Bamber, BL Schroeder, YL Everingham "323
- Paper: 8:30–9.00 What causes nitrous oxide emissions from some sugarcane crops to be so high? By PJ Thorburn, JS Biggs, BCT McDonald, DE Allen, OT Denmead "332
- Paper: 9.00–9.30 Phosphorus fertiliser requirements for plant and ratoon crops on soils with very high phosphorus sorption characteristics, by DM Skocaj, AP Hurney, BL Schroeder ""33:
- Paper 9.30–10.00 An assessment of controlled release fertiliser in the Herbert cane-growing region, by LP Di Bella, SP Stacey, A Benson, A Royle, G Holzberger ""348

AGRICULTURE SESSION (Concurrent B)

Chairman: Mr Greg Shannon

- Paper: 8.00–8.30 Generating and assessing chlorotic streak disease (CSD) ratings for twenty sugarcane varieties grown at Harwood, by A Young, W Davis, S Lokes "355
- Paper: 8:30–9.00 A diagnostic test for chlorotic streak disease, by KS Braithwaite, BJ Croft "363
- Paper: 9.00–9.30 Detection and variability of the causal agent of sugarcane downy mildew, by N Thompson, L Kuniata, R Kombukon, R Magarey ""36;
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Chairman: Mr Doug Sockhill

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- Paper: 8:30–9.00 A premium sugar mill roller shell material for conventional and high performance internal bleeding rollers, by D Sabnis "3: 6
- Paper: 9.00–9.30 Towards a multi-element simulation of heavily over-consolidated bagasse using a material subroutine, F Plaza 3; 5

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- Paper 9.30–10.00 Numerical model of sugar mills with compound imbibition, by  
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Chairman: Mr Mark Poggio

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AGRICULTURE SESSION (Concurrent B)  
Chairman: Dr Peter Allsopp

- Paper: 10.30–11.00 Oriental rice thrips. *Stenchaetothrips biformis* (Bagnall), recorded  
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MANUFACTURING SESSION  
Chairman: Mr Brett Kuskopf

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1.00–5.00 Manufacturing and Agriculture Field Tours  
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**THURSDAY, 18 APRIL 2013**

**MORNING SESSION—8.00 am**

AGRICULTURE SESSION

Chairman: Mr David Calcino

- Paper: 8.00–8.30 Comparison of two wet digestion procedures for multi-element analysis of mill byproducts, by ZA Ostatek-Boczynski, P Lee-Steere, EC Keeffe, M O'Shea 4: 2
- Paper: 8.30–9.00 Developing, validating and applying near infrared (NIR) spectroscopic methods for the nutrient compositional analysis of sugar mill byproducts, by EC Keeffe, ZA Ostatek-Boczynski, LJ Donnan, WN Martens, MG O'Shea 4: :
- Paper: 9.00–9.30 Need for cropping systems R&D to suit the evolving sugarcane farming system, by BL Schroeder, PG Allsopp, T Cameron, B Salter, AP Hurney, M Davis 4; 7
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AGRICULTURE SESSION

Chairman: Mr David Calcino

- Paper: 10.30–11.00 Assessing the environmental benefits of practice change using the CaneLCA eco-efficiency calculator, by MA Renouf, BL Schroeder, N Price, PG Allsopp 574

MANUFACTURING SESSION

Chairman: Mr Paul Turnbull

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- Paper: 11.00–12.00 ASSCT AGM
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**AFTERNOON SESSION–1.00 pm**

**AGRICULTURE SESSION**

Chairman: Mr Greg Shannon

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**MANUFACTURING SESSION**

Chairman: Mr Paul Turnbull

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