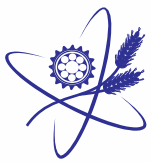


# FINAL PROGRAMME & EXHIBITOR INFORMATION



**SAAFoST**  
SOUTH AFRICAN ASSOCIATION for  
FOOD SCIENCE & TECHNOLOGY

# CONGRESS 2019

FOOD SCIENCE & TECHNOLOGY FOR THE 21<sup>ST</sup> CENTURY  
1 - 4 SEPTEMBER 2019



WELCOME TO SAAFoST's 23<sup>RD</sup> BIENNIAL

INTERNATIONAL CONGRESS & EXHIBITION

---

Birchwood Hotel and OR Tambo Conference Venue, Gauteng

[www.saafost2019.org.za](http://www.saafost2019.org.za)



# Enhancing quality of life and contributing to a healthier future

## For Individuals & Families



### Enabling healthier and happier lives

- Offering tastier and healthier choices
- Inspiring people to lead healthier lives
- Building, sharing and applying nutrition knowledge

## For our Communities



### Helping develop thriving, resilient communities

- Enhancing rural livelihoods
- Respecting & promoting human rights
- Promoting decent employment and diversity

## For the Planet



### Stewarding resources for future generations

- Caring for water
- Acting on climate change
- Safeguarding the environment

# SAAFoST FOUNDATION

It is with great pleasure to welcome the students and young professionals of the South African Food Science and Technology industry to the 23rd SAAFoST Biennial Congress in the City of Gold.

A few years have passed since MySAAFoST made its debut at the 2015 Congress in Durban, and much growth has happened since such time. Such is reflected in the programmes and activities held in the branches, where key topics have included soft-skill development, as well as job and post-graduate application support. By instilling a culture of 'I learn, I lead, I mentor,' we hope to engage with, empower and equip our members at the early stages of their careers.

We are proud to host Ms. Christie Tarantino-Dean (CEO, IFT) to address Volunteering for Relevant Food Science Organizations: Benefits and Success Stories as well as Ms. Mariana Wait Du Plessis from Par Excellence HR Practitioners to share insight on what makes for a successful first job application. In addition, we invite our members to a cocktail evening on Monday 2nd September at Hi-Flyerz (close to the conference venue) to meet and network with each other.

A number of companies are already channelling bursary funds through the Foundation and these are Maccallum (Pty) Ltd, Hilltop Food Ingredients, Sunspray Food Ingredients, Cereal and Malt, Merieux NutriSciences, Kerry Ingredients SA, and Tate and Lyle. The current cost of a bursary is R35000 per annum and, if possible, we would like companies to commit to a four year bursary plan.

We wish for your congress experience to be both an insightful and memorable one. Share your congress memories on Instagram, Twitter and Facebook with #MySAAFoST. Learn, network, have fun and get in touch should you wish to be involved with the further growth and development of MySAAFoST!

MySAAFoST Interim Committee 2019

SAAFoST Secretariat  
Sharon Beeming

Tel: +27 31 368 8000  
Fax: +27 31 368 6623

Email: [sharonb@turnerssecretariat.co.za](mailto:sharonb@turnerssecretariat.co.za)

P.O. Box 1935, Durban, 4000

**SAAFoST FOUNDATION**  
IT No. 643/2012

# INDEX

Messages	5
Organisation	6
Congress Information	8
Scientific Programme	11
Poster Programme	21
Product Theatre Programme	32
Exhibition Floorplan	34
Exhibition Key	35
Exhibitor Information	36
Sponsors	42

# MESSAGES

## Message from the Congress Chair

It is with great pleasure that the Local Organising Committee welcomes you to the 23rd SAAFoST Biennial Congress. This is the premier event of the South African food industry and we certainly hope that you enjoy every aspect of the congress that we have put together for you.

The Congress theme “Food Science and Technology for the 21st Century” is both topical and dynamic, and the Scientific Programme that has been drawn up is filled with excellent presentations covering a wide range of topics with scientific and commercial appeal relevant to the theme. There are nearly one hundred oral presentations, including thirty speakers from foreign countries. There are 120 high quality poster presentations, which are well worth reading. In addition, we hope that you thoroughly enjoy the wonderful presentation of “My Father’s Coat” by Michael Charton.

Our forty exhibition stands were sold out many months back which signifies the importance that businesses in the food industry place on identifying themselves with SAAFoST. It will give you the opportunity to learn about what these businesses offer. The Product Theatre also proved to be very popular and you can find out more about new products and services being showcased.

The social events have been well organized, and all will be most enjoyable. Registrations for the complementary cocktail party on Sunday evening have been excellent and this is being held in the Exhibition Hall giving our exhibitors extra exposure. The young scientist function on Monday evening has been sold out, but there are tickets still available for the DSM Gala Banquet being held on Tuesday evening if you have not already registered to attend.

We sincerely thank all of our generous sponsors whose contributions have assisted us in putting together this awesome Congress and ensuring that SAAFoST once again can deliver superb value for money to our delegates.

Finally, I would like to thank all the members of the LOC for their efforts and commitment in making Congress 2019 a wonderful success and an event to be remembered.



**David Watson**

Chair: SAAFoST 2019 Congress  
Organising Committee

## Message from the SAAFoST President

It is an honour and great pleasure to welcome you to the 23rd SAAFoST Biennial Congress and Exhibition in Johannesburg, South Africa, from 1 - 4 September 2019.

The SAAFoST Biennial Congress and Exhibition is undoubtedly the premier food science and technology event in Southern Africa and this year is no different. This Congress promises once again, a spectacular line-up of speakers, both national and international as you can see from the scientific programme. Included in the event, as always, are world-class exhibitors, showcasing their services, ingredients, technological innovations and so much more.

The MySAAFoST young professionals’ and students’ initiative has made significant strides in 2018/2019 and is included in the programme on Monday afternoon – a must for all falling in this extremely motivated group. Participate and secure the legacy of this wonderful organization for future generations.

This Congress certainly promises something for everyone, not least of which is an excellent opportunity to network, meet new people and establish fruitful collaborations.

Prepare yourselves to be inspired. Welcome to Johannesburg in the province of Gauteng, the “Place of Gold”, to celebrate food science and technology in Africa and around the world.



**Lucia Anelich**

SAAFoST President 2017-2019



# ORGANISATION

## SAAFoST Governing Council 2017 - 2019

President	Prof Lucia Anelich
President Elect	James McLean
Vice-President	Anza Bester
Ex Officio: Past SAAFoST President (2010-2013)	Prof Gunnar Sigge
SACNASP Representative	Dr Gerda Botha
KZN Branch (Acting Chair)	Madelein Jansen
Treasurer	James McLean
Cape Branch Chair (Acting Chair)	Melanie Naidoo
Northern Branch Chair	Ingrid Woodrow
Northern Branch Representative	Catherine Chisindi
Legislation Advisor	Nigel Sunley
Executive Director	Owen Frisby
Membership Development Officer	Irene Burke
Editor FST Magazine	Tricia Fitchet
Secretariat (Turners)	Gill Slaughter

## Local Organising Committee (LOC)

### Portfolio

Chair
Finance
Scientific Programme Chair
Exhibition and Sponsorship Chair
Marketing Committee Chair
Social Activities
SAAFoST Representatives

### Portfolio Rep

David Watson
Ingrid Woodrow
Riëtte de Kock
Denise Metcalfe
Oluwafemi Adebo
Silnia Badenhorst
Naushad Emmambux
Gunnar Sigge
Nicola Brook
Deon Gallas
Lorraine Geel
Wendy Beneke
Catherine Chisindi
Kelly Hargrave
Lauren White
Lindi Smith
Owen Frisby
Irene Burke
Tsetse Baloyi

## Media Representation

Nikita Singh	Daily Maverick, Mail & Guardian & City Press
Brenda Neall	FoodStuff SA
Bruce Cohen	Food & Beverage Reporter
Wendy Knowler	Consumer Journalist, Consumer Insights Specialist
Ivo Vegter	Freelance Journalist





**facts** Food & Allergy Consulting  
& Testing Services

*the go-to-company for peace of mind*

- ✓ Multidisciplinary Solutions
- ✓ Consumer Assurance Services
- ✓ Regulations & Standards Support
- ✓ Leaders in Allergen & Species Testing & Management
- ✓ Expert Analytical Testing & Interpretation
- ✓ Food Fraud
- ✓ Honey, Herb & Spice Authentication
- ✓ Training & Facilitation

www.factssa.com | +27 21 882 9883 | info@factssa.com



**SK chemtrade**  
concept to launch

Come and talk to us at Stand 39 on:

Product Development, Compounding, Flavours  
Nutraceuticals, Colourants, Sweeteners

[www.skchemtrade.co.za](http://www.skchemtrade.co.za)



# CONGRESS INFORMATION

The 23rd SAAFoST Biennial Congress and Exhibition will be held at the Birchwood Hotel & Conference Centre from 1 - 4 September 2019.

## ACCOMMODATION

If you have any queries with your accommodation (booked through Turners Conferences), kindly come to the registration desk in OR Tambo.

## BADGES

(sponsored by Compusense Inc.)  
Please note that delegates are required to wear their congress badges at all times in the Birchwood Hotel & Conference Centre. Access to all venues will be monitored.

## CATERING

(sponsored by British Standards Institute, Compusense Inc. & South African Meat Processors Association)

Complimentary tea / coffee & lunch for delegates and exhibitors, will be served in the exhibition hall at the times specified in the scientific programme.

## FIRST AID

Trained paramedics are on duty for the duration of the Congress. If you require first aid treatment, kindly go to the registration desk.

## INDEMNITY / INSURANCE

The Congress Organisers have taken reasonable care in making arrangements for the Congress, Exhibition, and Social Programme. Neither the Organising Body, the Local Core Organising Committee, the Professional Congress Organiser, nor its sponsors or committee members assume any responsibility, contractual or delictual for any loss, injury or damage to persons or belongings, or additional expenses incurred as a result of delays or changes in air, rail, sea, road or other services, strikes, sicknesses, weather, or for any acts or omissions by any persons, or for any unforeseen changes to the programme including cancellation of the Congress due to force majeure or any related events or activities. All participants are accordingly advised to make their own arrangements for adequate insurance cover including personal health and travel insurance.

## LOST AND FOUND

For information about lost and found property, please visit at the Birchwood Hotel & Conference Centre reception desk.

## MOBILE PHONES

Delegates are requested to turn their mobile phones off when entering sessions.

## PHOTOGRAPHS

If you would prefer that any photographs of yourself do not appear on the congress website and any other Congress and/or SAAFoST platforms, please advise the registration desk.

## PARKING

Parking is complimentary. Security guards at the entrance hand out the parking cards.

## REGISTRATION DESK TIMES

(sponsored by Tiger Brands)

Date	Time
Sunday 1 September	15:00 - 18:00
Monday 2 September	07:00 - 17:00
Tuesday 3 September	07:30 - 17:00
Wednesday 4 September	07:30 - 16:00

## SMOKING POLICY

The Birchwood Hotel & Conference Centre is a non-smoking venue. There are designated smoking areas outside the building.



## SOCIAL PROGRAMME

### Welcome Reception

Date: Sunday, 1 September 2019  
Venue: Birchwood Hotel & Conference Centre,  
OR Tambo 1 (Exhibition Hall)  
Time: 18:00 - 20:00  
Dress: Smart Casual

There is no cost to attend this function. However, you need to confirm your attendance.

### Woolworths Young Scientists Evening

Date: Monday, 2 September 2019  
Venue: Hi-Flyerz - Aviation Museum Bar  
Time: 18:30  
Dress: Smart Casual

Tickets must be purchased for this function.

### DSM Nutritional Products Banquet

Date: Tuesday, 3 September 2019  
Venue: Birchwood Hotel & Conference Centre,  
Serengeti Lapa  
Time: 18:30 for 19:00  
Dress: Smart / Formal

Tickets must be purchased for this function.

## SOCIAL MEDIA / MEDIA

Join the conversation - follow us on Instagram, Twitter or Facebook using the hashtags:  
#saafost #saafost2019 #foodscience

**Instagram** @saafost  
**Twitter** @SAAFoSTOfficial  
**Facebook** SAFoodScienceTechnology

For further congress updates and news, follow FST:  
@foodscieditor on Twitter.

A media room is available in Charles De Gaulle Boardroom at the Birchwood Hotel & Conference Centre. The media is available from Monday, 2 September - Wednesday, 4 September.

## SPEAKER PREVIEW ROOM

The speaker preview room is located in the Prague Boardroom. Please visit the speaker preview room the day before your scheduled presentation where possible. We are aware that it is not always possible to upload your presentation the day before however we would appreciate it if you could load your presentation at least 2 hours prior to your presentation time.

Speakers should report to the venue of their presentation at least 15 minutes before the start of the session to meet the session chairpersons and familiarise themselves with the audio-visual equipment and venue layout.

Speaker preview desk operating times are:

Date	Time
Sunday 1 September	15:00 - 18:00
Monday 2 September	07:00 - 17:00
Tuesday 3 September	07:30 - 17:00
Wednesday 4 September	07:30 - 13:00

## POSTERS

(sponsored by Tiger Brands)  
Posters will be displayed in the foyer of OR Tambo.

## COMPLIMENTARY AIRPORT TRANSFERS

The complimentary airport shuttle departs hourly from OR Tambo International bus terminal at 10 minutes past every hour (e.g. 12:10), and the return departs hourly from Birchwood at 30 minutes past every hour (e.g. 12:30).

Please wait in the hotel reception and the transport manager will escort you to the vehicle.

# Keeping food **safe, sustainable** and socially **responsible**



...making excellence a habit.™

# SCIENTIFIC PROGRAMME

## SUNDAY 1 SEPTEMBER 2019

### Registration and Welcome Reception

15:00 – 18:00	<b>Registration</b> Venue: OR Tambo Foyer (Sponsored by Tiger Brands)
18:00 – 20:00	<b>Welcome Reception</b> Venue: OR Tambo 1

## MONDAY 2 SEPTEMBER 2019

07:00 – 17:00	<b>Registration</b> Venue: OR Tambo Foyer (Sponsored by Tiger Brands)
08:00 – 10:00	<b>Opening: Plenary Session 1</b> Venue: NRF OR Tambo 2 <b>Session Chairpersons: David Watson &amp; Riëtte de Kock</b> Welcome by Conference Chair, Mr David Watson and SAAFoST President Lucia Anelich
08:00 – 08:10	Greetings from Institute of Food Technologists (IFT)
08:10 – 09:10	Ernest Newbery Memorial Lecture: Feeding Minds for Tomorrow's World <b>Ms Pam Coleman</b> <b>Institute of Food Technologists, President</b> <b>Merieux NutriSciences, USA</b>
09:10 – 10:00	Risk based food safety decision making within National Food Control Systems <b>Dr Lucia Anelich</b> <b>SAAFoST President</b> <b>Anelich Consulting, South Africa</b>
10:00 – 10:40	Venue: OR Tambo 1 & OR Tambo Foyer Tea/Coffee Break - sponsored by Compuse Inc. Poster Viewing - sponsored by Tiger Brands
10:40 – 12:10	<b>Plenary Session 2</b> Venue: NRF OR Tambo 2 <b>Session Chairpersons: Lucia Anelich &amp; Gunnar Sigge</b> When a Calorie is not a 'Calorie'; how sensory cues can influence calorie perception and food intake
10:40 – 11:10	<b>Dr Ciaran Forde</b> <b>A STAR Singapore Institute for Clinical Sciences, Singapore</b>
11:10 – 11:40	Advertising in 2019: more than just pushing products off the shelves <b>Mr Katlego Dithlokwe</b> <b>Strategic Planner, South Africa</b>
11:40 – 12:10	Research and business in the Nigerian Food Industry: Perspectives, challenges and opportunities <b>Dr Adedola Adeboye</b> <b>Publicity Secretary of NIFST, Moshod Abiola Polytechnic, Nigeria</b>
12:10 – 13:30	Venue: OR Tambo 1 and OR Tambo Foyer Lunch Break - sponsored by the South African Meat Processors Association (SAMPA) Poster Viewing - sponsored by Tiger Brands

13:30 – 14:30	<p><b>Session 1: Consumers in the 21<sup>st</sup> Century: Trends</b> Venue: Clover SA Heathrow <b>Session Chairperson: Lorraine Geel</b></p>	<p><b>Session 2: Food Fraud: Managing Vulnerabilities in the Food Supply Chain</b> Venue: NRF OR Tambo 2 <b>Session Chairperson: Nicola Brook</b></p>	<p><b>Session 3: Packaging / Shelf Life</b> Venue: Savannah King Shaka International <b>Session Chairperson: Maryna de Wit</b></p>	<p><b>Session 4: Novel and Emerging Technologies in Food and Beverages / Innovation in the Food and Beverage Industry</b> Venue: Compuse Inc. Cape Town International <b>Session Chairperson: Eugenie Kayitesi</b></p>
13:30 – 13:50	<p>115 - The social cognitive underpinning of food consumer' complaint behaviour: implications for manufacturers and retailers <b>Sune Donoghue and Ina Wilken University of Pretoria, South Africa</b></p>	<p>How to monitor the environment for threats and opportunities that could realise for the food industry <b>Harris Steinman FACTS, South Africa</b></p>	<p>Process validation: From low to high moisture foods <b>Ms Pam Coleman Merieux NutriSciences, USA</b></p>	<p>157 - Contribution of ionic strength and biopolymer ratio to bambara protein-gum Arabic complex formation, encapsulation and release properties <b>Nyasha Busu Durban University of Technology, South Africa</b></p>
13:50 – 14:10	<p>222 - The South African consumer and vitamin-mineral fortified food: attitude and purchasing behaviour <b>Monique Tredoux DSM Nutritional Products, South Africa</b></p>	<p>101 for VACCP – All you need to know to get you started <b>Jason Nyman NSF International</b></p>	<p>42 - Efficiency of marula and orange peel extracts as natural antioxidants for stabilization of sunflower oil-based salad dressing <b>Minenhle Khoza The University of Johannesburg, South Africa</b></p>	<p>78 - Preservation of fresh date fruit using modified atmosphere packaging <b>Fahad AL Juhaimi King Saud University; Saudi Arabia</b></p>
14:10 – 14:30	<p>183 - Snacking choices of school children in Gaborone, Botswana <b>Malebogo Lekgoa University of Botswana, Botswana</b></p>	<p>How to approach analysis as a tool for managing vulnerabilities <b>Karim Dhanani FACTS, South Africa</b></p>	<p>80 - Effects of thermosonication on phytochemicals of watermelon (<i>Citrullus lanatus</i>) juice using a response surface methodology <b>Maoto Makaepe Mossa University of South Africa, University of Venda, South Africa</b></p>	<p>81 - Preparation of xanthone- and benzophenone-enriched fractions from <i>Cyclopia genistoides</i> as ingredients for a formulated health beverage <b>Neil Miller Stellenbosch University, South Africa</b></p>
14:30 – 14:40	Comfort Break			



14:40 – 15:30	<p><b>My Father's Coat</b> - sponsored by DEW Consulting Venue: NRF OR Tambo 2</p> <p>MY FATHER'S COAT is the acclaimed story by Michael Charton. It makes the incredible story of South Africa more accessible to visitors and South Africans alike. This is a human story told through the eyes of five prominent and directly interlinked protagonists spanning 200 turbulent years: Mzilikazi, Kruger, Rhodes, Smuts and Mandela. A very unique product, providing order and meaning to a notoriously complex subject.</p>
15:30 – 16:00	<p>Venue: OR Tambo 1 &amp; OR Tambo Foyer Tea/Coffee Break</p> <p>Poster Viewing - sponsored by Tiger Brands</p>
16:00 – 16:45	<p><b>My Father's Coat Continued</b> Venue: NRF OR Tambo 2</p>
17:00 – 18:00	<p><b>SAAFoST Biennial General Meeting</b> Venue: NRF OR Tambo 2</p>
	<p><b>MY SAAFoST</b> Venue: Savannah King Shaka International <b>Session Chairperson: Nwabisa Mehloimakulu</b></p> <p>17:00</p>
	<p>17:00 – 17:20</p> <p>Volunteering for relevant Food Science Organisations: Benefits and Success Stories <b>Christie Tarantino-Dean</b> <b>Institute of Food Technologists, USA</b></p>
	<p>17:20 – 17:40</p> <p>Career path and employability in the Food Industry: A South Africa context <b>Mariana Wait Du Plessis</b> <b>Par Excellence H R Practitioners, South Africa</b></p>
18:30	<p>17:40 – 18:00</p> <p>Questions &amp; Answers</p>
<p><b>Fun Evening / Woolworths Young Professionals Evening</b></p>	

07:30 – 17:00	<b>Registration</b> Venue: OR Tambo Foyer (Sponsored by Tiger Brands)		
08:00 – 10:00	<b>Dual Session 1</b> Venue: Savannah King Shaka International <b>Session Chairpersons: Janet Taylor &amp; Thierry Regnier</b>	<b>Dual Session 2</b> Venue: NRF OR Tambo 2 <b>Session Chairpersons: Elna Buys &amp; Albertus Viljoen</b>	
08:00 – 08:30	Integrating under-utilised food species in food product development <b>Dr Agnes Mangwela</b> Lilongwe University of Agriculture and Natural Resources, Malawi	Sustainable nutrition for food security <b>Dr Karen Cooper</b> - sponsored by Nestlé <b>Nestlé Research Centre, Switzerland</b>	
08:30 – 09:00	Pulses: catering for present and future consumer trends <b>Mr Andreas Risch</b> - sponsored by Bühler <b>Bühler</b>	High pressure processing and Listeria monocytogenes <b>Dr Lynn McMullen</b> University of Alberta, Canada	
09:00 – 09:30	Commercializing indigenous food technologies: a case of obushera in Uganda <b>Prof Yusuf B. Byaruhanga</b> Makare University, Uganda	Cyber – the silent assassin, mitigating cyber risks for competitive advantage <b>Mr Richard Werran</b> - sponsored by BSI <b>BSI Group, United Kingdom</b>	
09:30 – 10:00	Bread staling – How to analyse <b>Mr Kees Veeke</b> - sponsored by Anchor Yeast/Lallemand <b>DSM Food Specialties B.V. Netherlands</b>	A food safety journey <b>Mr Alistair Hirst</b> - sponsored by Kellogg's <b>Kellogg Co, United States of America</b>	
10:00 – 10:30	Venue: OR Tambo 1 & OR Tambo Foyer Tea/Coffee Break - sponsored by Compusense Inc. Poster Viewing - sponsored by Tiger Brands		
10:30 – 12:10	<b>Session 5: Innovation in the Food and Beverage Industry</b> Venue: Clover SA Heathrow <b>Session Chairpersons: Gyebi Duodu &amp; Alison Pohl</b>	<b>Session 7: Food Safety, Control and Regulation</b> Venue: Savannah King Shaka International <b>Session Chairpersons: Oluwafemi Adebo &amp; Leigh McCarroll</b>	<b>Session 8: Food Security, Nutrition and Well Being</b> Venue: Compusense Inc. Cape Town International <b>Session Chairpersons: Ennet Moholisa &amp; Daleen van der Merwe</b>
10:30 – 10:50	165 - Getting spectral imaging out of the lab & into industry: Optimal waveband based multispectral imaging <b>Kate Sendin</b> Stellenbosch University, South Africa	41 - Fungi and aflatoxin occurrence in dry food stuffs sold at informal retail outlets in the Johannesburg metropolis <b>Frederick Tabit</b> University of South Africa, South Africa	1 - The optimal seed germination temperatures and incubation time for amylase activity in finger millet malt <b>Oluyinka Amos-Awoniye</b> University of Zululand, South Africa
	22 - Evaluation of filamentous fungi and yeast for biodegradation and energy production using food waste <b>Thierry Regnier</b> Tshwane University of Technology, South Africa		

10:50 – 11:10	38 - Antimicrobial Inactivation of Bacterial Populations on grape tomatoes and ATP assessment of Treatment efficacy <b>Dike Ukuku</b> <b>FSITRU-ARS-USDA</b>	162 - Developing a total quality management tool integrating sustainability practices to address food waste in the university food service sector: A Delphi Consensus survey <b>Boineelo Pearl Lefadola</b> <b>University of Pretoria, South Africa</b>	59 - Fumonisin toxicity and bio accessibility from maize porridge <b>Belinda Du Plessis</b> <b>Tshwane University of Technology, South Africa</b>	122 - Effect of lipid-modified starch as fat replacer on the tribology, rheology and sensory characteristics of low-calorie mayonnaise-type emulsions <b>Joyce Agyei-Amponsah</b> <b>University of Pretoria, South Africa</b>
11:10 – 11:30	104 - Moving from “What is food safety culture?” to “How to actually implement it”. Case study at a medium sized South African Food Manufacturer <b>Rolf Uys</b> <b>Entecom, South Africa</b>	171 - Valorisation of lactose in whey into lactic acid by fermentation <b>Colleen Precious Kelebogile Mudau</b> <b>University of Venda, South Africa</b>	54 - Enzymatic reduction of fumonisin B1 in total hominy feed during dry milling of maize <b>Johanna Alberts</b> <b>Cape Peninsula University of Technology, South Africa</b>	13 - Enhancing essential mineral bio-accessibility in a cereal-based diet using a food-based approach <b>Oluyimika Adetola</b> <b>University of Pretoria, South Africa</b>
11:30 – 11:50	197 - A proposed food label educational model for consumers <b>Sophia van Zyl</b> <b>North-West University, South Africa</b>	216 - Food waste from farm to fork in South Africa <b>Shandré Candiotes</b> <b>University of Pretoria, South Africa</b>	69 - Adhesion and competitive exclusion of probiotic bacteria against enteroaggregative <i>Escherichia coli</i> <b>Wisdom Selorm Kofi Agbemavor</b> <b>University of Pretoria, South Africa</b>	146 - Effects of UV light and dark storage conditions on stability of ascorbyl palmitate encapsulated in normal and high amylose maize starch <b>Oluwaseun Bamidele</b> <b>University of Pretoria, South Africa</b>
11:50 – 12:10	142 - Food dilemma: Challenges and possibilities for new plant based product development <b>Hanli de Beer</b> <b>North-West University, South Africa</b>		126 - Antimicrobial activity of essential oils against foodborne pathogens, causing diarrhea <b>Moleboheng Mohlomi</b> <b>Central University of Technology, South Africa</b>	

12:10 – 13:30

Venue: OR Tambo 1 and OR Tambo Foyer  
Lunch Break - sponsored by British Standards Institute (BSI)  
Poster Viewing - sponsored by Tiger Brands

13:30 - 14:30	<b>Dual Session 3</b> Venue: NRF OR Tambo 2 <b>Session Chairperson: Ryk Lues</b>	<b>Dual Session 4</b> Venue: Savannah King Shaka International <b>Session Chairperson: Susan Featherstone</b>
13:30 - 14:00	Structuring of bakery goods <b>Dr Stefano Renzetti</b> <b>Wageningen University and Research, Netherlands</b>	An interplay between obesity and the microbiome: Review of the evidence <b>Dr Aoife Murphy</b> - sponsored by Kerry <b>Kerry, Ireland</b>
14:00 - 14:30	Flavour generation in the restaurant kitchen compared with the flavour industry <b>Mr Holger Doering</b> - sponsored by Mane <b>MANE, France</b>	Food and nutrition security status update <b>Ms Katia Santos Dias</b> <b>GAIN, Mozambique</b>
14:30 - 15:00	Venue: OR Tambo 1 & OR Tambo Foyer Tea/Coffee Break sponsored by Compusense Inc. Poster Viewing sponsored by Tiger Brands	
15:00 - 17:00	<b>Session 9: Sensory and Consumer Science</b> Venue: Clover SA Heathrow <b>Session Chairpersons: Ingrid Woodrow &amp; Annchen Mielmann</b>	<b>Session 10: Food Chemistry and Analysis</b> Venue: NRF OR Tambo 2 <b>Session Chairpersons: Wendy Beneke &amp; Chane Pretorius</b>
15:00 - 15:20	114 - Development and validation of a questionnaire to assess sensory quality control practices in food companies in African countries <b>Oghenyoma Onojakpor</b> <b>University of Pretoria, South Africa</b>	<b>Session 11: Food Safety, Control and Regulation</b> Venue: Savannah King Shaka International <b>Session Chairpersons: Bhekiswa Dlamini &amp; Hilda Nyathi</b>
15:20 - 15:40	143 - Chemical and sensory quality of South African Chenin Blanc wines produced from natural fungicide treated grapes <b>Valmary van Breda</b> <b>Agricultural Research Council, South Africa</b>	<b>Session 12: Food Security, Nutrition and Well Being</b> Venue: Compusense Inc. Cape Town International <b>Session Chairpersons: Belinda du Plessis &amp; Muthulisi Siwela</b>
15:00 - 15:20	107 - Effect of pH and protein concentration on the emulsifying properties of hyacinth bean ( <i>Lablab purpureus</i> ) protein nanoparticles <b>Tremayne Sheldon Naiker</b> <b>Durban University of Technology, South Africa</b>	121 - Progression of food safety culture in South Africa: Perspectives on local and international narratives and interventions <b>Ryk Lues</b> <b>Central University of Technology, South Africa</b>
15:20 - 15:40	124 - Effect of starch depolymerisation by $\beta$ -amylase on the formation and functional properties of starch-lipid complexes <b>Prof Mohammad Naushad</b> <b>Emmambux</b> <b>University of Pretoria, South Africa</b>	110 - A review of the causes of spoilage in canned food in South Africa over the past 20 years <b>Susan Featherstone</b> <b>Nampak R&amp;D, South Africa</b>
15:20 - 15:40	143 - Chemical and sensory quality of South African Chenin Blanc wines produced from natural fungicide treated grapes <b>Valmary van Breda</b> <b>Agricultural Research Council, South Africa</b>	204 - Nutritional and functional properties of defatted <i>Citrullus lanatus</i> flour <b>Olakunbi Olubi</b> <b>Cape Peninsula University of Technology, South Africa</b>



15:40 - 16:00	95 - Dynamic oral texture properties of African indigenous complementary porridge samples: is there a link with child protein-energy malnutrition? <b>James Makame</b> University of Pretoria, South Africa	153 - Comparative study of vicilin (7S) and legumin (11S) of Bambara protein <b>Opeyemi Alabi</b> Durban University of Technology, South Africa	192 - Optimization of the function of sanitizers and nisin using response surface methodology: Biofilm control of <i>Escherichia coli</i> O157:H7 ATCC 43888 and <i>Listeria monocytogenes</i> ATCC 7644 <b>Stanley Dula</b> Durban University of Technology, South Africa	215 - The contribution of processed foods to the diet of 6-11-month-old infants from Kwamashu, Kwazulu-Natal <b>Nazeem Sayed</b> University of Pretoria, South Africa
16:00 - 16:20	211 - Healthy lifestyle consumers: Are they as food wise as they think they are? <b>Daleen van der Merwe</b> North-West University, South Africa	187 - Effect of processing steps on antioxidant and flavonoid content of pale and roasted malt craft beers <b>Vusi Mshayisa</b> Cape Peninsula University of Technology, South Africa	138 - <i>Listeria monocytogenes</i> induced damages onto Caco-2 cells are reduced in the presence of <i>Lactobacillus casei</i> strain expressing internalin AB genes <b>Moloko Mathipa</b> University of Pretoria, South Africa	217 - Dietary patterns of rural communities of KZN and their willingness to adopt biofortified traditional dishes <b>Laurencia Govender</b> University of Kwazulu-Natal, South Africa
16:20 - 16:40	218 - Effect of insect-sorghum meal blend on the nutritional composition and consumer acceptability of cookies <b>Temitope Awobusuyi</b> University of Kwazulu-Natal, South Africa	238 - Technological potential of plant extracts for inhibiting hydroxymethylfurfural formation in bovine serum albumin and glucose model systems <b>Ndumiso Mshicileli</b> Cape Peninsula University of Technology, South Africa	39 - Inactivation of <i>Salmonella enterica</i> and <i>Listeria monocytogenes</i> on post-harvest tomatoes and carrots by radiation, sanitizer and biocontrol treatments <b>Modesto Olanya</b> USDA-ARS, USA	221 - Antioxidant activity and in vitro digestibility of maize starch modified with grape pomace phenolic extract under alkaline conditions <b>Adekanmi Kamar Oladele</b> University of Pretoria, South Africa
16:40 - 17:00		32 - Nutraceuical potential of <i>Cyclopia pubescens</i> - 2D separation and NMR structure elucidation of "new" compounds <b>Nico Walters</b> Stellenbosch University, South Africa		
19:00	<b>DSM Nutritional Products Banquet - Serengeti Lapa</b>			

07:30 – 15:00	<b>Registration</b> Venue: OR Tambo Foyer - sponsored by Tiger Brands
08:30 – 10:00	<b>Plenary Session 3</b> Plenary Venue: NRF OR Tambo 2 <b>Session Chairpersons: Tricia Fitchet &amp; Naushad Emmambux</b>
08:30 – 09:15	Traditional African Food Technologies: Solutions to 21st Century Africa's Challenges <b>Prof John Taylor</b> <b>University of Pretoria, South Africa</b>
09:15 – 10:00	Nanotechnology for the food industry: Current status and future direction <b>Prof Suprekas S Ray</b> <b>CSIR, South Africa</b>
10:00 – 10:40	Venue: OR Tambo 1 & OR Tambo Foyer Tea/Coffee Break sponsored by Compuseense Inc. Poster Viewing sponsored by Tiger Brands
10:40 – 12:00	<b>Session 13: Cereal Science &amp; Technology / Fats &amp; Oils</b> Venue: NRF OR Tambo 2 <b>Session Chairpersons: Yusi Mshayisa</b>
10:40 – 11:00	Whole grain and high fibre breads with optimized textural quality <b>Dr Martin Noort</b> <b>Wageningen Food &amp; Biobased Research, Netherlands</b>
11:00 – 11:20	Can extrusion cooking improve and/or stabilise the flavour of pearl millet porridges? <b>Isiguzoro O. Onyeoziri</b> <b>University of Pretoria, South Africa</b>
	<b>Session 14: Nutrition Society of SA</b> Venue: Clover SA Heathrow <b>Session Chairperson: Bianca van der Westhuizen</b>
	Optimum nutrition: a nutritionist's view of the role of food scientists and food technologists <b>Chantell Witten</b> <b>North West University, South Africa</b> (On behalf of Carol Browne, Independent Consultant)
	<b>Session 15: Dairy Science &amp; Technology</b> Venue: Savannah King Shaka International <b>Session Chairperson: Christine Leighton</b>
	Dairy industry sustainability: What we do at farm level <b>Dr Heinz Meissner</b> <b>Milk SA, South Africa</b>
	<b>Session 16: Meat Science &amp; Technology</b> Venue: Compuseense Inc. Cape Town International <b>Session Chairperson: Arnold Hugo</b>
	Food Safety Crisis Mitigation Strategies: An Industry perspective <b>Najib Salim</b> <b>RCL Foods, South Africa</b>
	Dairy quality testing trends in Europe <b>Bernard J. de Villiers</b> <b>bioMérieux South Africa</b>
	101 - How South African consumers perceive attributes of chicken meat during assessment of the safety of chicken meat <b>Wendy Katiyo</b> <b>University of Pretoria, South Africa</b>
	Linking current advances in nutritional research to food product development: decreasing energy density and increasing nutrient density of foods <b>Prof Naushad Emmambux</b> <b>University of Pretoria, South Africa</b>

11:20 – 11:40	160 - Effects of bioprocessing on texture of high fibre snack products <b>Markus Nikinmaa</b> VTT, Finland	The role of African vegetables and fruits as functional foods and their health benefits <b>Dharini Sivakumar</b> Tshwane University of Technology, South Africa	Sustainable diets: The role of dairy <b>Prof Friede Wenhold</b> University of Pretoria, South Africa	87 - Verification of the South African pork classification system <b>Rita Myburg</b> University of the Free State, South Africa
11:40 – 12:00	Indigenous wheat fried batter innovation: Fat reduction with fibre <b>Oluwatoyin Oladayo Onipe</b> University of Venda, South Africa	Nutrient profiling: a tool for healthier food products <b>Mariaan Wicks</b> North-West University, South Africa	Food safety and quality compliance in the dairy industry: A shared responsibility <b>Jompie Burger</b> Dairy Standard Agency, South Africa	226 - What do South African consumers want to see on red meat labels? <b>Hester Vermeulen</b> University of Pretoria, South Africa
12:00 – 13:00	Lunch Break - sponsored by South African Meat Processors Association (SAMPA) Venue: OR Tambo 1 and OR Tambo Foyer Poster Viewing - sponsored by Tiger Brands			
13:00 – 14:20	<b>Closing: Plenary Session 4</b> Plenary Venue: NRF OR Tambo 2 <b>Session Chairpersons: John Taylor &amp; Afam Jideani</b>			
13:00 – 13:40	Will the microbes have the last word? <b>Prof Pieter Gouws</b> Centre for Food Safety, Stellenbosch University, South Africa			
13:40 – 14:20	Food challenges in the 21 <sup>st</sup> century <b>Mr David Watson</b> Sunspray, South Africa			
14:20 – 15:00	Closing and Awards <b>Mr David Watson &amp; Dr Lucia Anelich</b>			
15:00 – 15:30	Venue: OR Tambo 1 Tea / Coffee Break			



# Literature reviews in food science

## What, why & how?



food and health  
information

### AN IFIS/MYSAAFOST SESSION

IFIS, the not-for-profit publisher of the FSTA database, commissioned research in 2018 into how people search for information.

The findings showed that literature reviews are a particularly big challenge, so they are developing resources to help!

### JOIN THIS IFIS/MYSAAFOST SESSION AT SAAFOST 2019 TO LEARN:


- What is a literature review
- Why they are so important
- Some key challenges students and researchers face
- Free resources IFIS is developing to help
- Tips for carrying out effective literature reviews, including:
  - **Developing a search strategy**
  - **Undertaking effective information searches**
  - **Critical appraisal**
- Questions and answers

*This session is designed for students and young professionals in the food industry.*



**FSTA**<sup>®</sup>

sciences of food and health



Tuesday 3 September  
13:30 - 14:30  
Room 2 (Product Theatre)  
Presented by Rhianna Gamble, IFIS



# POSTER PROGRAMME

Food Security, Nutrition and Well Being

The Poster Area - sponsored by Tiger Brands

PB No.	Abstract No.	Title	Authors
P1	231	Consumer prejudice against insect protein: Can it be overcome?	<b>Jessy Van Wyk</b> , Vusi Vincent Mshayisa
P2	6	Protein, Vitamin A and mineral content of instant-maize porridge as influenced by the addition of <i>Moringa oleifera</i> leaves and termite powders	<b>Khavhatondwi Netshiheni</b> , Lindelani Mushaphi, Cebisa Nesamvuni
P3	15	Snack choices: Modern factors contributing to obesity	<b>Annchen Mielmann</b> , Thomas Brunner
P4	16	Proposed strategies for South African supermarkets to increase healthier food choices	<b>Annchen Mielmann</b>
P5	17	Female consumers' motives to choose and eat sweet baked products	<b>Annchen Mielmann</b> , Thomas Brunner
P6	29	Young cladodes from cactus pears ( <i>Opuntia ficus-indica</i> ) as a viable food source	<b>Alba Du Toit</b> , Maryna De Wit, Onele Mpemba, Bonolo Makhalemele, Yo-Chia Huang, Taylon Colbert, Sonja Venter, Arno Hugo
P7	30	Nopalitos a new food source: Comparison of two nopalito cultivars to known vegetables	<b>Onele Mpemba</b> , Alba Du Toit, Maryna De Wit, Arno Hugo
P8	34	Human probiotics from cattle to battle vitamin A deficiency, the prime hidden hunger challenge	<b>Srinivasan Krishnamoorthy</b> , Elna M Buys
P9	44	Comparative effect of methanol and oil extract of <i>Ocimum gratissimum</i> on testicular morphology and spermiogram of adult male albino rats (Wistar strain)	<b>Ishmael Jaja</b> , Ishmael Jaja, Adamu Boyi, Oyeyemi Olugbenga
P10	46	Human simulated gastrointestinal digestion influences phenolic metabolite content of <i>Solanum nigrum</i> (Black nightshade) an African leafy vegetable	<b>Siphosanele Moyo</b> , Eugenie Kayitesi, Vuyo Mavumengwana
P11	60	Impact of nutrition education intervention on children under five years at Ha Thetsane Maseru	<b>Mothusi Nyofane</b> , Marinel Hoffman, Rose Dufe-Turkson
P12	61	Comparison of cost of diet and feeding practices of 6-month old infant residing in HIV exposed versus-unexposed environment	<b>Mothusi Nyofane</b> , Marinel Hoffman
P13	70	Model gluten-free bread doughs made with the sorghum and maize prolamin proteins, kafirin and zein	<b>Mphokuhle B. Ncube</b> , Janet Taylor, John R.N. Taylor
P14	103	The morphological and physico-chemical evaluation of nopalitos from twenty South African cactus pear cultivars	<b>Bonolo Makhalemele</b> , Dr M de Wit, Ms M Truter, Dr A du Toit, Dr S Amoo, Prof A Hugo
P15	125	Characterization of the nutritional quality of <i>Trichilia emetica</i> and <i>Trichilia drageana</i> seeds	<b>Gugu Felicity Tsomele</b> , Obiro Cuthbert Wokadala, Mthulisi Siwela
P16	136	Magwinya production and consumption in South Africa - towards a healthier cereal snack	<b>Oluwatoyin Onipe</b> , Daniso Beswa, Afam IO Jideani
P17	167	Quality and antioxidant properties of South African steamed wheat bread incorporating sorghum and maize flour	<b>Stellar Frisby</b> , K. Gyebi Duodu

PB No.	Abstract No.	Title	Authors
P18	168	Effect of <i>Moringa oleifera</i> leaf powder on the physicochemical properties of beef minced meat	Mukovhe Mutshatshi, <b>Tabea Mokhele</b> , Mpho Mashau
P19	170	Assessment of growth performance, haemo-biochemistry and meat quality of Japanese quails fed on <i>Moringa oleifera</i>	<b>Anzai Mulaudzi</b>
P20	186	The characterization of protein content and functional properties of <i>Lactobacillus plantarum</i> fermented <i>Moringa oleifera</i> Lam. seeds	<b>Udisha Bassai</b> , Gyebi Duodu, Naushad Emmambux, Nwabisa Mehlomakulu
P21	190	Comparison of physicochemical properties and oxidative stability of black soldier fly larvae ( <i>hermetia illucens</i> ) oil with sunflower oil	<b>Vusi Vincent Mshayisa</b> , Nanilethu Ngcukayithobi
P22	202	Plant-based foods as potential biofortificants for functional food application end use -a review	<b>Zolelwa Hardy</b> , Victoria A Jideani
P23	242	Nutritional characterisation of monkey orange ( <i>Strychnos madagascariensis</i> ) seeds for food security in South Africa	<b>Kiana Van Rayne</b> , Oluwafemi Adebo, Obiro Wokadala, Nomali Ngobese
P24	210	Goat meat to attain food security	<b>Zani Veldsman</b> , Hettie Schönfeldt

## Food Safety, Control and Regulation

PB No.	Abstract No.	Title	Authors
P25	152	Breaking new ground - findings and experiences following a food safety culture assessment at a prominent South African Food service facility	<b>Linda Jackson</b> , Ryk Lues, Adele Krogh, Bridget Day
P26	19	Does the pace of regulatory progress slow innovation?	<b>Gabrielle Jackson</b>
P27	23	Diagnostic challenges with <i>Listeria monocytogenes</i> Identification from food and environmental samples	<b>Teena Thomas</b> , Adriano Duse
P28	25	Routine antibiotic use in food production: Challenges and solutions	<b>Karim Dhanani</b>
P29	33	Application of mathematical models for the prediction of <i>Listeria monocytogenes</i> growth in ready-to-eat meals sold in South Africa	<b>Basirat Olaonipekun</b> , Ranil Coorey, Elna Buys
P30	72	Evaluation of food safety knowledge, attitudes and practices of food handlers and foodborne pathogens in Lesotho prisons.	<b>Masello Sejake</b> , Jane Nkhebenyane, Ryk Lues
P31	100	Survey of bovine brucellosis from 2013-2018 in the Eastern Cape, South Africa	<b>Wanga-Ungeviwa Phingilili</b> , Ishmael Festus Jaja, Leocadia Zhou
P32	106	Knowledge of foodborne disease pathogens among farmers, abattoir and butchery workers formal and informal meat sector in South Africa	<b>Ishmael Jaja</b> , Ezekiel Green, James Oguttu, Voster Muchenje
P33	116	Campylobacter spp. and Arcobacter spp. prevalence in ostriches reared in the Oudtshoorn area, South Africa	<b>Nompumelelo Shange</b> , Pieter Gouws, Louwrens Hoffman
P34	123	Gauteng consumers' perceptions of food safety in quick service restaurants: An importance-performance analysis	<b>Lesego Marule</b> , Gerrie Du Rand, Nadene Marx-Pienaar

PB No.	Abstract No.	Title	Authors
P35	131	In vitro and in vivo antifungal control of citrus black spot (cbs) using thyme oil and thyme oil hydrosol	<b>Bheki Thapelo Magunga</b> , N.J Malebo
P36	158	The use of essential oils to control pathogen-carrying cockroaches found in South African food markets	<b>Gosego Sedikelo</b>
P37	161	My facilities own microbial plan - the state before spoilage and pathogenic effect	<b>Dia van Staden</b>
P38	169	Assessment of microbial quality of dried fish sold in the informal market around Johannesburg and, its public health implications in South Africa	<b>Siphiwe Nkosi</b> , Edoaurd Mpinda Tshipamba
P39	175	Food safety knowledge of street vendors in Tshwane when managing fresh produce	<b>Sphephile Zwane</b> , Dr JMM Marx_Pienaar, Prof GE du Rand
P40	182	Microbial quality of the water used in the preparation of food served within the National School Nutrition Programme (NSNP), Thabong Welkom	<b>Tlholohelo Tsolo</b> , Frederick Lues, Jugen Manyatsa
P41	185	Assessment of food handler knowledge, attitudes and practices among street food vendors and consumers' perceptions of street food vending in Maseru Lesotho	<b>Pontso Letuka</b> , Jane Nkhebenyane
P42	189	South African urban consumers' knowledge regarding Listeria of processed meat products: results of a web-based survey	<b>Gerrie du Rand</b> , Nadene Marx-Pienaar
P43	193	Extraction and Characterization of Extracellular Polymeric Substances (EPS) of <i>Escherichia coli</i> O157:H7 ATCC 43888 and <i>Listeria monocytogenes</i> ATCC 7644 biofilms grown at different growth conditions	<b>Stanley Dula</b> , Oluwatosin Ademola Ijabadeniyi, Ajayeoba Titilayo Adenike
P44	200	Using XRay Technology for cold pasteurising of Food products	<b>Cherin Balt</b> , Karin Hussey
P45	93	Characterization of antibiotic resistant lactic acid bacteria in OGI steep liquor	<b>Titilayo Ajayeoba</b> , Oluwatosin Ijabadeniyi
P46	207	High protein sports supplements' protein quality and label compliance	<b>Hettie Schönfeldt</b> , Beulah Pretorius
P47	88	Getting know Salmonella	<b>Michele Maartens</b>

### Shelf life of food and prevention of losses

PB No.	Abstract No.	Title	Authors
P48	51	Quality degradation of tigernut ( <i>Cyperus esculentus L.</i> ) milk drinks during storage	<b>Taiwo Olurin</b> , Ahmad Saleh
P49	83	The effect of antioxidants (natural and synthetic) on storage stability of crude sunflower oil	<b>Som Salatou</b> , Eugenie Kayitesi
P50	118	The nutritional and rehydration properties of dried butternut squash ( <i>Cucurbita moschata</i> )	<b>Nwabisa Mehlomakulu</b> , Rentia Lewis
P51	224	Effects of microwaving sorghum grain on the sensory characteristics of porridges prepared from flours stored for up to 6 weeks	<b>Olalekan J. Adebawale</b> , John R.N. Taylor, Henrietta L. de Kock

## Food Microbiology

PB No.	Abstract No.	Title	Authors
P52	74	Microbiological quality of beef, mutton, pork, and chicken from abattoirs in the Eastern Cape Province, South Africa	<b>Philisani Ncoko</b> , Morris Makepe, Gabriel Mutero, Ishmael Jaja, Voster Muchenje
P53	7	Effects of ultraviolet c on the spores of <i>bacillus subtilis</i> and <i>bacillus velenzensis</i> suspension in phosphate buffered saline	<b>James Elegbeleye</b> , Elna Buys, Artur X. Roig-Sagues, Ramon Gervilla
P54	35	Polyphasic Taxonomy of a novel Chryseobacterium strain isolated from poultry feather waste	<b>Adeline Lum Nde</b> , George Charimba, Arina Hitzeroth, Celia Hugo, Jeffrey Newman, Laurinda Steyn
P55	40	Detection and enumeration of inoculated <i>Listeria monocytogenes</i> in unflavored ice cream mix using culture method	<b>Njabulo Maphumulo</b> , Elna Buys
P56	82	Prevalence of <i>Listeria monocytogenes</i> in ready-to-eat food sold in Johannesburg, South Africa	<b>Hattie Makumbe</b> , Frederick Tabit Tabit, Bhekisisa Dlamini
P57	86	The growth and survival of escherichia coli and staphylococcus aureus reference strains in boerewors formulated with reduced or partially replaced NaCl	<b>Alicia Freitag</b> , MacDonald Cluff, Arina Hitzeroth, Arno Hugo, Celia Hugo
P58	90	Phylogenetic analysis and molecular characterization of food spoilers associated with a novel food product	<b>Betty Ajibade</b> , Christiana Aruwa, Oluwatosin Ijabadeniyi
P59	109	Increasing the folate content of fermented sorghum with <i>lactobacillus plantarum</i>	<b>Adriana du Plessis</b> , Kwaku Duodu, Elna Buys
P60	120	Prevalence of <i>Listeria monocytogenes</i> in food samples from retail shops and street vendors in Pretoria and evaluation of probiotics as its potential control measure	<b>Brighton Ncube</b> , Moloko Mathipa, Mapitsi Thantsha
P61	127	Phytochemical composition and antioxidant activities of <i>Moringa oleifera</i> , <i>Solanum retroflexum</i> and <i>Corchorus olitorius</i> leaf extracts	<b>Nontobeko Zulu</b> , Eugene Kayitesi, Bhekisisa Dlamini
P62	130	Multi- stress adaptation and subsequent freezing alters the structural and functional properties of probiotic strains	<b>Thobeka Dlangalala</b> , Moloko Mathipa, Mapitsi Thantsha
P63	134	Antibiofilm properties of selected probiotics against <i>Listeria monocytogenes</i>	<b>Reabetswe Masebe</b> , Moloko Mathipa, Mapitsi Thantsha
P64	155	Molecular characterization and antibiotic resistance of foodborne pathogens in street -vended ready to eat meat sold in south Africa	<b>Mpinda Edoaurd Tshipamba</b>
P65	156	Targeted control of <i>Listeria monocytogenes</i> using recombinant probiotics, a promising intervention towards mitigation of listeriosis outbreaks	<b>Tlangelani Mlambo</b> , Moloko Mathipa, Mapitsi Thantsha
P66	172	Detection of subclinical mastitis causing agents from cattle of small-scale farms around Harrismith, Free State Province using culture method and Multiplex PCR	<b>Ntelekwane George Khasapane</b> , Sebolelo Jane Nkhebenyane, Oriel Thekisoe



PB No.	Abstract No.	Title	Authors
P67	205	Antimicrobial activity of <i>Thymus vulgaris</i> essential oil on the fatty acids profile of <i>Bacillus cereus</i> and <i>Staphylococcus aureus</i> cell wall	<b>Gaofetoge Lenetha</b>
P68	209	Microbial levels on the street vended foods and preparation surfaces of Mangaung Metro in South Africa	<b>Malerato Moloji</b>
P69	227	The microbial stability of overwrapped and vacuum packaged bovine blood sausage	<b>Ennet Moholisa</b> , Phillip Strydom, Magdeline Magoro, Kealeboga Mosimanyana, Arno Hugo
P70	240	Microbiological quality of dried insects (mopane worms, termites and stinky bug) sold around Thohoyandou market, South Africa	Tshedza Tangulani, <b>Shonisani Ramashia</b>
P71	243	Antimicrobial activity of <i>Lavandula officianalis</i> , <i>Mentha piperita</i> and <i>Salvia officinalis</i> essential oils on oral pathogens	<b>Sinazo Ntondini</b> , Gaofetoge Lenetha, Thywill Dzogbewu

### Innovation in the Food and Beverage Industry

PB No.	Abstract No.	Title	Authors
P72	14	Mango kernel oil as an additional ingredient for the production of a trans-fat free margarine	<b>Kgothatso Tlhapi</b> , Laura da Silva, Thierry Regnier, Belinda Du Plessis
P73	21	Development of vinegar from lilly pilly ( <i>Syzygium paniculatum</i> )	Tumissi Molelekoa, Emely Demile, Carmen Leonard, <b>Thierry Regnier</b>
P74	50	Effect of harvest maturity and blanching on drying behaviour and physico-textural properties of pomegranate arils (cv. Acco)	<b>Adegoke Olusesan Adetoro</b> , Olaniyi Amos Fawole, Umezuruike Linus Opara
P75	91	Optimization of biomass production of pigment producing filamentous fungi for use in the food industry	<b>Tumisi Molelekoa</b> , Thierry Regnier, Laura da Silva, Wilma Augustyn
P76	111	Cassava Banana Pancakes: Gluten free, soft, oven baked pancakes with an authentic African flavour	<b>Carina Mendes</b> , Lilian Kafuko, Katlego Baikie
P77	119	New product development of an affordable wheat-soy sponge cake dessert for the price-sensitive (lower LSM) market	<b>Sarah Kandolo</b> , Reagan Kawuma, Asanda Nkonyane, Heriette De Kock
P78	174	Nutritional and structural characterization of black soldier fly larvae before and after freeze drying.	<b>Bongisiwe Zozo</b> , Prof Merill Wicht, Vusi Mshayisa
P79	233	New sources of natural colorants for the industries from Madagascar Island dye plants	<b>Mahery Andriamanantena</b> , Pascal Danthu, Patricia Clerc, Thierry Reigner, Belinda Du Plessis, Fanjaniaina Fawbush Razafimbelo, Beatrice Raonizafinimanana, Thomas Petit, Yanis Caro
P80	132	Plant-based Proteins for healthy and sustainable nutrition as well as for Multi-sensory experience in applications	<b>Stefanie Speiser</b>

## Novel and Emerging Technologies in Food and Beverages

PB No.	Abstract No.	Title	Authors
P81	9	Quality characteristics of an extruded product from sorghum and peanut and its sorption isotherms	<b>Sunday Sobowale</b> , Antoine Mulaba-Bafubiandi, Oluwafemi Adebo, Patrick Njobeh
P82	58	Effect of Harvest Maturity, Fermentation Duration and Drying time on the Functional, Pasting and Organoleptic properties of Pan fired fufu powder	<b>Lukumon Ayinde Odunmbaku</b> , Samuel Sunday Sobowale, Adeyinka Elizabeth Adetunji, Olufemi Ayodeji Adebo, Oluwale Omotoso
P83	92	Hot by Nature: Whole Genome Sequencing of <i>Bacillus sporothermodurans</i> in UHT milk	<b>Rodney Owusu-Darko</b> , Silvia Dias de Oliveira, Elna Buys

## Food Chemistry and Analysis

PB No.	Abstract No.	Title	Authors
P84	12	Green solvent for phenolic characterisation of plant material: Application to <i>Cyclopia pubescens</i>	<b>Nico Walters</b> , Elizabeth Joubert, Dalene De Beer
P85	20	Phytochemical characteristics and potential use of Bauhinia galpinii flowers as a novel source of dye	<b>Thierry Regnier</b> , Wilma Augustyn
P86	24	Cross-reactivity and allergen risk assessments	Jana Coetzee, <b>Harris Steinman</b>
P87	31	Effects of Soxhlet and water extraction on phenolic composition and antioxidant capacity of Marula and Orange peels.	<b>Minenhle Khoza</b> , Eugenie Kayitesi
P88	45	Nutritional and antinutritional factors of Raw and fermented Bambara groundnut ( <i>Vigna subterranea</i> ).	<b>Janet Adebiyi</b> , Patrick Njobeh, Eugenie Kayitesi
P89	49	Functional properties of hydrothermally treated maize starch with stearic acid	<b>Clarity Ropafadzo Mapengo</b> , Mohammad Naushad Emmambux, Suprakas Sinha Ray
P90	56	Gas chromatography high resolution time of flight mass spectrometry (GC-HRTOF-MS) dataset of whole grain sorghum and derived ting (a fermented Southern African food)	<b>Oluwafemi Adebo</b> , Eugenie Kayitesi, Janet Adebiyi, Patrick Njobeh
P91	75	Effects of fermentation and lactic acid acidification on protein quality of finger millet gruel	<b>John Lubaale</b> , Gyebi. K Duodu
P92	99	Effect of extrusion cooking on cooking quality, beta carotene content and antioxidant properties of gluten free maize - orange fleshed sweet potato pasta	<b>Rose Otema Baah</b> , M. Naushad Emmambux, KG Duodu
P93	108	Characterization of <i>Coffea Arabica</i> cultivars grown in Port Edward, Kwa-Zulu Natal, South Africa	<b>Verushca Naicker</b> , Dr. Paul James Williams, Prof. Marena Manley

PB No.	Abstract No.	Title	Authors
P94	133	Establishing relationship between structure and oil absorption in cereal fried batter and dough using conventional methods and a non-invasive double-staining microscopy protocol	<b>Oluwatoyin Onipe</b> , Daniso Beswa, Afam IO Jideani
P95	137	Development and characterization of sorghum Mahewu supplemented with Bambara groundnut	<b>Xolisile Witness Oaku</b> , Adeoluwa Adetunji, Bhekisisa Dlamini
P96	139	Bioactive compounds and antioxidant activities of fermented unripe banana flour	Promise Mokgwatjane, <b>Mpho Mashau</b>
P97	140	A study of cannabis products in the South African market	<b>Shivani Bhowan</b> , Esrie Menhennet, Mark Pieterse, Alexander Whaley
P98	147	Effect of Irradiation on Near-Infrared (NIR) Spectral Data of Honey	<b>Alexandra Rust</b> , Federico Marini, Mike Allsopp, Paul Williams, Marena Manley
P99	151	What is buzzing in your backyard?	<b>Esrie Menhennet</b> , Alexander Whaley, Shivani Bhowan, Mark Pieterse
P100	164	Optimisation of Bambara groundnut protein gelation process	<b>Faith Matiza Ruzengwe</b> , Eric O. Amonsou, Tukayi Kudanga
P101	173	Effect of added resulting flours from heat treated Bambara groundnut seeds on the rheological properties of wheat flours	<b>Peter Mukwevho</b> , Maboko Samuel Mphosi, Mohammad Naushad Emmambux
P102	178	Functional and morphological characterization of six green banana flour cultivars grown in South Africa for food application	<b>Phumudzo Blair Makatu</b>
P103	180	Functional properties of defatted marama flour: A hope for the bakery industry	<b>Patricia Nyembwe</b> , Riette de Kock
P104	198	Potential for enhanced soy storage protein breakdown and allergen reduction in soy-based foods produced with optimized sprouted soybeans	<b>Ajibola Bamikole Oyedeji</b> , John Jason Mellem, Oluwatosin Ademola Ijabadeniyi
P105	201	Rheological characterisation of flour produced from roasted wheat	<b>Zandre Germishuys</b> , Lomme Deleu, Jan Delcour, Marena Manley

## Sensory and Consumer Science

PB No.	Abstract No.	Title	Authors
P106	47	Juicing potential and sensory properties of low chill requiring apple cultivars	<b>Hermine Stander</b> , Iwan Labuschagne, Magdalena Muller, Dalene de Beer, Elizabeth Joubert
P107	66	Addition of red palm olein as natural antioxidant to sunflower oil: Effect on frying quality	<b>Nombulelo Zulu</b> , Eugénie Kayitesi, Opeoluwa Ogundele
P108	128	The product development of a gluten-free focaccia bread using smart African crops.	<b>Nadia Pretorius</b> , Michelle Fourie, Nicholas MacDonald
P109	148	Effect of cultivation medium on the fermentation potential of two <i>Saccharomyces cerevisiae</i> strains and one <i>Torulaspota delbrueckii</i> strain	Clymie Abrahams, <b>Valmary van Breda</b> , Ndiko Ludidi, Rodney Hart
P110	181	The effect of resting time (15 min, 24 h) of sorghum-soya (70:30) dough on physical and textural properties and consumer acceptability of the biscuits.	<b>Josephine Baloyi</b> , Naushad N Emmambux, John RN Taylor, Henriette L de Kock

## Consumers in the 21st century: Trends

PB No.	Abstract No.	Title	Authors
P111	113	South African Consumers' subjective and objective knowledge of the Karoo lamb claim of geographic origin: implications for consumer protection	<b>Ina Wilken</b> , Suné Donoghue, Johann Kirsten
P112	145	Mkate bread - a gluten-free garlic naan bread made from rice and cassava flour	<b>Jane Marais</b> , Celeste Khuzwayo, Brittany Worthington

## Functional Foods

PB No.	Abstract No.	Title	Authors
P113	117	Metagenomics analysis and bacterial viability of selected commercial probiotic supplements and the antibiotic resistance of probiotic isolates	<b>Richard Nyanzi</b> , Seth Rapoo, Renate Roux-Van Der Merwe, Piet Jooste, Elna Buys
P114	177	Gluten-free flat bread containing sorghum flour, cassava flour and yoghurt.	<b>Chante Bosch</b> , Nomfundo Dlamini, Daddy Kgonothi
P115	52	Effect of microwave pre-treatment on the cooking time and functional properties of pre-soaked Bambara groundnut seeds	<b>Anton Venter</b> , Prof. K.G. Duodu, Prof. M.N. Emmambux
P116	55	Functional properties of cactus pear mucilage: gelling, emulsification, edible coatings and spherification	<b>Dembe Mushanganyisi</b> , Maryna de WIT, C Bothma, Anold Hugo, S Venter, A du Toit, Liezl du TOIT

PB No.	Abstract No.	Title	Authors
P117	64	The effect of addition of hydrocolloids on the quality characteristics of gluten free bread made from unripe banana flour	<b>Ilunga Joelle Kongolo</b> , Laura Suzanne Da Silva, Belinda Du Plessis, Obiro Cuthbert Wokadala, Mieke Daneel
P118	71	Nutritional and antioxidant capacity of porridge from pre-soaked infrared heated bambara groundnut	<b>Opeolu Mayowa Ogundele</b> , Eugenie Kayitesi, Mohammad Naushad Emmambux
P119	77	Application of liquid native and powdered freeze-dried mucilage in functional food product development - A sensory perspective	<b>Maryna de Wit</b> , Alba du Toit, Carina Bothma, Arno Hugo, Schani Naudé, Kelly Bouwer
P120	94	Mucilage: Characterisation of proteins and carbohydrates responsible for capacity and stability of foam food systems	<b>Sibongile Miya</b> , Maryna de Wit, Angeline van Biljon, Eric Amonsou, Sonya Venter

### What is new in meat, dairy, fruit & vegetables, cereals and legume, fats and oils sciences?

PB No.	Abstract No.	Title	Authors
P121	43	Starch and protein characteristics of quality protein maize grown under optimal and low nitrogen conditions	<b>Schae-Lee Olckers</b> , Garry Osthoff, Maryke Labuschagne, Perry Ng

### Convenience Food

PB No.	Abstract No.	Title	Authors
P122	57	Development and quality evaluation of cookies produced from wheat-maize cob flour blends	<b>Lukumon Ayinde Odunmbaku</b> , Samuel Sunday Sobowale, Monilola Adenekan, Olufemi Ayodeji Adebo, Oluwole Omotoso

### Environmental Sustainability and Waste Management

PB No.	Abstract No.	Title	Authors
P123	37	The functionality of bioplastics from brewers' spent grain prolamins	<b>Anesu Magwere</b> , Janet Taylor, John Taylor
P124	85	Material properties of maize starch and zein protein biopolymer blends manufactured by hot melt blending under alkaline conditions	<b>Mondli Masanabo</b> , Naushad Emmambux



## Other

PB No.	Abstract No.	Title	Authors
P125	129	The role of knowledge on the effect of external influences on the food information search of working female consumers	<b>Marli Nel</b> , Daleen van der Merwe, Hanli de Beer, Suria Ellis
P126	144	Extraction and characterisation of pectin, micro and nanocellulose from grape pomace, grapefruit peels, and sugarcane bagasse	<b>Marie Carene Nancy Picot-Allain</b> , Mohammad Naushad Emmambux
P127	149	<i>Asphodeline lutea</i> Reichenb and <i>Asphodeline cilicica</i> Tuzlaci: Wild edible medicinal plants with bioactive properties	<b>Carene Marie Nancy Picot-Allain</b> , Mohamad Fawzi Mahomoodally, Dora Melucci , Marcello Locatelli , Clinio Locatelli, Alessandro Zappi , Francesco De Laurentiis, Simone Carradori, Cristina Campestre, Lidia Leporini, Gokhan Zengin, Luigi Menghini, Abdurrahman Aktumsek, Andrei Mocan, Kanna Rengasamy
P128	154	Severity index of fasciolosis in dairy cattle slaughtered abattoir in the Eastern Cape Province South Africa	<b>Zuko Mpisana</b> , Ishmael Jaja, Munnyaradzi Christopher Marufu, Voster Muchenje

**PB No.** (Poster Board Number)



## Matching today's expectations. Smart ingredients for healthy lifestyles.

As part of their modern lifestyles, consumers expect their food to be tasty, healthy, convenient and functional at the same time. BENE0 offers smart ingredients that help you meet these expectations. Our products cater for energy and weight management, improved digestion and healthy ageing as well as better taste and texture, just to name a few. Beyond that, your product development will be inspired by our insights and expertise!

Our Sales Network Partner  
in South Africa:

  
**SAVANNAH**  
info@savannah.co.za

Follow us on:     
[www.beneo.com](http://www.beneo.com)

**beneo**  
connecting nutrition and health

# PRODUCT THEATRE PROGRAMME

## MONDAY 2 SEPTEMBER 2019

13:30 - 14:00	<b>Nestle Session</b> Venue: Marco Polo
	OPTIFAST® Programme in South Africa <b>Lynne Mincher</b> <b>NESTLÉ Health Science (NESTLÉ South Africa)</b>
14:00 - 14:30	<b>Microsep Session</b> Venue: Marco Polo
	Rapid Analysis of Functional ingredients in food and beverages <b>Willem Joubert</b> <b>Microsep (Pty) Ltd</b>

## TUESDAY 3 SEPTEMBER 2019

10:30 - 11:00	<b>Savannah Session</b> Venue: Marco Polo
	Lead the Scene and Keep it Green with Plant-based Proteins <b>Savannah Fine Chemicals Team</b>
10:30 - 11:00	<b>Nestle Session</b> Venue: Barcelona
	NESTLÉ MILO and MAGGI Relaunch <b>Katlego Maphutha &amp; Mndeni Mncwango</b> <b>Nestlé</b>
11:05 - 12:10	<b>DSM Session</b> Venue: Marco Polo
	A solution for all in DSM's Pop-Up Innovation Application Centre <b>Lee-Anne Jacobson</b> <b>DSM Nutritional Product (Pty) Ltd</b>
11:05 - 11:35	<b>Kerry Session</b> Venue: Barcelona
	Africa Rising <b>Arnold Mnkandla</b> <b>Kerry</b>
11:40 - 12:10	<b>SACNASP</b> Venue: Barcelona
	Registration and Regulation of Natural Scientists Practicing in South Africa <b>Dr Pradish Rampersadh / Dr Gerda Botha</b> <b>South African Council for Natural Scientific Professions (SACNASP)</b>
13:30 - 14:00	<b>IMCD Session</b> Venue: Marco Polo
	Sternwywio-lution: profitable ideas for bakery and fortification <b>Jannes Peemöller</b> <b>Mühlenchemie GmbH &amp; Co. KG, Germany</b>
14:05 - 14:35	<b>IMCD Session</b> Venue: Marco Polo
	Ingredient goes beyond starch - new ingredients addressing global consumer mega trends <b>Simon Adderley</b> <b>EMEA, United Kingdom</b>

13:30 – 14:35	<b>IFIS Session</b> Venue: Barcelona
	Literature reviews in food science – what, why and how? <b>Rhianna Gamble</b> IFIS Publishing, United Kingdom
14:45 – 15:30	<b>UOS Session</b> Venue: Marco Polo
	It's Kosher <b>Rabbi Dovi Goldstein</b> BD Kosher South Africa
14:45 – 15:30	<b>Biodx Biological Chemical Technologies (Pty) Ltd</b> Venue: Barcelona
	Contact-safe food disinfectant <b>Burt Rodrigues</b>

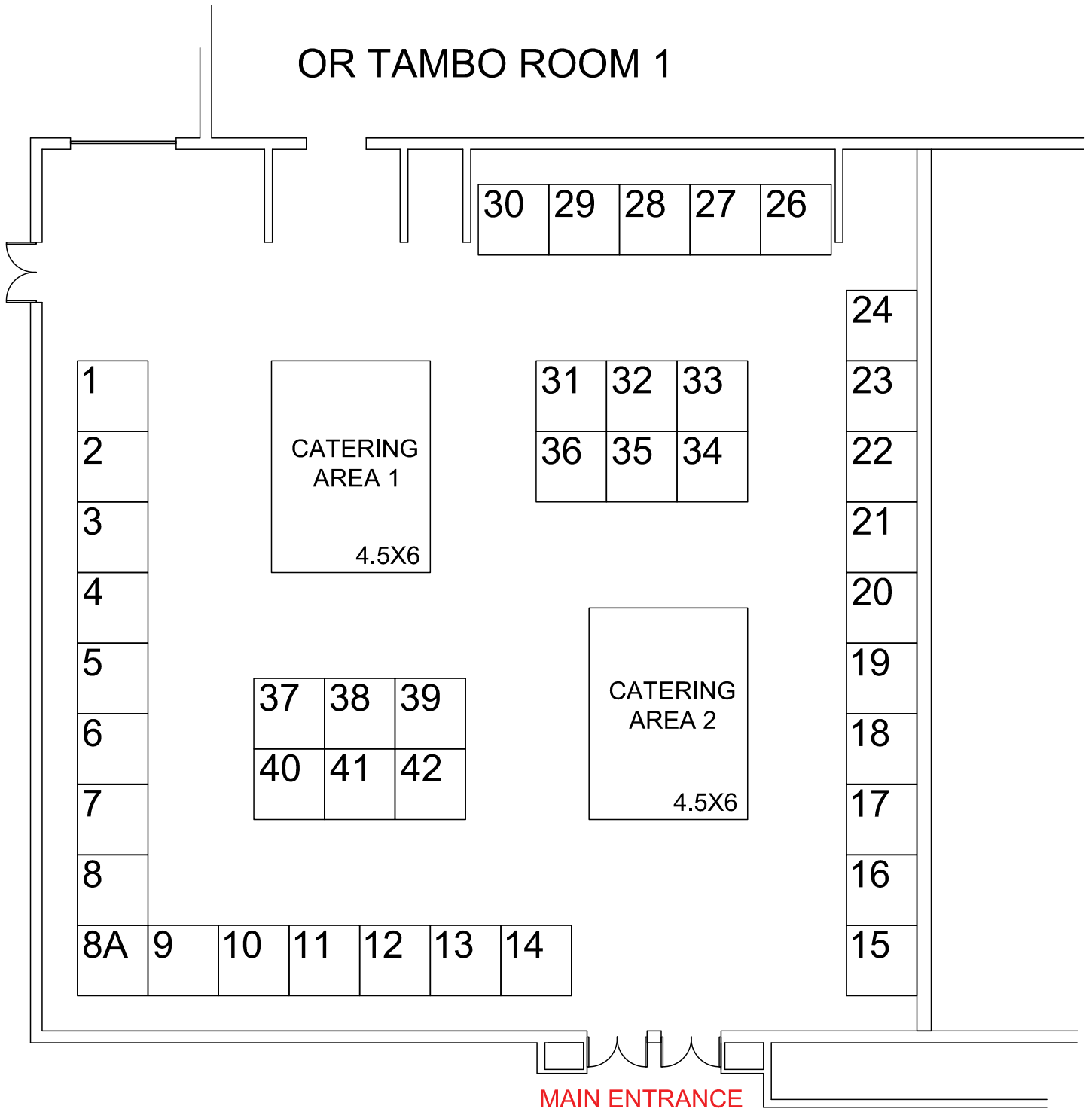
#### WEDNESDAY 4 SEPTEMBER 2019

10:40 – 11:10	<b>Savannah Session</b> Venue: Marco Polo
	Cocoa powder: Key elements to consider in the decision-making process <b>Savannah Fine Chemicals Team</b>
11:15 – 12:00	<b>Kerry Session</b> Venue: Marco Polo
	Meeting the proactive health & wellness consumer's needs through functional ingredients <b>Brian Nevin</b> Kerry



# EXHIBITION FLOORPLAN

OR TAMBO ROOM 1





# EXHIBITION KEY

EXHIBITOR	STAND
3M Food Safety	9
Analytical & Diagnostic Products	10
Anatech Instruments (Pty) Ltd	31
Anchor Yeast	6
Brenntag South Africa	22
Cape Food Ingredients	26
Cargill Food META	27
Cereal and Malt - Extract (Pty) Ltd	40
Consumers In Focus & SenseLab	19
Doehler	3, 4 & 5
Handyware Industries	33
IMCD South Africa (Pty) Ltd	16,17 & 18
Ingredion South Africa (Pty) Ltd	15
Kerry Taste and Nutrition	34 & 35
LECO Africa (Pty) Ltd	36
Mérieux NutriSciences	8
Microsep	1 & 2
National Separations	30
Nestle (South Africa) (Pty) Ltd	28 & 29
NSF International	37 & 38
Pescatech	32
PHT	41 & 42
Procert Southern Africa	24
Progress Excellence	23
SGS South Africa	7
SK Chemtrade Services (Pty) Ltd	39
Tate & Lyle	11,12 & 13
Testo South africa	14
Tongaat Hulett Starch (Pty) Ltd	20 & 21

STAND	EXHIBITOR
1 & 2	Microsep
3, 4 & 5	Doehler
6	Anchor Yeast
7	SGS South Africa
8	Mérieux NutriSciences
9	3M Food Safety
10	Analytical & Diagnostic Products
11,12 & 13	Tate & Lyle
14	Testo South africa
15	Ingredion South Africa (Pty) Ltd
16,17 & 18	IMCD South Africa (Pty) Ltd
19	Consumers In Focus & SenseLab
20 & 21	Tongaat Hulett Starch (Pty) Ltd
22	Brenntag South Africa
23	Progress Excellence
24	Procert Southern Africa
26	Cape Food Ingredients
27	Cargill Food META
28 & 29	Nestle (South Africa) (Pty) Ltd
30	National Separations
31	Anatech Instruments (Pty) Ltd
32	Pescatech
33	Handyware Industries
34 & 35	Kerry Taste and Nutrition
36	LECO Africa (Pty) Ltd
37 & 38	NSF International
39	SK Chemtrade Services (Pty) Ltd
40	Cereal and Malt - Extract (Pty) Ltd
41 & 42	PHT

# EXHIBITOR INFORMATION

Exhibitor:	<b>3M FOOD SAFETY</b>
Stand Number:	9
Website:	<a href="http://www.3M.com">www.3M.com</a>
Information:	3M Food Safety provides a vast variety of testing solutions committed to helping you protect your brand.

Exhibitor:	<b>ANALYTICAL &amp; DIAGNOSTIC PRODUCTS</b>
Stand Number:	10
Website:	<a href="http://www.adpsa.co.za">www.adpsa.co.za</a>
Information:	Analytical & Diagnostic Products are suppliers of world quality food safety testing solutions to food manufacturing facilities to assist in hygiene and sanitation programmes, allergen, microbiology, pathogen and other key food and beverage quality areas.

Exhibitor:	<b>ANATECH INSTRUMENTS</b>
Stand Number:	31
Website:	<a href="http://www.anatech.co.za">www.anatech.co.za</a>
Information:	Anatech is a leading supplier of innovative analytical instrumentation and consumables encompassing Mass Spectrometry, Chromatography, Microbiology, Water Analysis, Elemental Analysis, Molecular Spectroscopy and Molecular Biology. Anatech has a dedicated team of qualified specialists offering full service, application support and training on all instruments supplied. Assuring you of our total commitment to premium products and services.

Exhibitor:	<b>ANCHOR YEAST</b>
Stand Number:	6
Website:	<a href="http://www.anchoryeast.co.za">www.anchoryeast.co.za</a>
Information:	Anchor Yeast produces and markets yeast for the Consumer, Bakery and Wine Yeast markets. In addition, we have a partnership with DSM, a global leader in food enzymes. This synergy of yeast and enzymes positions us uniquely as leaders in dough raising technology. We offer the Bakezyme range as concentrated, innovative and cost effective enzyme for various functionalities or tailor made products to suit the baking process and final baked product requirements.

Exhibitor:	<b>BRENNTAG SOUTH AFRICA</b>
Stand Number:	22
Website:	<a href="http://www.brenntag-food-nutrition.com/en/">www.brenntag-food-nutrition.com/en/</a>
Information:	Our specialized teams are at your service in the universe of food: Creating tailor-made food formulations, no matter how small or large our partner's need. Finding innovative and smart approaches for food products that appeal to all senses. We are dedicated to better nutrition, always looking for healthier options and nutritious formulations that satisfy every appetite. It is our ambition to bring the future onto the table.

Exhibitor:	<b>CAPE FOOD INGREDIENTS</b>
Stand Number:	26
Website:	<a href="http://www.capefoodingredients.com">www.capefoodingredients.com</a>
Information:	A leading innovator in food ingredients, including flavours both sweet and savoury, and their applications. Via our R&D, we do complete formulations for all sectors of the food industry. Better taste quality and cost savings are our promise. We manufacture in South Africa, meaning big advantages for you in pricing, lead times and MOQs.

Exhibitor:	<b>CARGILL FOOD META</b>
Stand Number:	27
Website:	<a href="http://www.cargill.com">www.cargill.com</a>
Information:	<p>Cargill is committed to helping the world thrive. Cargill is working to nourish the world. We're bringing together people, ideas, and resources to deliver products, technology and ways of operating that build successful businesses and communities.</p> <p>Our team of 160,000 professionals in 70 countries draws together the worlds of food, agriculture, nutrition and risk management. For more than 150 years, we have helped farmers grow more, connecting them to broader markets. We are continuously developing products that give consumers just what they're seeking, advancing nutrition, food safety and sustainability.</p>

Exhibitor:	<b>CEREAL AND MALT-EXTRACT (PTY) LTD</b>
Stand Number:	40
Website:	<a href="http://www.cerealandmalt.com">www.cerealandmalt.com</a>
Information:	<p>A South African owned and operated company supplying a range of quality malted extracts and ingredients to the beverage and breakfast cereal, micro-brewing, baking, confectionery, savoury and snack food industries for the last 60 years. We are the leaders in malt extract production in Africa and we are also proud millers of ancient grains.</p>

Exhibitor:	<b>CONSUMERS IN FOCUS &amp; SENSELAB</b>
Stand Number:	19
Website:	<a href="http://www.senselab.co.za">www.senselab.co.za</a>
Information:	<p>Providing sensory services to the food and beverage industry using scientifically sound methodologies. Getting consumers' sensory input on products (Consumers In Focus) or profiling products to understand the sensory landscape of the product market (SenseLab).</p>

Exhibitor:	<b>DOEHLER</b>
Stand Number:	3-5
Website:	<a href="http://www.doehler.com">www.doehler.com</a>
Information:	<p>Doehler (<a href="http://www.doehler.com">www.doehler.com</a>) is a global producer, marketer and provider of technology-driven natural ingredients, ingredient systems and integrated solutions for the food and beverage industry. Doehler's integrated approach and the broad product portfolio are the optimal basis for innovative and safe food &amp; beverage applications. The product portfolio of natural ingredients ranges from natural flavours, natural colours, health ingredients, pulses &amp; cereal ingredients, dairy &amp; plant-based ingredients, fermented ingredients, dry fruit &amp; vegetable ingredients, fruit &amp; vegetable ingredients to ingredient systems.</p>

Exhibitor:	<b>HANDYWARE INDUSTRIES</b>
Stand Number:	33
Website:	<a href="http://www.handyware.co.za">www.handyware.co.za</a>
Information:	<p>Handyware, founded in 1968, is a leader in providing solutions for our customers and we are supported by manufacturing facilities in South Africa and Nigeria. Key areas we work with: Flavourings for biscuits, bakery, confectionery. Seasonings for snacks, stock powders. Food ingredients like sweeteners, fat filled milk powders, drink premixes. Plant based foods like vegemeat mince and chunks. Snack pellets.</p>

Exhibitor:	<b>IMCD SOUTH AFRICA (PTY) LTD</b>
Stand Number:	16 - 18
Website:	<a href="http://www.imcdgroup.com">www.imcdgroup.com</a>
Information:	<p>IMCD is a global leader in the sales, marketing and distribution of speciality chemicals and food ingredients. Through our technical, marketing and supply chain expertise we bring added value and growth to both our customers and principal partners throughout the world.</p> <p>IMCD focuses on partnering with prestigious suppliers that offer leading and innovative products. By working with IMCD, customers ensure they have the highest level of technical and formulatory support to create market leading and innovative products.</p>

Exhibitor:	<b>INGREDION SOUTH AFRICA (PTY) LTD</b>
Stand Number:	15
Website:	<a href="http://emea.ingredion.com/africa.html">emea.ingredion.com/africa.html</a>
Information:	<p>Ingredion Incorporated is a leading global ingredient solutions provider serving customers in more than 120 countries. Offering valued insights into key trends twinned with formulation expertise, Ingredion can enable manufacturers to produce the delicious, high-quality foods and beverages consumers seek and expect. Whether reducing recipe costs in yoghurt, building consumer-pleasing textures in savoury snacks or reformulating for clean label, Ingredion's extensive product portfolio, expertise and global network of Ingredion Idea Labs® innovation centres can help manufacturers achieve their goals.</p>

Exhibitor:	<b>KERRY TASTE AND NUTRITION</b>
Stand Number:	34 & 35
Website:	<a href="http://kerryafrica.com">kerryafrica.com</a>
Information:	<p>Our mission is to delight and nourish consumers across the globe with products people enjoy and feel better about. We are proud to provide our customers with expertise, local insights and know how they need to deliver products that people enjoy and feel better about.</p>

Exhibitor:	<b>LECO AFRICA (PTY) LTD</b>
Stand Number:	36
Website:	<a href="http://www.lecoafrika.co.za">www.lecoafrika.co.za</a>
Information:	<p>LECO Africa is a wholly-owned subsidiary of the privately owned company LECO Corporation, USA. LECO Africa has been servicing the Sub-Saharan African Analytical and Metallographic industries since 1976.</p> <p>We provide LECO Analytical, Metallographic, Spectrographic and Separation Science equipment, consumables and related spare parts manufactured and assembled in the USA.</p> <p>We assure you of our commitment to service, quality instruments and operating supplies that deliver the right results.</p>

Exhibitor:	<b>MÉRIEUX NUTRISCIENCES</b>
Stand Number:	8
Website:	<a href="http://www.merieuxnutrisciences.com/za">www.merieuxnutrisciences.com/za</a>
Information:	<p>As one of the longest-established commercial food testing laboratories in South Africa, Mérieux NutriSciences provides a comprehensive product-safety service to the food and beverage, cosmetics, hospitality and related industries from its branches in Cape Town, Midrand, Durban, George and Jeffreys Bay. By addressing needs such as microbiological and chemical testing of products, quality management systems, training (floor-worker to management level), hygiene auditing and sampling, as well an on-site technical consultancy, Mérieux NutriSciences builds long-term partnerships with its clients.</p>

Exhibitor:	<b>MICROSEP</b>
Stand Number:	1 & 2
Website:	<a href="http://www.microsep.co.za">www.microsep.co.za</a>
Information:	<p>Microsep, a distributor of laboratory equipment, offers variety of products for the food and beverage industry to meet food quality, safety and regulatory standards.</p> <p>Waters supplies food testing systems that integrate chromatography (HPLC &amp; UPLC), mass spectrometry (MS), columns, sample prep chemistries and data management software. VICAM's testing systems offer quantitative detection of mycotoxins through the choice of fluorometric or HPLC measurements.</p> <p>METTLER TOLEDO ensures adherence to quality control procedures and efficient workflows via top-performing and innovative weighing balances, titrators, moisture analysers, density and refractometers, pipettes, pH meters, UV/VIS spectrophotometers, melting-, softening- and dropping point analysers and thermal analysers.</p>

Exhibitor:	<b>NATIONAL SEPARATIONS</b>
Stand Number:	30
Website:	<a href="http://www.natsep.co.za">www.natsep.co.za</a>
Information:	<p>National Separations (NATSEP), a subsidiary of Microsep, supplies products to the food &amp; beverage industry where food safety and rapid detection of microbial contamination is crucial. Food testing products include rapid detection systems for pathogens, spoilage organisms, GMOs and allergens by real-time PCR.</p> <p>Hygiena's ATP hygiene monitoring systems provide immediate indication of surface hygiene in food and beverage processing.</p> <p>Celsis systems deliver accurate presence/absence screening results in 18-24 hours, suitable for end product release in dairy, food and beverage products where there is a low expectation of bioburden.</p> <p>The range of lab water systems provide purified water for food applications.</p>

Exhibitor:	<b>NESTLÉ (SOUTH AFRICA) (PTY) LTD</b>
Stand Number:	28 & 29
Website:	<a href="http://www.nestle.co.za">www.nestle.co.za</a>
Information:	<p>For 103 years, Nestlé South Africa has delivered on its 'Good Food, Good Life' promise to its consumers.</p> <p>We employ 3400 employees and have five factories and two Distribution Centres across South Africa. Our commitment is enshrined in our purpose of 'enhancing quality of life and contributing to a healthier life,' of individuals and families, communities where we operate, and environmental sustainability.</p> <p>We are a company with a high performance culture. We embrace and uphold the principles of creating shared-value, diversity, responsible behaviour and complying with all regulatory standards.</p>

Exhibitor:	<b>NSF INTERNATIONAL</b>
Stand Number:	37 & 38
Website:	<a href="http://www.nsf.org">www.nsf.org</a>
Information:	<p>Founded in 1944, our mission is to protect and improve global human health. Manufacturers, regulators and consumers look to us to facilitate the development of public health standards and certifications that help protect food, water, consumer products and the environment. As an independent, accredited organization, we test, audit and certify products and systems as well as provide education and risk management.</p>



Exhibitor:	<b>PESCATECH</b>
Stand Number:	32
Website:	<a href="http://www.pescatech.co.za">www.pescatech.co.za</a>
Information:	High hygiene is our ethos, we provide high quality products that can yield the best results. Whether you are looking for hygiene solutions such as brushes and brooms, to wash-down equipment, floor drains and janitorial solutions, Pescatech can give you everything you need. We are the leading importer and distributor of premium cleaning solutions and haccp products in South Africa. As a trusted supplier of a range of hygiene and cleaning products, we ensure you get the items you need for your food factory, abattoir, and restaurants to name a few.

Exhibitor:	<b>PHT</b>
Stand Number:	41 & 42
Website:	<a href="http://www.pht.group">www.pht.group</a> & <a href="http://www.pht.co.za">www.pht.co.za</a>
Information:	Hygiene and food safety are our Passion. We care about our Customers, our Suppliers and our People - we measure our success by the way we touch their lives. Because we care, we design innovative and holistic solutions.

Exhibitor:	<b>PROCERT SOUTHERN AFRICA</b>
Stand Number:	24
Website:	<a href="http://www.procert.ch">www.procert.ch</a>
Information:	ProCert is a Swiss accredited certification body offering food safety system certification in Southern Africa. Our audit team consists of local auditors who are qualified to perform BRC, FSSC, IFS, HACCP as well as ISO 45000 and ISO 14001 audits. Our philosophy is to add value through the certification process by using the audit as a basis to identify risks, allowing our clients to develop effective mitigation strategies. Our team understands the fundamental pillars of the certification process and is committed to audits with integrity, service you can rely on and certification you can trust!

Exhibitor:	<b>PROGRESS EXCELLENCE</b>
Stand Number:	23
Website:	<a href="http://www.progress-excellence.co.za">www.progress-excellence.co.za</a>
Information:	Progress Excellence offers a variety of food safety training courses - from A to Z our training courses cover all the current GFSI-recognised standards such as BRC and FSSC as well as laboratory standards. The courses are offered in a number of formats to suit company-specific needs - long or short, on-site or off-site. We will soon be celebrating 15 years of happy training memories. With a team of expert facilitators, we have delivered food safety training courses to more than 11 000 delegates across the country!

Exhibitor:	<b>SGS SOUTH AFRICA</b>
Stand Number:	7
Website:	<a href="http://www.sgs.com">www.sgs.com</a>
Information:	SGS is the world's leading inspection, verification, testing and certification company. SGS is recognized as the global benchmark for quality and integrity. With more than 97 000 employees, SGS operates a network of over 2 600 offices and laboratories around the world. Our comprehensive range of services can help you to: <ul style="list-style-type: none"> <li>• Manage risk, do better business and meet your obligations</li> <li>• Safeguard your customers and consumers</li> <li>• Comply with complex legislation</li> <li>• Ensure correct storage, shipping, packing and distribution of commodities, food ingredients and food products</li> <li>• Ensure quality and safety throughout your diverse supply chain</li> </ul>

Exhibitor:	<b>SK CHEMTRADE SERVICES (PTY) LTD</b>
Stand Number:	39
Website:	<a href="http://www.skchemtrade.co.za">www.skchemtrade.co.za</a>
Information:	SK Chemtrade offers value-added product development services. We take a brief from Concept to Launch. Through our proud associations with companies including International Flavors & Fragrances (IFF), Lycored, Vitablend and Nexira, we are equipped with a basket of world class key speciality food ingredients including flavours, colours, vitamin premixes, botanical extracts and other functional ingredients that we combine to create the perfect tailor-made compound or blend for our clientele. We also can supply these ingredients as and when required on their own. We supply customers in the beverage, confectionary, dairy, savoury, baked goods and pharmaceutical industries. In 2018 we implemented our small-scale pilot bottling plant to assist entrepreneurs in the beverage industry who are entering the market. Our vision is to offer real, tangible value to our customers by becoming a partner in dynamic product development and a key ingredient supplier.

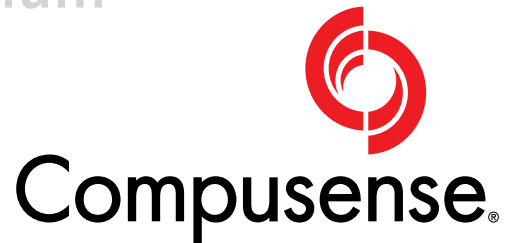
Exhibitor:	<b>TATE &amp; LYLE</b>
Stand Number:	11 - 13
Website:	<a href="http://www.tateandlyle.com">www.tateandlyle.com</a>
Information:	Tate & Lyle is a leading global food and beverage ingredients and solutions supplier, with a 160-year history of innovation. Inspired by its purpose of Improving Lives for Generations, Tate & Lyle partners with food and beverage brands worldwide to help provide consumers with healthier and tastier choices. The company specialises in sugar, fat and calorie reduction, fibre enrichment, and solutions that provide texture and stability mainly in beverages, dairy products, and soups, sauces and dressings.

Exhibitor:	<b>TESTO SOUTH AFRICA (PTY) LTD</b>
Stand Number:	14
Website:	<a href="http://www.testo.co.za">www.testo.co.za</a>
Information:	Testo is a world market leader in the field of portable and stationary measurement solutions with a strong focus on digital quality management software for the food and pharmaceutical industries. Testo supplies most of the food manufacturers, major retailers and restaurant chains in South Africa with food safety measuring devices. Testo SA is your partner in food safety instrumentation: food thermometers, cooking oil testers, pH meters, data loggers, wireless data monitoring systems and SANAS accredited calibrations for temperature, humidity and fluegas.

Exhibitor:	<b>TONGAAT HULETT STARCH (PTY) LTD</b>
Stand Number:	20 & 21
Website:	<a href="http://www.tongaathulettstarch.co.za">www.tongaathulettstarch.co.za</a>
Information:	Tongaat Hulett Starch converts more than 670 000 tons per annum of locally grown Non-GM maize into starch, starch-based ingredients and agricultural products for animal nutrition and edible oil manufacture. We also manufacture a wide range of products, from unmodified maize starch such as liquid and powdered glucose products, which are key ingredients for manufacturers of foodstuffs, beverages and a variety of industrial products. As Africa's largest producer of starch, glucose and other related products, Tongaat Hulett supplies clients domestically, across the continent and internationally.

# SPONSORS

## Platinum



## Gold



## Silver



## Congress



# INGREDIENT INNOVATION THAT'S VALUE DRIVEN

## BASIC FOOD INGREDIENTS FOR EVERYDAY SOLUTIONS



## SMART CHOICE INGREDIENTS

**W**e supply food manufacturers with quality ingredients and a wide range of additives to help **create the taste, texture, performance and appearance** you need for your food & nutritional products.

**W**e represent leading global manufacturers & our specialists can provide you with unrivalled sales support bringing the highest quality products to market:

**B**akery ingredients: flavour, texture and fortification - **B**everage ingredients for innovation - **C**onfectionary: healthier & tastier alternatives to enhance your brand - **C**ulinary solutions for sauces, dressings and prepared meals that will innovate - **D**airy & desserts: texture and functionality - **F**lavour & fragrance creation - **H**ealth & sports nutrition.

**Johannesburg:** +27 11 856 4500 **Durban:** + 27 31 202 0794  
**Cape Town:** +27 21 551 5353 **Email:** info@Savannah.co.za



SAVANNAH





Turning the best out of nature into

# Multi-Sensory & Nutritional Excellence

We pave the way for turning smart ideas into amazing products.

Find out more:

[www.doehler.com](http://www.doehler.com)

[www.we-bring-ideas-to-life.com](http://www.we-bring-ideas-to-life.com)

[mailbox@doehler.com](mailto:mailbox@doehler.com)

WE BRING  
IDEAS TO LIFE.

NATURAL INGREDIENTS  
INGREDIENT SYSTEMS  
INTEGRATED SOLUTIONS