



SASEV-WINETECH 41st International CONFERENCE

2-4 Oct 2018 | NH Charles Hotel, Somerset West, South Africa

What is novel and innovative in Grapevine and Wine Sciences?

TUESDAY 2 OCTOBER 2018

08:00 – 08:45 **REGISTRATION – Tea & Coffee**

08:45 – 09:00 Welcoming and Opening

09:00 – 09:40 **OPENING LECTURE: Prof Dr Reinhard Töpfer - Julius Kühn-Institut Geilweilerhof, Germany:**
Digital Assistance for Grapevine Breeding and Viticulture

OPEN SESSION 1: Grapevine novelties

09:40 – 10:20 **Keynote Speaker 1: Prof Melané Vivier – Stellenbosch University:** Exploring the vineyard “memory” of a wine through integrative grape to wine analyses

10:20 – 10:40 Lecture 1: **Dr Chandré Honeth:** The impact of UVB on grapevine berry metabolites and wine properties

10:40 – 11:00 Lecture 2: **Marco Simonit:** Prevention against vineyard deterioration? Grapevine pruning respecting the sap flow

11:00 – 11:25 TEA/COFFEE BREAK and POSTERS

11:25 – 11:45 Lecture 3: **Eunice Avenant:** Blue water footprint and water use efficiency of *Vitis vinifera* cv. Crimson Seedless in South Africa


11:45 – 12:05 Lecture 4: **Ihan du Plessis:** The diversity and epidemiology of Botryosphaeriaceae from the winelands of South Africa

12:05 – 12:25 FLASH POSTER PRESENTATIONS (5 mins)

- **Anke Berry** - Development of a model Merlot vineyard in the Stellenbosch area
- **Andries Daniels** - Brown or not brown – using Artificial Neural Networks (ANN) to classify whole white seedless table grape bunches scanned non-destructively with near infrared (NIR) spectroscopy
- **Matthew Webber** - Effect of hot water treatment on grapevine trunk disease *in vitro* and in rootstock propagation material
- **Davin Williams** - Following phenolic compounds from the berries to the wine: A Sauvignon blanc study

12:30 **SASEV ANNUAL GENERAL MEETING**

13:00 – 14:00 LUNCH

WORKSHOPS Registration: 13:15 – 14:00		
W01	W02	W03 
Rapid Sensory Profiling Solutions for Industry Applications	Alternative Trellis Systems – Making the Right Choice	Rapid, Optical Method for Phenolic Profiling and Classification of Wine and Spirits
Coordinator: Jeanne Brand – SUN	Coordinator: Lucinda Heyns – Winetech	Coordinator: Adam Gilmore – HORIBA Scientific
Summary: This workshop will illustrate how scientific research on rapid sensory methods, applied to wine profiling, can be used during product development, branding and marketing. A live demo show casing new sensory products and services available to industry in addition to talks on the essential theory and research will be presented.	Summary: This workshop will focus on different types of trellis systems and what practical aspects to take into account when considering to implement each of these systems. Learn more about how each system should be developed and management implications of each in an interactive atmosphere where case studies will also form part of the discussion.	Summary: This interactive workshop will demonstrate specific classification of wine and spirit samples as well as rapid quantification of their phenolic composition using a patented, traceable optical spectroscopy instrument method. The results of the instrument’s measurements will be compared to audience predictions and evaluations of selected wine and spirit sample tastings.



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WEDNESDAY 3 OCTOBER 2018

08:00 – 08:30 **REGISTRATION – Tea & Coffee**

OPEN SESSION 2: Innovative technologies and the environment

08:30 – 09:10 **Keynote Speaker 2: Dr Sigfredo Fuentes – University of Melbourne, Australia:** New and emerging technologies for sensory analysis of beverages

09:10 – 09:30 **Lecture 5: Anne Alessandri:** Innovative Teaching and Learning helps prepare graduates for the South African wine industry

09:30 – 09:50 **Lecture 6: Gert Malan:** Lessons to be learned from Israel's desert agriculture

09:50 – 10:10 **Lecture 7: Leon Dippenaar:** The effectiveness of interactive knowledge transfer channels and mobile applications in the creation of awareness amongst South African wine grape producers

10:10 – 10:40 TEA/COFFEE BREAK and POSTERS

10:40 – 11:00 **Lecture 8: Gareth Holtman:** Treatment of winery wastewater using a biological sand filter

11:00 – 11:20 **Lecture 9: Dr Carolyn Howell:** Management and re-use of treated winery wastewater, with particular reference to wine grape irrigation - Report back on technical tour to New Zealand and Australia

11:20 – 11:40 **Lecture 10: Nwabisi Masekwana:** The evaluation of selected fodder crops as nutrient interceptors during irrigation with winery wastewater in vineyards and open land

11:40 – 12:00 **Lecture 11: Marina Cornelissen:** Assessment of the sanitary status in machine harvested wine grapes: Insights gained from the Lower Olifants River region, South Africa

12:00 – 12:40 **Keynote Speaker 3: Prof Vittorino Novello – University of Turin, Italy:** Sustainability and new techniques in viticulture

12:40 – 13:00 FLASH POSTER PRESENTATIONS (5 mins)

- **Gabriella Petrovic** - Rapid and cost effective quantification of YAN concentration and composition
- **James Walls** - Factors affecting the efficacy of sparging in South African white wines
- **Dr Elleunorah Allsopp** - Do mealybugs on root remnants pose a risk to newly planted, virus-free grapevines?
- **Karla Hoogendijk** - Assessing the feasibility of using treated municipal wastewater for vineyard irrigation
- **Murray Dunn** - Breed 'em to beat 'em: Optimisation of the *in vitro* liquid culture of *Steinernema jeffreyense* for use as a biocontrol agent against key grapevine pests

13:00 – 14:00 LUNCH

WORKSHOPS Registration: 13:15 – 14:00		
W04	W05	W06
Unlocking Value in South Africa's Old Vine Resources	Precision Viticulture	Waste Not Want Not-being Water Wise Without Compromising Hygiene
Coordinator: Dr Jonathan Steyn – UCT / Dr Astrid Buica – SUN	Coordinator: Dr Carlos Poblete – SUN	Coordinator: Juli Swanepoel – Thales Services (Pty) Ltd
Summary: The question of whether, how and why market value in South Africa's 2600 hectares of old vine resources may be unlocked and leverage the South African wine category, is gaining momentum. However, scientific, sensory and business research about this category is still in its infancy. The purpose of the workshop is to facilitate conversations around research and business initiatives in this category. Two tutored tastings will assist in illustrating the distinctiveness of certified heritage vineyard wines.	Summary: The objective of this workshop is to present the main characteristics of the current systems and methods used in Precision Viticulture (PV) besides to discuss practical applications, advantages and limitations of these techniques. To have an overview of PV we will have the participation of researchers and local companies and an international keynote speaker with large experience in the subject.	Summary: The 2018 season challenged conventional thinking and established habits – also on the topic of cellar hygiene. The focus of this workshop would be to evaluate the current best cleaning and sterilization practices, as well as to investigate water saving options that would not compromise the necessary high standards of hygiene.



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THURSDAY 4 OCTOBER 2018

08:00 – 08:30 **REGISTRATION – Tea & Coffee**

OPEN SESSION 3: Novelties in Sensory & Wine Sciences

08:30 – 09:10 **Keynote Speaker 4: Prof Manfred Grossman - Hochschule Geisenheim University, Germany:** Using different strategies to address the alcohol issue in wine

09:10 – 09:30 **Lecture 12: Nadia van der Colff:** An international first: investigating consumers' wine risk perception on varietal level

09:30 – 09:50 **Lecture 13: Claudia Gevers:** Moving wine forward within the next generation – an investigation of how and why

09:50 – 10:10 **Lecture 14: Dr Hélène Nieuwoudt:** New pre-screening tool for sensory evaluation of table grapes: machine learning and support vector machine classification using reflectance spectra of single intact berries

10:10 – 10:25 FLASH POSTER PRESENTATIONS (5 mins)

- **Jeanne Brand** - Check-All-That-Apply, Pivot[®] Profile and Polarised Sensory Positioning: The pro's and con's when used for benchmarking
- **Tshepo Mokonotela** - New Insights into South African Sparkling Wine, Sensory and Consumer Study
- **Sebastian Vannevel** - A novel method of temporal sensory evaluation of wine: temporal rate-all-that-apply

10:25 – 10:45 TEA/COFFEE BREAK and POSTERS

10:45 – 11:05 **Lecture 15: Julie Mekoue Nguela:** The development of an innovative yeast autolysate to improve red wine quality

11:05 – 11:25 **Lecture 16: Dr Stéphanie Rollero:** *Kluyveromyces marxianus*: a remarkable South African non-*Saccharomyces* wine yeast

11:25 – 11:45 **Lecture 17: Dr Astrid Buica:** Elucidating chemical and sensory relationships in tainted commercial wines

11:45 – 12:05 **Lecture 18: Prof Wessel du Toit:** Novel findings on effects of oxygen in white and red wines

12:25 – 12:45 **Lecture 19: Prof Antonio Silva Ferreira:** Understanding wine oxidation: Interaction effects between Phenolics, Sugars, Metals and Sulphur Dioxide on the formation of Strecker Aldehydes

12:45 – 13:00 FLASH POSTER PRESENTATIONS (5 mins)

- **Nongcebo Langa** - Amelioration of smoke taint using achievable winemaking strategies
- **Carla Snyman** - Investigating the impact of the protease-producing non-*Saccharomyces* yeast *Metschnikowia pulcherrima* on grape proteins during wine fermentation
- **Dr Heinrich du Plessis** - Use of non-*Saccharomyces* yeasts and malolactic fermentation strategy to modify wine flavor

13:00 – 14:00 LUNCH

WORKSHOPS		
Registration: 13:15 – 14:00		
W07	W08	W09
Table Grape Production Under Protection	Distilling Your Brand's Unique Value	Web-based Automated Phenolic Analysis and Interpretation of SA Results
Coordinator: Tarryn Wettergreen/ Eunice Avenant – SATI	Coordinator: Carlen Wahl – Platform 5/ Dr Carla Enslin – Vega School	Coordinator: Dr Jose Luis Aleixandre/ Prof Wessel du Toit – SUN
Summary: The use of hail netting, as well as plastic covering over the canopy and bunch zone to protect grapes from rain, are accepted practices for successful cultivation of table grapes in the northern summer rainfall region of South Africa. Recently there has been a growing interest in cultivation of table grapes under netting and plastic covering in the other SA table grape regions. Research results (international and South African), as well as practical experience regarding table grape production under protection will be presented and discussed.	Summary: Brand building presupposes strategy for uniqueness, not sameness. The challenge is to uncover the most original and meaningful reason for your brand to exist, from the outside-in, that is from the perspective of the people that you aim to connect with. This workshop will explore and apply a strategic model to uncover the compelling motivation for your brand's existence - it is this unique value that informs the development of an effective marketing strategy.	Summary: The workshop will consist of an initial brief introduction of phenolic compounds followed by a presentation of the web based application called PhenoLab (South African Phenolics Laboratory). Two industry partners from Kanonkop Wine Estate and Villafonté will show two practical applications of the PhenoLab platform. Finally, wine tasting exercises to broadcast the potential of the application will take place with a final presentation of future applications.

18:30 DINNER & PRIZE GIVING