



19th Australian Near Infrared Spectroscopy Group
(ANISG) Conference
12 - 14 September 2022
Novotel Cairns Oasis Resort

Draft Program

Monday 12 th September 2022	
8.30-5.00pm	Registration
9.00-12.30pm	Workshop 1: NIR Nuts and Bolts - sampling, sample prep, spectrometer operation
12.30 - 1.30pm	Lunch
1.30 - 5.00pm	Workshop 2: Introduction to hyperspectral imaging
5.00-7.00pm	Welcome Reception Function Sponsored by Meder Consulting
Tuesday 13 th Sept 2022	
7.30-5.00pm	Registration
8.30 - 9.00am	Acknowledgement to Country / Opening Graeme Batten and Roger Meder
9.00 - 10.30am	SESSION 1 Session Chair: Roger Meder
9.00 - 9.35	Tony Blakeney Award: The synergy of spectroscopy, chemometrics and instrumentation in developing a NIR application – Australian case study Kerry Walsh
9.35-10.10	PLENARY: Autonomous tactics to adapt NIR calibrations to the target domain John Kalivas
10.10 - 10.30	Panel discussion and questions
10.30-11.00am	Morning Tea
11.00 - 12.30pm	SESSION 2: Session Chair: Cassandra Walker
11.00-11.25	Development of a VIS and NIR reflectance spectroscopy calibration for the estimation of washing yield and fibre diameter of commercially measured fleece samples Victoria Fish
11.25-11.50	Aquaphotomics: Fruit quality analysis Harpreet Kaur
11.50-12.15	Out with the old and in with the new: replacing instruments in an NIR network Steve Holroyd

**** Please note that this program is subject to change. Correct as at 190822**

12.15-12.30	Panel discussion and questions	
12.30-1.30pm	Lunch	
1.30 – 3.30pm	SESSION 3:	Session Chair: Daniel Cozzolino
1.30-1.55	Investigating the potential of spectroscopy to provenance natural history museum specimens	Celia Cramer
1.55-2.20	NIR spectroscopy to rapidly screen ivory toggles	Elizabeth Carter
2.20-2.45	Infrared spectroscopy for the <i>in situ</i> quality analysis of a granular Tebuthiuron formulation	Joel Johnson
2.45-3.10	Discrimination of biochar feedstock and pyrolysis condition using near infrared spectroscopy	Nicholas Anderson
3.10-3.30	Panel discussion and questions	
3.30 -4.00pm	Afternoon Tea & Poster Session	
4.00 – 5.10pm	SESSION 4 & Elevated Pitches	Session Chair: Steve Holroyd
4.00-4.05	Estimation of lycopene content in tomato fruit at different storage temperatures using visible/near infrared spectroscopy	Noriko Takahashi
4.05-4.10	Deep learning in estimation of fruit attributes using near infrared spectroscopy	Jeremy Walsh
4.10-4.35	Egg provenance without the cracking using near infrared spectroscopy	Daniel Cozzolino
4.35-5.00	Monitoring bacterial response to antibiotics using near-infrared spectroscopy	To Be Advised
4.00-5.10	Panel discussion and questions	
	Free Evening	
Wednesday 14th September 2022		
8.00-5.00pm	Registration	
8.30-10.30am	SESSION 5	Session Chair: Kyle Devey
8.30-8.55	Ensemble models using near infrared spectroscopy for compliance to 2021 Australian soil carbon farming methodology	Nicholas Anderson
8.55-9.20	Convolutional neural network analysis with multivariate inputs for fibre prediction of sugarcane	David Donald
9.20-9.45	Mems-based NIR spectral sensors for on-farm applications	Gino Putrino
9.45-10.10	The application of sensor technologies on-farm	Cassandra Walker
10.10-10.30	Panel discussion and questions	
10.30-11.00am	Morning Tea	
11.00-12.30pm	SESSION 6	Session Chair Ian Welsey
11.00-11.30	Infrared analysis applications in brewing	Glen Fox

11.30-12.00	Utilization of NIR spectroscopy to investigate the within-tree variation of loblolly pine	Laurie Schimleck
12.00-12.30	Calibration of wood density. Why is it so hard?	Roger Meder
12.30-1.30pm	Lunch	
1.30-3.30pm	SESSION 7	Session Chairs Joe Panozzo
1.30-2.00	Predicting the nutritional profile of black soldier fly larvae (<i>Hermetia Illucens</i>) using near infrared spectroscopy	Shanmugam Alagappan
2.00-2.30	NIR-hyperspectral technologies to screen wheat for elevated alpha-amylase	Linda McDonald
2.30-3.00	The spectra of wheat grains with low phosphorus	Graeme Batten
3.00-3.30	Panel discussion	
3.30 - 4.00pm	Afternoon Tea	
4.00 - 5.00pm	AGM and Close	
7.00-10.00pm	Conference Dinner	