







SI Roadshow Auckland Programme

In partnership with the Metrology Society of Australasia and the Dodd-Walls Centre

Thursday 9 May, 10:00 am - 4:00 pm

Unleash Space, Faculty of Engineering, University of Auckland, 20 Symonds Street

Morning Session	
10:00 am	Arrival Tea and Coffee
10:20 am	Welcome and Opening
	Presenter: Kevin Gudmundsson , Manager Mass and Length Quantities, Measurement Standards Laboratory of New Zealand
10:30 am	Cheese, Platinum, and Fundamental Constants – what is the SI revision all about?
	Worldwide agreement on units of measurement has brought us freedom to trade and innovate as well as supported improved wellbeing and trust. So why are we changing things up now and what does the revision of the International System of units promise for the future?
	Presenters: Dr Peter Saunders and Dr Farzana Masouleh, MSL
11:10 am	Precision Photonics – Why measuring matters in the Photon Factory
	Presenter: Professor Cather Simpson , Auckland University
11:35 am	Measuring Success: Metrology for a Sustainable and Prosperous New Zealand
	Metrology is moving into a period of rapid innovation driven by increased client expectations and emerging sensor technologies. This talk highlights some of these exciting developments and argues that a world-class metrological infrastructure is key not only to New Zealand's prosperity but to a sustainable, innovative and equitable future.
	Presenter: Associate Professor Amy Fletcher, University of Canterbury
12:00 pm	Te Hītori o te Whai Inenga a te Māori - The History of the Māori Development of Measurement

	This presentation conveys the main themes found in a preliminary study about the indigenous metrology of New Zealand. This study took a historical approach in investigating pre-European Māori measurements and measurement methods.	
	Presenter: Te Aomania Te Koha, Student, Victoria University of Wellington	
12:20 – 1:20 pm	Lunch	
Afternoon Session		
1:20 pm	The future of calibrating sensors remotely in vineyards	
	Internet connectivity provides a mechanism to build networks of low-cost sensors across the horticultural and agriculture economy to protect crops from frost, pests and diseases and to optimise chemical and water use.	
	On the downside, the cost of repairing and calibrating temperature sensors in the harsh environment is 100 to 3,000 times the cost the sensor.	
	This inform you of the work that has been going on to develop methods to build calibration tools which factor in uncertainty budgets in field measurement networks. This ensures that only reliable data are presented to the grower, and that the sensor service providers remain aware of calibration and sensor failures to optimise deployment of field staff on an as-needed basis.	
	Presenter: Mark Bart, Director of Metris	
1:40 pm	Workshop - Promoting and growing metrology awareness and knowledge in NZ	
	The MSA is leveraging off the experts at various events to capture information on how to promote metrology and education in NZ. There's already some traction in different spaces so now it's time for an update on the progress to date and an opportunity for more thinking on this.	
	This MSA workshop will involve group discussions to share ideas and get your support for the things we are doing.	
2:20 pm	Developing and validating technical methods	
	Eleanor Howick will look at what needs to be in a laboratory-developed technical method, or measurement procedure. How to verify the method is suitable and what needs to be done to validate it for use.	
	Presenter: Dr Eleanor Howick, Chief Metrologist, MSL	
3:00 – 4:00 pm	Networking hosted by the Metrology Society of Australasia	

Please <u>click here to register</u> for the Auckland SI Roadshow

MSL Supports UNESCO promote the <u>International Day of Light</u> on 16 May 2019.

