# **Microscopy New Zealand Conference 2024**

## Day 1: Monday 2nd December 2024

Time	Location	Workshops
10am - 12pm and 2pm -4pm	AgResearch Ahuwhenua room, Lincoln	Image analysis: FIJI for Beginners (includes lunch). <b>Sponsored by Plant &amp; Food Research</b>
9am - 5pm	School of Engineering, University of Canterbury, lecture theatre E5	Scanning Electron Microscopy: Master class theory and practice.  Sponsored by AXT (includes lunch)
1pm - 3pm	Lincoln University Waimarie Whare Auaha meeting room, Lincoln	Fluorescence life-time imaging confocal microscopy.
Time	Location	General
3pm	Lincoln University Waimarie foyer	Setup trade displays (closes 5pm)
7pm - 9pm	Lincoln University Waimarie foyer	Welcome Reception Sponsored by AXT - Tescan

#### Day 2: Tuesday 3rd December 2024

Time	Location	Conference
8:15am	Lincoln University Waimarie foyer	Registration opens
8:45am	Lincoln University Waimarie Inaka	Welcome with a Karakia
9am - 10:40am	Lincoln University Waimarie Inaka	Morning: Session 1: Chemical imaging using infrared microscopy at the Australian Synchrotron (Dr. Pimm Vongsvivut)  Sponsored by MNZ Inc.
10:40am - 11:00am	Lincoln University Waimarie foyer	Morning tea
11:00am - 12:30pm	Lincoln University Waimarie Inaka	Morning: Session 2: Researching human fertility, ethical and technical challenges (Dr. Karen Reader) <b>Sponsored by Evident</b>
12:30pm - 1:30pm	Lincoln University Waimarie foyer	Lunch
1:30pm -3pm	Lincoln University Waimarie Inaka	Afternoon: Session 3: Peering inside pathogens; Using cryoEM to image features inside of viruses (Dr. Alice Eruera) <b>Sponsored by JEOL</b>
3pm - 3:30pm	Lincoln University Waimarie foyer	Afternoon tea
3:30pm - 4:25pm	Lincoln University Waimarie Inaka	Afternoon: Session 4 -"Trade Secrets"
4:30pm	Lincoln University Waimarie Inaka	Poster session, - 2 minute talks. then poster setup time
6pm	Lincoln University Waimarie foyer	Trades and Vendor evening

### Day 3: Wednesday 4th December 2024

Time	Location	Conference
9am - 10:40am	Lincoln University Waimarie Inaka	Morning: Session 5: 50 years behind the microscope (Drs. Allan Mitchell and Ian Hallett): <b>Sponsored by MNZ Inc</b> .
10:40am - 11:00am	Lincoln University Waimarie foyer	Morning tea
11:00am - 12:30pm	Lincoln University Waimarie Inaka	Morning: Session 6: X-ray photoelectron spectroscopy (XPS): from basic principles, to selected case studies and new capabilities at the University of Canterbury (Dr. Vladimir Golovko)
12:30pm - 1:30pm	nLincoln University Waimarie foyer	Lunch
1:30pm - 2:30pm	Lincoln University Waimarie foyer	Poster session 2
2:30pm - 4:15pm	Lincoln University Waimarie Inaka	Afternoon: Session 7: Imaging over biological scales using optical microscopy (Dr. Paul McMillan)
6pm	"The Laboratory"	Evening Dinner  Sponsored by Thermo Fisher Scientific

### Day 4: Thursday 5th December 2024

Time	Location	Conference
9:45am - 10:30an	n Lincoln University Waimarie Inaka	Morning: Session 8: Quantifying the nanoworld: measuring mechanical properties with high-resolution AFM (Dr. Elena Taran)
10:30am - 10:45am	Lincoln University Waimarie foyer	Morning tea
10:45am - 11:30am	Lincoln University Waimarie Inaka	Session 8 continued
11:30am - 12pm	Lincoln University Waimarie Inaka	End of Conference Announcements (and prizes)
12pm	Lincoln University Waimarie Inaka	Microscopy NZ AGM
	Lincoln University Waimarie foyer	Trade display take down and clean up.

### Day 5: Friday 6th December 2024

Time	Location	Workshop
10am- 12pm	Lincoln University Waimarie foyer	Advancing fluorescence microscopy using real-time computational clearing: Leica Thunder. <b>Sponsored by Bio-Strategy - Part of DKSH Group</b>
10am- 12pm and 2pm- 4pm	AgResearch Ahuwhenua room, Lincoln	Image analysis: FIJI for Quantification. <b>Sponsored by Plant &amp; Food Research</b> (includes lunch)

Time	Location	Workshop
10am - 4pm	University of Canterbury,	Atomic force microscopy correlated infrared
	Engineering lecture theatre E5	spectroscopy (includes lunch)

#### **Workshop Descriptions**

#### **Monday**

**Image analysis: FIJI for Beginners.** Run by Dr. Paul McMillan. University of Melbourne. This full day course is sponsored by Microscopy New Zealand. Held at Plant and Food Research, Lincoln. Bring your own devices.

**Life Sciences: Fluorescence life-time imaging confocal microscopy.** Run by Dr. Claudia Meisrimler, University of Canterbury. This is an afternoon course, run at AgResearch, Lincoln with a live feed to a FLIM microscope laboratory at the University of Canterbury.

**Scanning Electron Microscopy master class, theory and practice.** Run by Dr Lena Wolff from AXT. This full day lecture course covers how an SEM works, best practice to operate one, understand imaging modes and how to care for the instrument. The workshop is sponsored by AXT PTY LTD and held at AgResearch Lincoln.

#### **Friday**

Advancing fluorescence microscopy using real-time computational clearing: Leica Thunder. Run by Dr. Charlotte Johnson. This morning live demonstration of the technology is sponsored by Bio-strategy – Part of DKSH Group, and will be held at AgResearch Lincoln.

**Image analysis: FIJI for Quantification.** Run by Dr. Paul McMillan. University of Melbourne. This full day course is sponsored by Microscopy New Zealand. Held at Plant and Food Research, Lincoln. **Bring your own devices.** 

NanolR: correlative atomic force microscopy and infrared spectroscopy mapping. Run by Dr. Mark Staiger and an application expert from Bruker, this whole day workshop is hands on and held at the University of Canterbury. Sponsored by Coherent Scientific Ltd. (Places very limited).

#### Contact

Conference enquiries email address: mnz2024@microscopynz.co.nz