

MCN/ANFF-VIC

NEW CAPABILITIES WORKSHOP



23–24 July 2024

New Horizons Bldg - Monash University
Seminar room 407/408
20 Research Way, Clayton VIC 3168

[Zoom link - Day 1](#)

Meeting ID: 898 5843 0453
Passcode: 922797

[Zoom link - Day 2](#)

Meeting ID: 874 3733 2759
Passcode: 360696



ANFF
VICTORIA



MCN/ANFF-VIC NEW CAPABILITIES WORKSHOP PROGRAM

Time	Presentation	Presenter	Category
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DAY 1 – TUESDAY, 23 JULY 2024

SESSION 1 (9:30–10:45)

09:30–09:45	Welcome, acknowledgement & housekeeping	Prof Nico Voelcker	
09:45–10:15	Materials Discovery Platform Glovebox	Prof Udo Bach	Materials Discovery
10:15–10:35	Flexus thin-film stress-measurement system, Ex-pertech wet/dry oxidation furnace, general purpose furnace, Keithley 4200A parameter analyser	Dr Abu Sadek	Thin Films
10:35–10:45	Oxford PECVD & Quorum critical point dryer (CPD)	Dr Siqi Deng	Thin Films

MORNING TEA (10:45–11:15)

SESSION 2 (11:15–12:45)

11:15–11:45	ULVAC ei-5 dual-source & Angstrom e-beam evaporators	Dr Yang Lim	Thin Films
11:45–12:15	AJA combinatorial sputtering system with e-beam evaporation, in situ ellipsometry & RHEED	Dr Ash Dyer Mr Juan Benitez Rodriguez	Thin Films
12:15–12:45	Oxford deep reactive ion etcher (DRIE), ULVAC & SAMCO reactive ion etchers (RIEs)	Mr Dan Smith Dr Ricky Tjeung	Patterning (Litho/Etch)

LUNCH (1:00–2:00)

SESSION 3 (2:00–4:00)

2:00–2:30	X-ray nanolithography facility: towards the ultimate resolution	Dr Grant Van Riessen	Patterning (Litho/Etch)
2:30–2:50	NanoScribe Photonic Professional GT2	Mr Daniel Day	Patterning (Litho/Etch)
2:50–3:20	Heidelberg MLA150 direct-write lithography system with robotic autoloader	Dr Yang Lim	Patterning (Litho/Etch)
3:20–3:40	Eulitha PhableR Talbot lithography system	Dr Hazem Abdelmaksoud	Patterning (Litho/Etch)
3:40–4:00	Heidelberg NanoFrazor Explore with direct laser sublimation (DLS) upgrade	Dr Andrea Vischioni	Patterning (Litho/Etch)

REFRESHMENTS AND NETWORKING (4:00–5:00)



Time	Presentation	Presenter	Category
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DAY 2 – WEDNESDAY, 24 JULY 2024

SESSION 4 (9:30–10:45)

9:30–10:00	3DMICROMAC femtosecond laser system & DISCO DAD3350 dicing saw	Dr Vahid Adineh	Packaging
10:00–10:15	F&S Bondtec Series 58 ball/wedge wire bonder	Dr Ash Dyer	Packaging
10:15–10:25	Polytec laser Doppler vibrometer (LDV) upgrades	Dr Ash Dyer	Characterisation
10:25–10:45	Bruker timsTOF fleX MALDI-2	Dr David Rudd	Characterisation

MORNING TEA (10:45–11:00)

SESSION 5 (11:00–12:30)

11:00–11:20	ThermoFisher Apreo FEG-SEM & upgraded EM sample-preparation capabilities	Dr Tatiana Pinedo Rivera	Characterisation
11:20–11:40	Witec Confocal Raman Microscope	Mr Ken van't Schip	Characterisation
11:40–12:00	Bruker Dimension Icon AFM electrical-measurement capabilities: PF-TUNA, PFM & SCM	Dr Hemayet Uddin	Characterisation
12:00–12:10	Bruker Dektak stylus profilometer	Dr Tatiana Pinedo Rivera	Characterisation
12:10–12:30	Neaspec neaSNOM and nano-FTIR	Mr Daniel Day	Characterisation

LUNCH (12:30–1:30)

SESSION 6 (1:30–3:30)

1:30–1:50	Microgravity reactors & Carbide laser	Dr Karyn Jarvis	ANFF-VIC Hub – Swinburne
1:50–2:10	Ceradrop electronics 3D printer & the Micro Nano Research Facility (MNRF)	Dr Huajun Shen	ANFF-VIC Hub – RMIT
2:10–2:30	He-Ion microscopy & the Materials Characterisation and Fabrication Platform (MCFP)	Dr Elena Taran	ANFF-VIC Hub – UniMel
2:30–2:50	ToF-SIMS & upgraded sample preparation facilities at the Centre for Materials and Surface Science (CMSS)	Mr See Yoong Wong	ANFF-VIC Hub – La Trobe
2:50–3:10	Novel fibre & yarn-spinning capabilities at the Institute for Frontier Materials (IFM)	Dr Faruque Abdullah	ANFF-VIC Hub – Deakin
3:10–3:30	Micro-CT 3D X-ray system, parylene coater and aerosol spray-coater	Dr Sherry Mayo	ANFF-VIC Hub – CSIRO

CLOSING REMARKS (3:30–3:40)

4:00–5:00	MCN tours (sign-up required)		
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