Australian Centre for Microscopy & Microanalysis

Professor Simon Ringer
Director

24 October 2014

RE: Invitation to the 4th Australian Atom Probe Microscopy Workshop

Dear Atom probe microscopist and/or materials scientist!

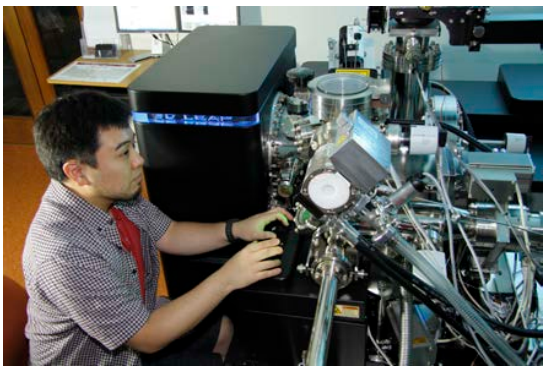
We would like to invite you to a two-day Atom Probe Microscopy Workshop that we will be hosting at the University of Sydney, during **Monday-Tuesday, 24-25 November 2014**. This is the fourth in the series of atom probe workshops hosted by the University of Sydney in the past years.

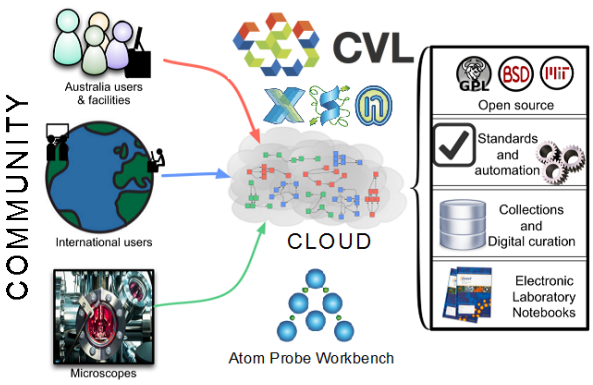
This user-focused workshop will be on the latest developments in computational approaches to atom probe microscopy. We will be asking the question: what happens after the atom probe experiment? We'd like your insights into how to answer this question. Our draft program (attached) will consist of five sessions on the current status of the field, covering reconstruction, visualisation, analysis and data workflows. The sessions will include a combination of talks, discussions and demonstrations of new techniques. The talks will be contributed from Australian as well as international researchers in the field.

This scientific workshop is free. There will be a dinner on the evening of the 24th November 2014, which is sponsored by the Australian Microscopy & Microanalysis Research Facility (AMMRF). The Combined Australian Materials Societies Conference (www.cams2014.com.au) runs between 26-28 November and we will join the CAMS welcome drinks function on the evening of the 25th November. Please **RSVP** to anna.ceguerra@sydney.edu.au by **14th November, 2014** if you want to attend the workshop, as well as the dinner, so we can finalise the numbers.
We look forward to welcoming you to the University of Sydney.

Yours sincerely,

Professor Simon Ringer
Director





Australian Centre for Microscopy & Microanalysis
Incorporating:
Australian Microscopy & Microanalysis Research Facility
ARC Centre of Excellence for Design in Light Metals
Madsen Building F09
The University of Sydney

T +61 2 9351 2351
F +61 2 9351 7682
E simon.ringer@sydney.edu.au
sydney.edu.au/acmm

ABN 15 211 513 464
CRICOS 00026A

THE UNIVERSITY OF SYDNEY

4th Australian Atom Probe Microscopy Workshop

Venue: Rooms 236-238 Madsen Building F09, The University of Sydney

Draft Program

DAY 1, Monday 24 NOV 2014

10:00 – 10:10	Introduction *Simon Ringer - The University of Sydney, Australia*
Session 1 – Current status Chair: Simon Ringer	
10:10 - 10:40	Atom probe: The big picture *Tom Kelly - Cameca*
	Atom probe: An international perspective
10:40 - 11:00	*Christian Oberdorfer - Universität Stuttgart, Germany*
	Atom probe: An Australian perspective
11:00 - 11:20	*Steven Reddy - Curtin University, W.A., Australia*
11:20 - 11:40	*Ross Marceau - Deakin University, VIC, Australia*
11:40 - 12:00 TBC	*David Sampson - University of Western Australia, Australia*
12.00 - 12.20 TBC	*Elena Pereloma - University of Wollongong, NSW, Australia*
12:20 - 13:30	Lunch (provided)
Session 2 – Reconstruction Chair: Leigh Stephenson	
13:30 - 13:50	What's wrong with the current reconstruction? *Simon Ringer – The University of Sydney, Australia*
13:50 - 14:10	New time of flight & back projection methods *Anna Ceguerra – The University of Sydney, Australia*
14:10 - 15:30	Improving atom probe reconstruction through feed-forward loops *Peter Felfer - The University of Sydney, Australia*
15:30 - 15:40	Afternoon tea (provided)
15:40 - 16:00	Physics-free reconstruction *Peter Liddicoat - The University of Sydney, Australia*
16:00 - 16:20	Crystallographic distortion correction of APT data *Andrew Breen - The University of Sydney, Australia*
16:20 - 16:40	Discussion
16:40 - 17:00	Lab tour
18:00 - late	Dinner (Sponsored by the AMMRF) *Buon Gusto Restaurant, 368 Abercrombie St, Chippendale* *Please RSVP by 14th of Nov 2014*

ammrf
Australian Microscopy & Microanalysis Research Facility

ARC Centre of Excellence Design in Light Metals

Australian Centre for Microscopy & Microanalysis
Incorporating:
Australian Microscopy & Microanalysis Research Facility
ARC Centre of Excellence for Design in Light Metals
Madsen Building F09
The University of Sydney
NSW 2006 Australia

T +61 2 XXXX XXXX
F +61 2 9351 7682
E firstname.lastname@sydney.edu.au
sydney.edu.au/acmm

ABN 15 211 513 464
CRICOS 00026A

DAY 2, Tuesday 25 NOV 2014

Session 3 – Visualisation Chair: Anna Ceguerra	
10:00 - 10:30	Visualisation using Blender *Peter Felfer - The University of Sydney, Australia*
10:30 - 11:00	Visualisation using the Oculus Rift *Leigh Stephenson - The University of Sydney, Australia*
Session 4 - Analysis Chairs: Anna Ceguerra, Andrew Breen	
11:00 - 11:20	APT Simulations - TAPSIM *Christian Oberdorfer – Universität Stuttgart, Germany*
11:20 - 11:40	The problems of mass multiplicity *Leigh Stephenson - The University of Sydney, Australia*
11:40 - 12:00	Quantitative chemical structure evaluation of Fe-Al *Ross Marceau - Deakin University, Australia*
12:00 - 12:20	Atom probe crystallography *Julie Cairney - The University of Sydney, Australia; currently on sabbatical at ETH Zurich, Switzerland*
12:20 - 12:30	Discussion
12:30 - 13:30	Lunch (provided)
13:30 - 13:50	High resolution atom probe *Peter Liddicoat - The University of Sydney, Australia*
13:50 - 14:10	Interfacial excess mapping and related techniques *Peter Felfer - The University of Sydney, Australia*
14:10 - 14:20	Ceramic-metal composite materials for solid oxide fuel cells *Barbara Scherrer - ETH Zurich, Switzerland, and The University of Sydney, Australia*
14:20 - 14:30	Analysing solute segregation in titanium alloys *Tong Li - The University of Sydney, Australia*
14:30 - 14:50 TBC	(Title TBC) *David Saxey - University of Western Australia, Australia*
14:50 - 15:00	Discussion
Session 5 – Workflows Chair: Peter Liddicoat	
15:00 - 15:30	Afternoon tea (provided)
15:30 - 16:00	Atom Probe Workbench on the CVL *Anna Ceguerra - The University of Sydney, Australia*
16:00 - 16:20	Discussion
16:20 - 16:30	Closing remarks Simon Ringer - *The University of Sydney, Australia*
18:00 - late	CAMS2014 Welcome drinks This will be an informal event, venue TBC

ammrf
Australian Microscopy & Microanalysis Research Facility

ARC Centre of Excellence Design in Light Metals

Australian Centre for Microscopy & Microanalysis
Incorporating:
Australian Microscopy & Microanalysis Research Facility
ARC Centre of Excellence for Design in Light Metals
Madsen Building F09
The University of Sydney
NSW 2006 Australia

T +61 2 XXXX XXXX
F +61 2 9351 7682
E firstname.lastname@sydney.edu.au
sydney.edu.au/acmm

ABN 15 211 513 464
CRICOS 00026A