

Characterisation of Surfaces and Interfaces using Tensiometry



Understanding wettability, adhesion, cleanliness and surface free energy and interfacial rheology.

This workshop will introduce a number of different surface based nanoscale characterisation methods from Biolin Scientific. These are powerful tools when developing advanced materials in implants, hydrophobic surfaces, composites, etc. It will give you an overview of the latest techniques for analysing real surfaces and interfaces. We will discuss how to measure wettability, adhesion and other features of heterogeneous surfaces with varying topography.

The workshop will be divided into two parts:

1/ Theory/basic principles of tensiometry - what is surface tension and surface free energy, how to measure it plus the advantages and limitations. The application areas of where it can be used will also be covered.

2/ Practical demonstrations- Talks will be followed by live demonstrations with the opportunity for you to discuss your analysis requirements.

DATES AND VENUES 2018

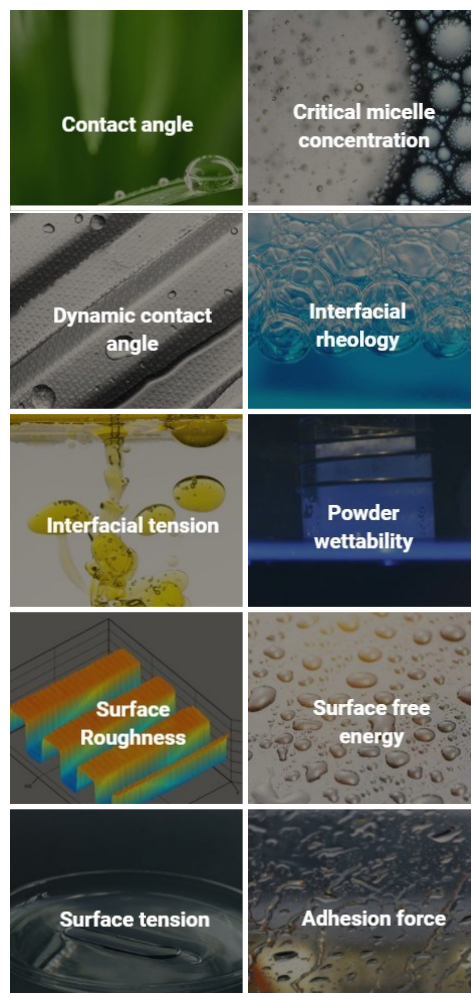
13th – 23rd March

Tue 13 Mar	Melbourne	Morning Session: 9am-12pm or Afternoon session: 1-4pm
Thu 15 Mar	Sydney	Afternoon session: 1-4pm
Fri 16 Mar	Sydney	Afternoon session: 1-4pm
Mon 19 Mar	Brisbane	Afternoon session: 1-4pm
Tue 20 Mar	Brisbane	Morning session: 9am-12pm
Fri 23 Mar	Auckland	Morning Session: 9am-12pm or Afternoon session: 1-4pm

Presentation: Presentations will be repeated twice a day for most locations. **Morning session: 9am – 10am or Afternoon session: 1pm - 2pm.**
Contact us for an updated program.

Demo/ Hands on: Following each talk the Attension Theta instruments will be available for demonstration and for sample analysis. Sessions are identical.

Morning sessions start from 10am to 12pm or Afternoon sessions start from 2pm to 4pm.



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WHAT'S ON SHOW



Attention Theta Versatile Optical Tensiometer or contact angle meter used to characterise surfaces and interfaces between gas, liquid and solid phases. Measures static and dynamic contact angle, 3D surface roughness, surface free energy, surface and interfacial tension, and interfacial rheology.

Attention Theta Lite A cost-effective version of the Theta with 6 Drop Profile measurements and a manual sample stage and manual or automated liquid dispenser.

3D Topography module Unique accessory can evaluate the influence of roughness on wetting.

Tilting stage Tiltable sample stage allows automated measurements of dynamic contact angle, used as an indicator of surface homogeneity.

INTERNATIONAL GUEST SPEAKER

This workshop is an excellent opportunity to meet Dr Gabriel Ohlsson, Distribution Sales Manager from Biolin Scientific based in Sweden. Gabriel completed his PhD in Engineering Physics at Chalmers University of Technology in Sweden in 2012. His PhD thesis named “Small-scale sample handling for studies of liquid crystals and lipid based soft matter” focused on method development within the field of (bio) sensing with a focus on small scale sample handling. His research applied to interfacial and biophysical processes such as phase transitions, molecular transport through cell membranes and membrane proteins.



WHO SHOULD ATTEND

This workshop will be useful to scientists working in research, development and quality control for a variety of industries such as chemicals, building and construction, coating suppliers, pharmaceuticals, electronics, foods, energy, paper and packaging. It will be particularly useful to users of these instruments including university researchers and students who will benefit from discussing their applications during the demonstrations.

REGISTRATION

Registration is free of charge, however participants must register.

Please register your interest online at www.atascientific.com.au

or email us at enquiries@atascientific.com.au or phone +61 2 9541 3500 .