

MAKING MEANINGFUL RHEOLOGICAL MEASUREMENTS

Date: 10-21 October 2016



FREE Seminar – register now

Rheology and the influence of particle size on dispersion stability

Dispersions are used across multiple industries – from foodstuffs to personal care and pharmaceutical formulations, and from paints and coatings to mineral slurries. For all these applications, **rheological results are key** for understanding flow properties to enable satisfactory performance at all stages of the product lifetime. In a suspension, these bulk material properties are influenced by the physical properties of the dispersed particles, such as the average particle size, the size distribution, the zeta potential (or charge on the particles) and even the shape of the particles.

This 2h seminar will present some of the fundamental properties of dispersed systems, and demonstrate how these ultimately affect rheological properties. We will discuss the **Malvern Kinexus rheometer**, a powerful laboratory-based analysis system, that performs accurate and reproducible shear and axial measurements. The talk will also cover the unique Kinexus rSpace software which allows a sequence driven approach, and brings SOP (standard operating procedure) measurements to a rheometer for the first time. rSpace is designed to help the novice and QC analyst make accurate and reproducible measurements, while giving the expert user the flexibility and functionality to develop bespoke and complex test protocols using shear and axial test modes.

Key topics covered:

1. Introduction to Rheology - Applied Measurement
2. Relating Rheological Parameters to Particle Properties - Suspension Stability



This seminar is an excellent opportunity to meet our guest speaker, Dr Shona Murphy, from Malvern Instruments, UK.

Shona is a Product Technical Specialist for Malvern's rheometry products based in the UK. Her PhD from the University of Birmingham focused on the rheological characterisation of the influence of supercritical carbon dioxide on polymer reptation time. Shona is dedicated to helping our customers make high quality and meaningful rheological measurements.

Time: 10am-12pm or 2-4pm

2016 Venues:

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|-------------|---|
| Mon 10 Oct | Curtin University |
| Tue 11 Oct | University of South Australia |
| Wed 12 Oct | RMIT University University of Melbourne |
| Thur 13 Oct | Deakin University |
| Fri 14 Oct | UNSW University of Sydney |
| Mon 17 Oct | University of Newcastle |
| Tue 18 Oct | QLD University of Technology University of QLD |
| Thur 20 Oct | University of Auckland NZ |
| Fri 21 Oct | Massey Uni Palmerston North NZ |

Who should attend: Scientists, researchers and students who wish to further their knowledge. This workshop will be particularly useful to users of these instruments who will benefit from discussing their applications.

Registration: RSVP by 7 Oct 2016.

Participation is free of charge. You can register by completing the [registration form](#) on our web site or by sending us an email to enquiries@atascientific.com.au.

CAN'T MAKE IT? [REQUEST AN ON-SITE VISIT](#)

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Malvern Kinexus Rotational Rheometer



New Kinexus Series

Kinexus is the next generation rotational rheometer developed for flexibility and ease of use. Flow properties such as shear viscosity can be measured from flow tests while dynamic material properties such as viscoelastic modulus and phase angle can be measured from oscillation tests. Kinexus supports unmatched dual-action capabilities for both shear and vertical testing and covers a wide range of applications such as complex fluids and soft solids including dispersions, emulsions, polymer and surfactant solutions, pastes and gels. Adaptable instrument design coupled with a revolutionary and unique software interface ensures the system can be easily operated by all users while maintaining a class leading performance.

You think it – Kinexus can run it ...

Malvern Mastersizer 3000 Particle size analyser



Malvern Mastersizer 3000

Mastersizer 3000 laser diffraction particle size analyser delivers rapid, accurate particle size distributions for both wet and dry dispersions with the minimum of effort. It is the premier instrument on the market for design, performance and software user experience. With a wide dynamic range spanning 0.01 to 3500 microns, the Mastersizer 3000 delivers precise, robust particle size measurements tailored to the operator's application needs. A small footprint, exceptional dispersion capabilities and intuitive software designed to ease user workload have resulted to its enduring appeal and propelled the system as the unit of choice.

For more details please contact us.

Registration:

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RSVP by 7 October 2016