

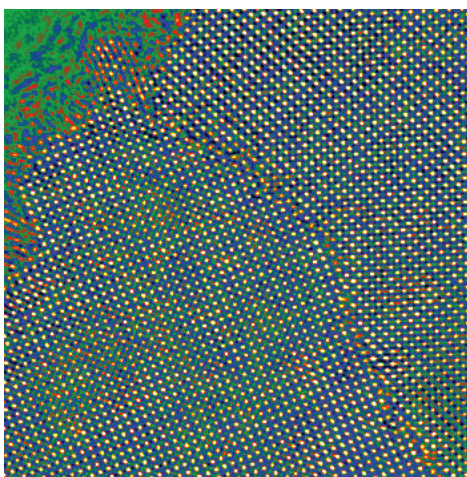
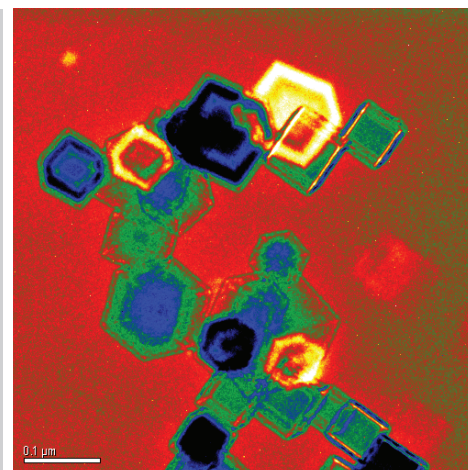
# Introduction to Transmission Electron Microscopy

Training Course

Jointly hosted by University of Pretoria &  
CSIR Nanoscience Group

JEOL

ALS  
ADVANCED LABORATORY  
SOLUTIONS



## Details

- Presenters:** Sarah Haigh (*Oxford University*)  
Larry Stoter (*JEOL UK*)  
John Critchell (*JEOL UK*)  
Steve Hant (*Oxford Instruments*)  
Neil Wilkinson (*Gatan Inc.*)
- Date:** 29th September - 1st October 2009
- Cost:** R 8200 incl VAT / R 7193 excl VAT  
(3-day Course)
- Venue:** University of Pretoria  
Faculty Natural & Agricultural Sciences  
Lab for Microscopy & Microanalysis  
Pretoria
- Time:** 09h00 - 17h00
- RSVP by:** 8 September 2009  
Michelle on 086 0000 ALS (257)  
email: [training@advancedlab.co.za](mailto:training@advancedlab.co.za)  
Please note, 12 delegates only

## Course Overview

This course forms part of the University of Pretoria's Winter School Program for Microscopy. It will be a hands-on practical experience in groups of 4.

The course will cover both theory and practical aspects of TEM including:

- Instrument Alignment for Imaging and Diffraction techniques
- High Resolution Transmission Electron Microscopy
- Energy Dispersive X-ray spectroscopy
- Digital Imaging
- Advanced TEM techniques

Course participants are not required to have any previous TEM experience but the course is also suitable for anyone wanting to improve their TEM knowledge.

Participants are encouraged to bring along their own prepared TEM specimens, although due to time constraints we cannot guarantee to be able to image all samples.

**SmartCall:** 086 0000 ALS (257)  
**SmartFax:** 086 1111 ALS (257)  
**E-mail:** [info@advancedlab.co.za](mailto:info@advancedlab.co.za)  
**Web:** [www.advancedlab.co.za](http://www.advancedlab.co.za)

# Registration Form 1/2



Please send these completed forms by 8th September 2009 to **E-mail:** [training@advancedlab.co.za](mailto:training@advancedlab.co.za) or **Fax:** 011 462-1466

The number of places on the course is strictly limited and your place **cannot** be confirmed when your completed registration forms have been received.

## Delegate Details:

Mr. / Mrs. / Miss: \_\_\_\_\_ Name: \_\_\_\_\_ Surname: \_\_\_\_\_  
Company: \_\_\_\_\_ Job Title: \_\_\_\_\_  
Phone number: \_\_\_\_\_ Fax Number: \_\_\_\_\_  
Cell Number: \_\_\_\_\_ Email Address: \_\_\_\_\_  
Postal address: \_\_\_\_\_ Postal Code: \_\_\_\_\_  
Company VAT Number (Compulsory for invoicing purposes): \_\_\_\_\_  
Order Number: \_\_\_\_\_  
Approving Manager (Name): \_\_\_\_\_  
Approving Manager (Job Title): \_\_\_\_\_  
Send tax invoice to: Mr. / Mrs. / Miss: \_\_\_\_\_ Name: \_\_\_\_\_ Surname: \_\_\_\_\_  
Job Title: \_\_\_\_\_ E-mail: \_\_\_\_\_

## Terms and Conditions of Registration

- A substitute delegate is welcome at no extra cost, should the delegate be unable to attend.
- You may cancel your registration, in writing, up to 7 working days before the workshop takes place, a full refund will be given. Cancellations made inside of the 7 days will be liable for the full fee.
- Unfortunately, no refund or credit can be given to delegates who do not attend without giving prior notice.
- Please note, once your registration form is received, you will be issued with a tax invoice. **Payment or proof thereof must be received 7 working days before the workshop takes place.** Delegates will not be permitted entry unless payment has been received, or unless prior arrangements have been made with Advanced Laboratory Solutions Accounts Department for late payments.
- Advanced Laboratory Solutions reserves the right to cancel an event due to unforeseen circumstances.

I hereby acknowledge that I understand and agree to the terms and conditions of my registration

\_\_\_\_\_  
Signature Full name Date

# Registration Form 2/2

Please mention here any disability which we should be aware of in order to allow you to get the most out of the course:

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Special dietary requirements: \_\_\_\_\_

## **Your TEM experience**

*It is not necessary to have any experience to attend this course. However, it is useful for us to know if participants have any experience to help us pitch the course at the correct level.*

*Please answer the following questions as accurately as you can.*

Which of the following best describes your transmission electron microscope experience? (delete as appropriate)

- None -Never used one
- Some - I have watched someone image my samples.
- Some – I can use the microscope independently but do not do alignment
- Lots – I am able to work independently without help
- Lots – I train and supervise others

Which electron microscope instruments have you used? (Please state model and manufacturer if known):

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Have you used any of the following techniques independently (please delete as appropriate and add further details if you wish):

Dark field /bright field diffraction contrast? **yes/no** \_\_\_\_\_

High resolution transmission electron microscopy (HRTEM) **yes/no** \_\_\_\_\_

Convergent beam electron diffraction (CBED) **yes/no** \_\_\_\_\_

Energy filtered transmission electron microscopy (EFTEM) **yes/no** \_\_\_\_\_

Energy dispersive X-ray analysis? **yes/no** \_\_\_\_\_

Scanning Transmission Electron Microscopy? **yes/no** \_\_\_\_\_

Please describe briefly how electron microscopes relate to your work: \_\_\_\_\_

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Please describe your current project(s) or area(s) of interest in one or two sentences: \_\_\_\_\_

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If there is anything else that affects your electron microscope experience, which you would like to make the organizers aware of in order to allow you to get the most out of the course, please state it here: \_\_\_\_\_

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If there is anything particular that you would like to learn on the course please tell us here and we will try to accommodate it in this or future courses: \_\_\_\_\_

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