

SAMPLE PREPARATION FOR BIOLOGICAL TEM: PRACTICAL WORKSHOP

THE NEXT WORKSHOP WILL BE: TBA – as required

WHO SHOULD ATTEND THIS WORKSHOP?

This workshop is an entirely practical course, directed at providing training in routine sample preparation of biological samples for TEM at the CMCA. *As such it is only available to those who can demonstrate a need for practical training in this area.* Expected enrollees would include:

- People who will be preparing biological TEM samples in the *near* future
- People who are currently preparing samples but are having difficulties
- People currently preparing samples who require further training on CMCA equipment

WORKSHOP OUTLINE:

The workshop will run over an entire day from 9am – 5pm, and will include practical training and discussions specifically related to the projects / concerns of the attendees. It is anticipated that there will be an opportunity to discuss any questions related to your project with experienced people. The course will involve hands-on training in the following areas:

- Microwave processing (fixation, dehydration, infiltration)
- Microtomy
- Heavy metal staining of sections

WHAT SHOULD YOU KNOW BEFORE THE WORKSHOP?

Attendees must justify why TEM will be needed for their project. Attendees must be familiar with basic sample preparation techniques and the TEM aspects of their own research project.

WHAT IS NOT INCLUDED IN THIS WORKSHOP?

Training in TEM operation and use is not included. Advanced (eg. analytical, low temperature) preparation methods are not included.

RELATED TRAINING OPPORTUNITIES:

This workshop is only suitable for people intending to prepare routine biological samples for TEM. Those people:

- Wanting *information* about TEM and/or sample preparation methods should consult the list of information resources provided below.
- Needing to learn how to use a TEM should complete the CMCA Training course on TEM conducted by Dr Martin Saunders
- Interested in analytical or non-routine methods should contact Dr Peta Clode direct (e-mail: pclode@cmm.uwa.edu.au or phone: 6488 8098).

ADDITIONAL RESOURCES & INFORMATION:

Some information on theoretical aspects and procedures will be provided to workshop registrants in advance on CD. To maximise the benefits from the workshop, all participants are expected to be familiar with this additional material before attending the workshop. Enrollees should also be familiar with general methods and techniques of sample preparation and should consult items from the recommended list below. For additional information, people should also search the [UWA library catalogue](#) for other titles of interest.

- Electron microscopy: principles and techniques for biologists. Bozzola & Russell

- Biological electron microscopy: theory, techniques & troubleshooting. Dykstra & Reuss
- Principles and techniques of electron microscopy: biological applications. Hayat

WHEN AND WHERE IS THE WORKSHOP HELD?

The workshop is held at the [Centre for Microscopy, Characterisation and Analysis](#) at The UWA. The workshop will run as demand requires, which is likely to be several times per year.

HOW DO I REGISTER & WHAT DOES IT COST?

Places on this workshop are available to students and researchers with a demonstrated need for practical training in biological sample preparation for TEM. You can apply to attend the next workshop by completing the online registration form.

Places are limited and preference will be given to registered CMCA Users. Your place will be confirmed in advance of the next scheduled workshop.

To find out about becoming a CMCA User contact the CMCA Manager, Jeanette Hatch (e-mail: admin@cmm.uwa.edu.au or phone: 6488 2770).

The workshop is free to all current registered users. All other non-registered participants will be allocated a place only if maximum numbers are not reached, and a cost of \$220 (inc. GST) will apply. Any enrollee who fails to cancel their attendance more than 24h in advance will be charged a \$55 (inc. GST) no show fee.