

BE TAF resources

In addition to the collections, libraries and staff expertise, the following facilities are available at BE TAF:

RBINS

- Molecular Systematics Laboratory

Equipped with 7 PCR thermocyclers, two ALF-Express automated DNA sequencers, one ABI 3130 automated DNA sequencer, two laminar flow workbenches, two flatbed multiphor electrophoresis set-ups (e.g. for SSCP-analysis), several units for flatbed submarine agarose gel electrophoresis, digital cameras and photographic equipment for gel documentation (including UV-photography), four ultrafreezers (-80°C), five portable liquid nitrogen dry shipping containers, etc. The unit also has several PCs and Macintosh computers for data treatment. There is a specialized library and a key-word driven, fully informatized reprint collection comprising more than 42,000 titles.

- FEI XL 30 ESEM. The new apparatus has a number of advantages, such as the possibility to work in wet mode and to record digitised images on diskettes or CD ROM.
- TEM-PREP: Equipped with a Leica Ultracut Ultramicrotome and a Leica EM-KMR-2 Knifemaker. In the course of 2006 the facility will be equipped with a Leica EM CPC and a Leica EM AFS2 for cryofixation, cryopreparation and freeze substitution of samples for TEM.
- Several well equipped laboratories for treating palaeontological samples, including crushers, microsaws and polishers, microdrills, sieves, centrifuges, high temperature furnaces, laboratory ovens, 5 fume cupboards, etc.
- 4 high performance research light microscopes with integrated photomicrography (up to x1250; 3 Zeiss and 1 Olympus) and 10 high performance binocular microscopes (up to x150, mainly Leica-Wild) for microfossil analyses

RMCA

- Binocular microscopes (Leica, Wild, Zeiss)
- Leica Polarizing microscope (transmission) with digital image acquisition
- Leitz Polarizing microscopes (reflective and transmission)
- GER high resolution VIS-NIR field spectroradiometer
- Image capture and analysis infrastructure: Leica dissecting (MZ12) and light (DMLB) microscope with 3CCD Toshiba and Leica DC300 camera.
- Synoptics Automontage software, linked to above Toshiba camera
- Image Pro Plus analysis software
- Wild M3 with camera lucida, Wild M5, Wild M7 & Wild M8 with diascopy holder and camera lucida
- Zeiss Stemi 200C with triocular Zeiss 6-40x
- Leica Zoom 2000
- Leica Dialux 22 (obj. 10 - 100x, phase contrast, camera lucida, syst. Photo Wild MPS 45)

- Zeiss Axiophot I (obj. Diascopy 2,5 à 100x, obj. Episcopy 5 à 100x, phase contrast, fluorescence, syst. photo Axiophot , syst. video CCD C72 & image analysis Vidas 25)
- Camera Sony CCD-IRIS with obj. Cosmicer TV Zoom 12,5-75mm, monitor Sony, printer Sony Videographic UP 860 CE
- Two Olympus research microscopes (BX60) & One Olympus research stereomicroscope (SZH10)
- Two LINTAB measuring stages for tree ring analysis with TSAP software
- Resistograph
- AnalySIS image analysis software
- Analogous (SONY) and digital (OLYMPUS) camera'
- Laboratories with Vacuum Oven
- Lab with routine colouring technique tools.
- Thin- and polished section preparation workshop Clean room class 100
- ICP-MS Inductively coupled plasma mass spectrometer
- UV ICP-MS Laser ablation inductively coupled plasma mass spectrometer
- HR-ICP-MS High resolution inductively coupled plasma mass spectrometer
- Polishing equipment Vempol 300 VEM
- Circular saw Labcut VEM
- Dissection and precision measuring tools.
- Chemical Laboratory with: Electronic sledge microtome Microm; Mechanical sledge microtome Reichert & Knife sharpene
- Wood processing workshop - Sawing, sanding and polishing machines