

**The transmission electron microscopy meeting  
(mainly in French, partly in English)  
will take place in Guadeloupe between the 9th and 16th of May.**

**Program:**

**May 10:**

High Resolution Scanning Transmission Microscopy, coupling with X Rays Emission Spectroscopy and Electron Energy Loss Spectroscopy for atomic level analysis in material sciences and in biology.

**May 11:**

New sample preparation methods, low temperature microscopy, high resolution electron tomography

**May 12:**

Analytical Transmission Electron Microscopy applied to biodiversity studies

**May 13:**

Analytical Transmission Electron Microscopy applied to material characterization and to ageing processes (environmental ageing, irradiation damage)

**May 14:**

Visit of the biodiversity site 1  
evening workshop Caribbean area biodiversity hot spot

**May 15:**

Visit of the biodiversity site 2

**The Caribbean summer school in electron microscopy  
(all lectures, practical teaching in English)  
will take place in Guadeloupe, as previously announced,  
between the 1st and 13th of July.**

The number of participants is limited to 40, 25 places being reserved for students or researchers from non French speaking Caribbean countries.

**Proposed program and lecturers:**

**Theoretical lectures – 4 days-**

- \*Introduction to electron optics examples of the electron microscopes of the C3MAG
  - TEM STEM Tecnai F20 XTwin (Dr. Dominique DELILLE FEI France)
  - ESEM Quanta 250 (Dr. Keriya MAM FEI Eindhoven)
- \* Samples preparation by ultramicrotomy ( Helmut GNÄGI DIATOME Suisse)
- \*Samples preparation for biological materials (Prof. Olivier GROS UAG)
- \* metallurgical and mineral samples preparations (Dr. Laurent LEGRAS EdF les Renardières)
- \*Electron matter interactions, electron image formation, contrasts interpretations in TEM and SEM (Prof. Jean-Louis MANSOT UAG)
- \*Electron diffraction (Prof. Jean Paul MORNIROLI Université de Lille)
- \*High resolution transmission electron microscopy STEM and TEM (Dr. Dominique DELILLE FEI France)
- \*X rays Spectrometry (Oxford Specialist)

\*Electron Energy Loss Spectrometry EELS (Prof. Jean Louis MANSOT UAG)

\*Seminars : examples of applications in various fields of academics and industrial researches (UAG, FEI, DIATOME, EdF, Oxford, Gatan)

**Practical teaching to groups of 4 students – 3 days -**

- Samples preparations by Ultramicrotomy (4h)
- Sample preparation by mechanical polishing and ion etching (4h)
- Conventional Analytical Scanning Electron Microscopy (ASEM) on Hitachi S 2500 SEM (4h).
- Environmental Analytical Scanning Electron Microscopy (AESEM) on FEI Quanta 250 ESEM (4h)
- Analytical Transmission Electron Microscopy on FEI Tecnai F20 X twin TEM (4h)
- Data analyses and treatments on computers(4h)

**For all students :**

- Transmission electron microscopy experiments on a European microscope using remote control equipment in Guadeloupe (4h)

Visit of the UAG research infrastructures (4 h)

Oral presentation by participants of their research subjects (4h)

Official Registration forms will be available in February 2011.

Contact

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