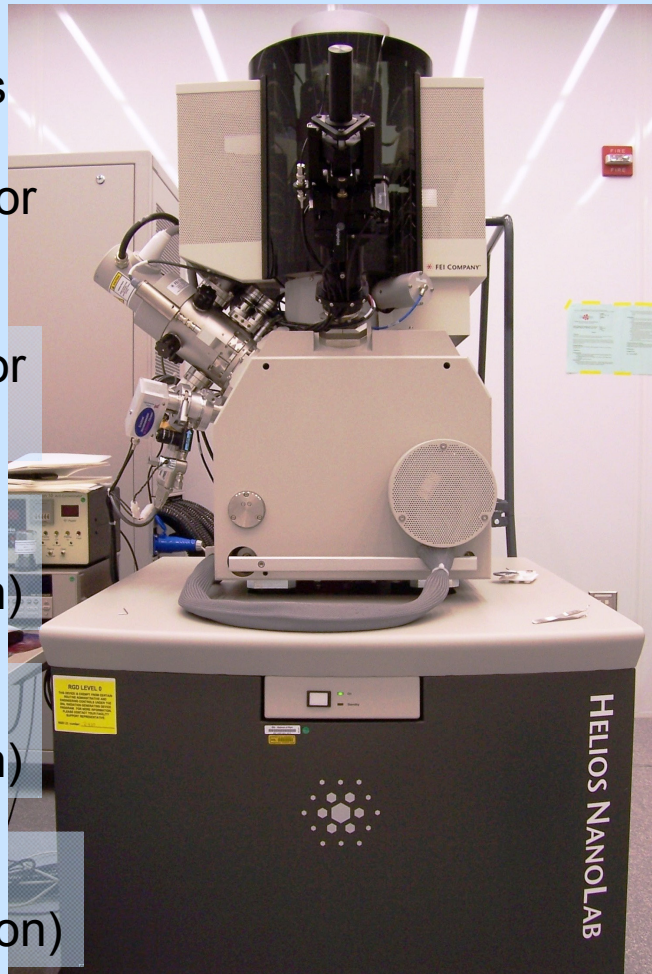


Dual SEM/FIB system

Main use: simultaneous focused ion beam (FIB) pattern milling and SEM imaging.

Additional capabilities:

- precursor gas injector for beam assisted deposition of platinum and insulator (TEOS)
- In-situ electrical measurements
- nano-manipulator probe
- x-ray detector for EDS analysis
- SEM imaging (1 nm resolution)
- FIB imaging (5 nm resolution)
- STEM imaging (0.8 nm resolution)



Some applications:

selective area FIB-based TEM sample preparation

nanoprobe

5 μm

F. E. Camino (CFN)

nanostructure transfer techniques

nanoprobe

graphene

10 μm

F. E. Camino (CFN)

SEM-directed FIB-cleaning of nanodevices

carbon nanotube mesh

before

2 μm

after cleaning

1 μm

Z. Xiao (AAMU) and F. E. Camino (CFN)