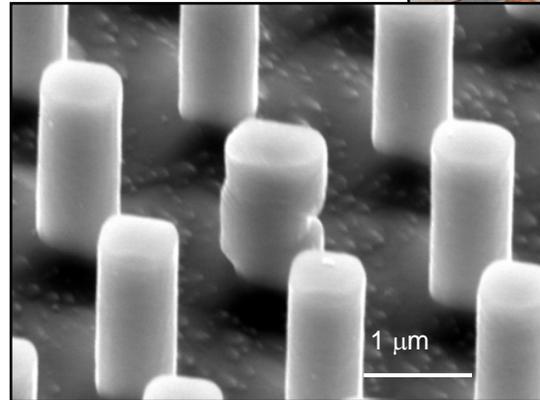
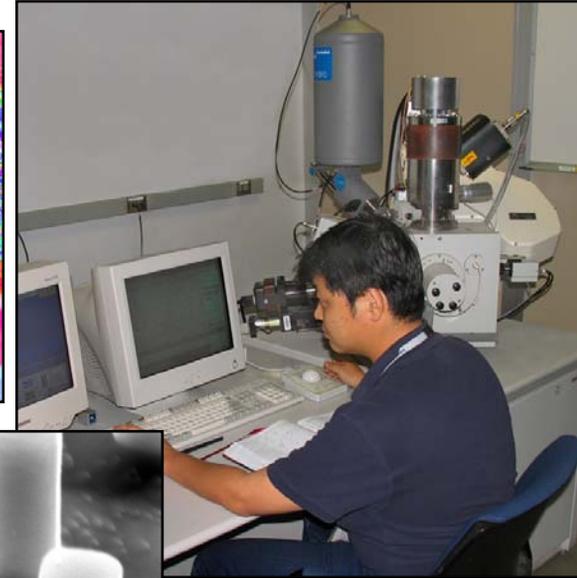
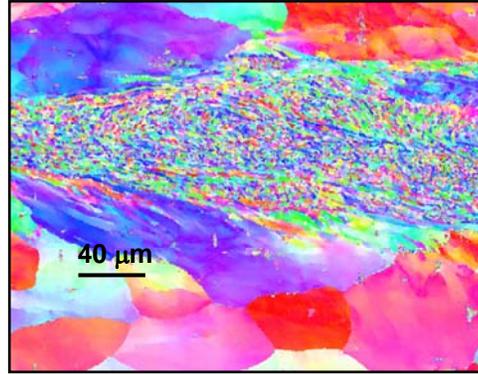


# Philips XL30 FEG-SEM

## Techniques/Capabilities:

- High current, 30kV FE gun
- SE/BSE imaging down to 0.2 and 2kV, respectively
- Si(Li) EDS X-ray detector ( $Z>3$ )
- EDS spectrum imaging
- Electron backscattered diffraction orientation imaging microscopy
- Dry pumping system/ex-situ plasma cleaning of specimens
- Examination of radioactive materials
- Heating stage



## Current Research Activities:

- Structural characterization of high temperature alloys, composites, ceramics, nano-structured materials, carbon-based materials
- Elemental and phase distribution via EDS analysis/mapping and BSE imaging
- Phase distribution and microtexture determination via EBSD/OIM in advanced alloys, superconductors, mechanical and laser welds, deformed materials

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