## **Scanning and Probing Microscopy**

Environmental Closed Loop Atomic Force Microscope - Asylum MFD-3D-BIO

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard - HP-IND-220

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Ambient Scanning Probe Microscope - VEECO Multimode V

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

## Near Field Optical/Atomic/Confocal/Confocal Raman/Scanning Probe Microscope - WiTec Alpha Combination

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety – HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Low Energy Electron Microscope III (LEEM) at NSLS - Elmitec

Cyber Security Training – GE-CYBERSEC

General Employee Radiological Training - TQ-GERT

Photon Sciences NSLS Safety Module - PS-ESH-NSLS-SFTYMOD

#### Low Energy Electron Microscope V (LEEM) - Elmitec

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

## Low-Temperature UHV Scanning Tunneling Microscope (no laser) - Createc

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard – TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Low-Temperature UHV Scanning Tunneling Microscope (with laser) - Createc

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Compressed Gas – TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard – TQ-ODH Laser Safety – TQ-LASER Laser Medical Surveillance – OM-MEDSURV-LASER Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Variable Temperature UHV Scanning Tunneling/Atomic Force Microscope – RHK CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Compressed Gas – TQ-COMPGAS-1
Cryogen Safety – HP-OSH-25
Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP
Oxygen Deficiency Hazard – TQ-ODH
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

# **Optical Microscopy**

Low-Temperature Confocal Microscope - Attocube
CFN Safety Module for Users - NC-ESH-USERS
Cyber Security Training - GE-CYBERSEC
Laboratory Standard - HP-IND-220
Hazardous Waste - HP-RCRIGEN3
Compressed Gas - TQ-COMPGAS-1
Cryogen Safety - HP-OSH-25
Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP
Oxygen Deficiency Hazard - TQ-ODH
Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

Confocal fluorescence microscope and visible laser/NIR spectral & lifetime imaging multiphoton - Leica SP5 CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Laboratory Standard – HP-IND-220 Laser Safety – TQ-LASER Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Time and Spectrally resolved single molecule fluorescence detector – Olympus CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Laboratory Standard – HP-IND-220 Hazardous Waste – HP-RCRIGEN3 Laser Safety – TQ-LASER Laser Medical Surveillance – OM-MEDSURV-LASER Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Total Internal Reflection Fluorescence System (TIRF) - Olympus IX81 with 3 colors excitation CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Laser Safety – TQ-LASER
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Epifluorescent and Polarized Microscope - Olympus BX51 CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Laboratory Standard – HP-IND-220 Hazardous Waste – HP-RCRIGEN3 Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Benchtop light microscopes - one with motorized stage & digital readout – Nikon (*Cleanroom*) CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220 Hazardous Waste – HP-RCRIGEN3 Oxygen Deficiency Hazard – TQ-ODH Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Benchtop light microscope – Zeiss (Cleanroom)
CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Oxygen Deficiency Hazard – TQ-ODH
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

# **Electron Microscopy**

Environmental Transmission Electron Microscope (E-TEM) - FEI Titan 80-300 CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Compressed Gas – TQ-COMPGAS-1 Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Scanning Transmission Electron Microscope (STEM) - Hitachi HD 2700C Cyber Security Training Laboratory Standard Hazardous Waste Compressed Gas Cryogen Safety Electrical Safety-Benchtop Workers Nanotechnology in the Workplace-Nano Workers

High Resolution Analytical Transmission Electron Microscope (HRTEM) - JEOL 2100F CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Analytical Bio/Soft Matter Transmission Electron Microscope (TEM) - JEOL 1400
CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Compressed Gas – TQ-COMPGAS-1
Cryogen Safety – HP-OSH-25
Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Scanning Electron Microscope (SEM) - Hitachi 4800 CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Cryogen Safety – HP-OSH-25 Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

High Resolution Analytical Scanning Electron Microscope (HRSEM) - JEOL 7600F CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Cryogen Safety – HP-OSH-25 Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

X-ray Energy Dispersive Spectroscopy (EDS)-Oxford Inca Energy CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC

Cryogen Safety – HP-OSH-25 Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

X-ray Wavelength Dispersive Spectroscopy (WDS)-Oxford Inca Wave

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### STEM imaging

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Low Angle Backscattered Electron Detector (LABE)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### 3D Surface Metrology – Alicona MEX 5.0

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Dual Beam Scanning Electron/Focused Ion Beam Microscope - FEI Helios NanoLab (Cleanroom)

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### SEM/EDX

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### STEM

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### TEM Sample Prep

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste – HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

#### Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Electron Beam Induced Imaging (EBIC)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### In-situ electrical characterization

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### X-ray Energy Dispersive Spectroscopy (EDS) Oxford Inca Energy

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### UHV Focused Ion Beam/Low Energy Electron Diffraction/Scanning Auger analyzer - Omicron Nanoprobe

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### Low Energy Electron Microscope III (LEEM) at NSLS - Elmitec

Cyber Security Training - GE-CYBERSEC

General Employee Radiological Training – TQ-GERT

Photon Sciences NSLS Safety Module - PS-ESH-NSLS-SFTYMOD

#### Low Energy Electron Microscope V (LEEM) - Elmitec

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety – HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Lorentz Transmission Electron Microscope - JEOL 2100M

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Nanomill – Fischione 1040

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

## Techprep Automatic Polisher – Allied High Tech

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Dimpler - South Bay Technology D500I

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Dimpler – Gatan 656

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety – HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Dual Beam Ion Mill - Fischione 1010

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Precision Ion Polishing System (PIPS) - Gatan 691

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

High Resolution Ion Beam Coater - Gatan 681

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Compressed Gas – TQ-COMPGAS-1
Cryogen Safety – HP-OSH-25
Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

## **Spectroscopic and Time-Resolved Probing**

Time-Correlated Single Photon Counting (TCSPC) - Picoquant FT200 CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Laboratory Standard – HP-IND-220 Hazardous Waste – HP-RCRIGEN3 Laser Safety – TQ-LASER Laser Medical Surveillance – OM-MEDSURV-LASER Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Femtosecond Transient Absorption Spectrometer - Helios CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Laser Safety – TQ-LASER Laser Medical Surveillance – OM-MEDSURV-LASER Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Nanosecond Transient Absorption Spectrometer - EOS CFN Safety Module for Users - NC-ESH-USERS Cyber Security Training - GE-CYBERSEC Laser Safety - TQ-LASER Laser Medical Surveillance - OM-MEDSURV-LASER Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

Fluorescence Up-conversion Spectrometer - Halcyone CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Laser Safety – TQ-LASER Laser Medical Surveillance – OM-MEDSURV-LASER Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Amplified Ti:Sapphire Laser System/Optical Parametric Amplifier-1 kHz CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laser Safety – TQ-LASER
Laser Medical Surveillance – OM-MEDSURV-LASER
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

## Pump-probe

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laser Safety – TQ-LASER
Laser Medical Surveillance – OM-MEDSURV-LASER
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

## Zscan/Nonlinear Absorption

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laser Safety – TQ-LASER
Laser Medical Surveillance – OM-MEDSURV-LASER
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Sample Irradiation

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laser Safety – TQ-LASER

Laser Medical Surveillance - OM-MEDSURV-LASER

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### FTIR Spectrometer - Bruker Vertex 80V

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety – HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

### FTIR Spectrometer - Thermo Scientific Nicolet 6700

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### Photon Counting Spectrofluorometer - ISS PC1/K2

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

# Circular Dichroism Spectrometer - Jasco J-815

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Uv-Vis/NIR Spectrophotometer - PerkinElmer Lambda 950

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### Uv-Vis Spectrophotometer - PerkinElmer Lambda 25

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Fluorescence Spectrometer - Varian Cary Eclipse

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laser Safety - TQ-LASER

Laser Medical Surveillance - OM-MEDSURV-LASER

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

### X-Ray and Light Scattering

X-Ray Diffractometer - Rigaku Miniflex II

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

X-Ray Diffractometer - Rigaku Ultima III

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

General Employee Radiation Training – TQ-GERT

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

Small and Wide Angle X-ray scattering (SAXS/WAXS/GISAXS) - X9 beamline at NSLS

Cyber Security Training - GE-CYBERSEC

General Employee Radiological Training - TQ-GERT

Photon Sciences NSLS Safety Module - PS-ESH-NSLS-SFTYMOD

Dynamic Light Scattering with Zeta Potential - Malvern Zetasizer Nano

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Solution Based and Biomolecular Methods

Laminar Flow hoods/wet chemistry/hot plates/heating bath/diamond scriber (Cleanroom)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Wet chemistry synthesis/functionalization of nano-scale and organic materials

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Biomolecular methods:cell culture,cold room,gel electrophoresis and DNA imaging

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Microarray scanner - GenePix 4200A

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Quantitative Real-time PCR - Roche Lightcycler 480

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Fast Protein Liquid Chromatography (FPLC) - GE AKTA Explorer 100

CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

### Circular Dichroism Spectrometer

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Centrifuges/shakers/mixers/sonicators

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

## **Dynamic Light Scattering**

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

## Thermal Analysis, Annealing, and Electrochemistry

#### Differential Thermal Analysis (DSC) - Perkin Elmer Diamond

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Constant Temperature bath (-20°C to 100°C)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Thermo Gravimetric/Differential Thermal Analyzer(TGA/DTA)-Perkin Elmer Diamond

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

#### Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Electrochemical workstation

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Compressed Gas – TQ-COMPGAS-1
Cryogen Safety – HP-OSH-25
Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

# Thin Film Metrology

### Dektak 150 Stylus Profilometer - Dektak 150 (Cleanroom)

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Oxygen Deficiency Hazard – TQ-ODH
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Spectroscopic Ellipsometer - J.A. Woollam M-2000

CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC Laboratory Standard – HP-IND-220

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### Ellipsometer - Rudolph Instruments 439 (Cleanroom)

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Oxygen Deficiency Hazard – TQ-ODH
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Non-contact Profilometer - Zygo New View 6000 (Cleanroom)

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Oxygen Deficiency Hazard – TQ-ODH
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Reflectometer – Filmetrics F20 (Cleanroom)

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
Hazardous Waste – HP-RCRIGEN3
Oxygen Deficiency Hazard – TQ-ODH
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### X-Ray Diffractometer - Rigaku Ultima III

CFN Safety Module for Users – NC-ESH-USERS
Cyber Security Training – GE-CYBERSEC
Laboratory Standard – HP-IND-220
General Employee Radiation Training – TQ-GERT
Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

# **Etching and Ashing**

Reactive Ion Etcher (RIE) - March Plasma

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

Deep Reactive Ion Etcher, available w/Bosch process (DRIE) - Oxford Plasma Lab

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### Plasma Asher - Technics PEIIA

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard – TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

### Reactive Ion Etcher (RIE) - Trion Phantom III

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Oxford Chlorine Etcher C (RIE-C) – Oxford Plasma Lab 100

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

## **Deposition (Evaporators/Sputterers/PECVD/Coaters)**

Desktop sputter coater for SEM analysis - Denton (Cleanroom)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard – TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

### Electron Beam Deposition System - Kurt J. Lesker PVD75 (Cleanroom)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

### Physical Vapor Sputter/Thermal Evaporator - Kurt J. Lesker PVD75

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Electrical Safety for Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

### Sputter Coater - Kurt J. Lesker PVD75 (Cleanroom)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Plasma Enhanced Chemical Vapor Deposition (PECVD)System - Trion Orion III (Cleanroom)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

### Sputter/Coater - Cressington 208HR DC

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Electrical Safety for Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Spin Coater - Brewer Science Cee 200CB (Non-Cleanroom)

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste – HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Electrical Safety for Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

## Suss Spin - Coater (Cleanroom)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Spin Coater - Brewer Science Cee 200CB (Cleanroom)

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Atomic Layer Deposition Tool (ALD) Savannah S100

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Electrical Safety for Benchtop Workers – TQ-ELECT-BENCHTOP

# **Electrical Probing**

Cryogenic Probe Station - Lakeshore CFN Safety Module for Users – NC-ESH-USERS Cyber Security Training – GE-CYBERSEC

Cryogen Safety – HP-OSH-25

Electrical Safety for Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Electrical Probe Station, with solar simulator - Rucker-Kolls

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Cryogen Safety – HP-OSH-25

Electrical Safety for Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

Electrical Probe Station - Signatone

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Cryogen Safety - HP-OSH-25

Electrical Safety for Benchtop Workers – TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

High Temp Electrical Probe Sta/Annealing oven MBE Komponenten A0500

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Cryogen Safety - HP-OSH-25

Electrical Safety for Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Wedge Bonder - Kulicke & Soffa 4526

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Cryogen Safety - HP-OSH-25

Electrical Safety for Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Photovoltaic Device Characterization System - Rucker-Kolls, Newport, and Agilent (customized electrical probe station, 150W solar simulator, calibrated Si solar cell standards, precision semiconductor parameter analyzer)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Cryogen Safety - HP-OSH-25

Electrical Safety for Benchtop Workers - TQ-ELECT-BENCHTOP

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

# Lithography

Electron Beam Lithography Tool (EBL) - JEOL JBX6300FS (Cleanroom)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

#### Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### Layout Beamer (pattern fracture & proximity effect correction)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### L-EDIT (CAD)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

### UV Mask Aligner - Karl Suss MJB-3 (Cleanroom)

CFN Safety Module for Users - NC-ÈSH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

#### Nanoimprinter - Molecular Imprints Imprio 55 (Cleanroom)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### Dual Beam Scanning Electron/Focused Ion Beam Microscope-FEI Helios Dual Beam (Cleanroom)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

#### focused ion beam

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

# low-kV e-beam lithography with NPGS

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste – HP-RCRIGEN3

Oxygen Deficiency Hazard - TQ-ODH

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

### ion-beam/electron-beam induced deposition of platinum

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard - HP-IND-220

Hazardous Waste – HP-RCRIGEN3 Oxygen Deficiency Hazard – TQ-ODH Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

# **Molecular and Macromolecular Synthesis**

Organic Synthesis Facility (Fume Hoods, Vacuum/Inert Gas Manifolds, solvent purification system)

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Cadmium Training for HAZCOM - TQ-CADMIUM

Methylene Chloride for HAZCOM - TQ-MCAT

Size Exclusion Chromatography System - Viscotek TDAmax (low-angle light scattering, diff. viscometry, diff. refractive index, photodiode array detectors)

CFN Safety Module for Users - NC-ESH-USERS

Cyber Security Training – GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers – TQ-NC-HS2

Cadmium Training for HAZCOM - TQ-CADMIUM

Methylene Chloride for HAZCOM - TQ-MCAT

Inert Atmosphere Glove Box - Vacuum Atmospheres Omni-Lab w/Freezer

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas - TQ-COMPGAS-1

Cryogen Safety – HP-OSH-25

Electrical Safety-Benchtop Workers - TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

Cadmium Training for HAZCOM - TQ-CADMIUM

Methylene Chloride for HAZCOM - TQ-MCAT

#### Automated Flash Chromatography System - Biotage Isolera One

CFN Safety Module for Users – NC-ESH-USERS

Cyber Security Training - GE-CYBERSEC

Laboratory Standard – HP-IND-220

Hazardous Waste - HP-RCRIGEN3

Compressed Gas – TQ-COMPGAS-1

Cryogen Safety - HP-OSH-25

Electrical Safety-Benchtop Workers – TQ-ELECT-BENCHTOP

Nanotechnology in the Workplace-Nano Workers - TQ-NC-HS2

Cadmium Training for HAZCOM – TQ-CADMIUM

Methylene Chloride for HAZCOM - TQ-MCAT

### Theory, Computation & Software

Software and Computational Services

Cyber Security Training – GE-CYBERSEC