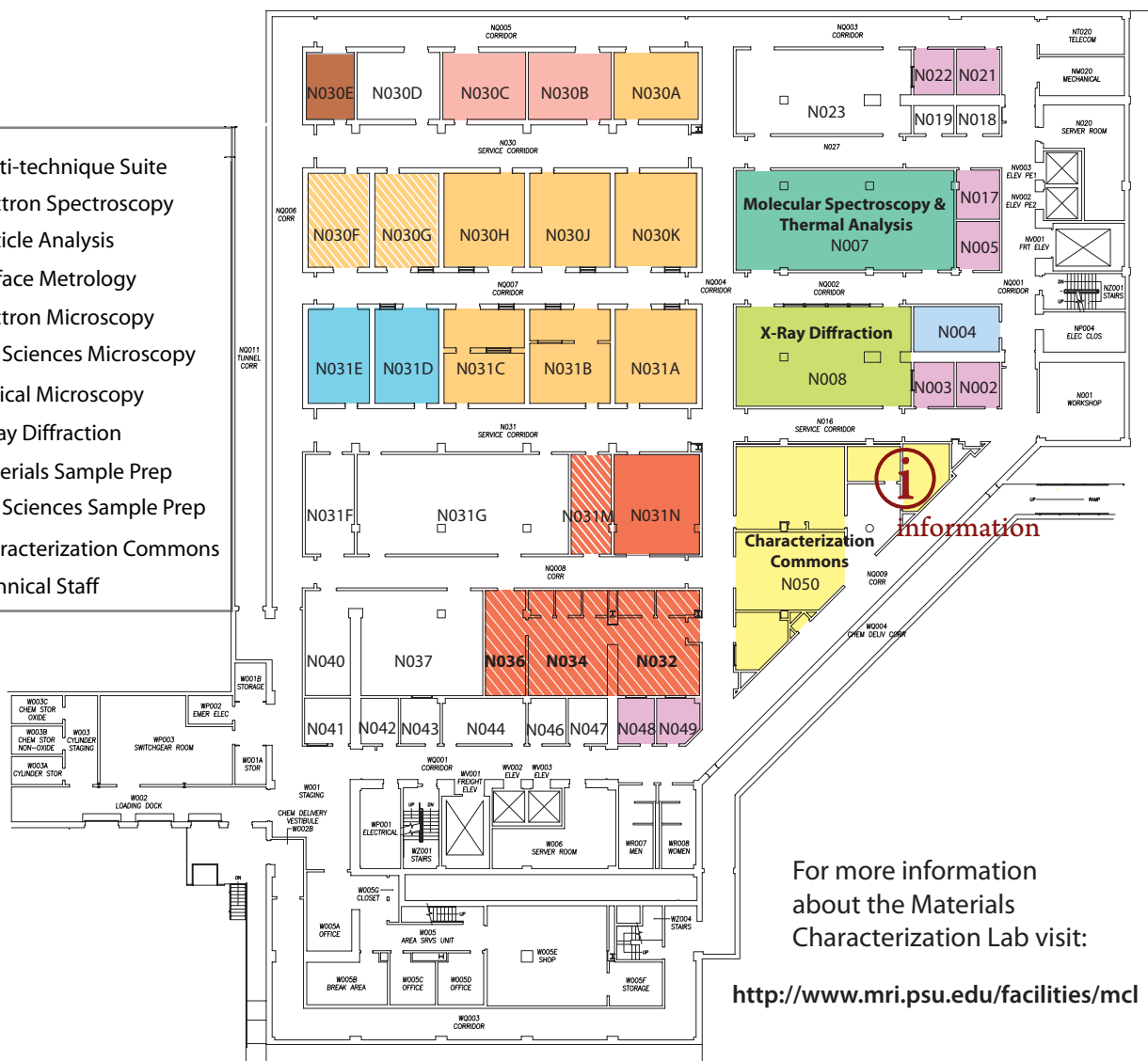


Millennium Science Complex - Characterization Laboratories - Basement

- Multi-technique Suite
- Electron Spectroscopy
- Particle Analysis
- Surface Metrology
- Electron Microscopy
- Life Sciences Microscopy
- Optical Microscopy
- X-Ray Diffraction
- Materials Sample Prep
- Life Sciences Sample Prep
- Characterization Commons
- Technical Staff



For more information about the Materials Characterization Lab visit:

<http://www.mri.psu.edu/facilities/mcl>

Electron Microscopy

- N030A SEM - Hitachi S-3000H
SEM - Hitachi S-3500N
- N030F SEM - JEOL 5400
- N030G TEM - JEOL 1200
- N030H TEM - JEOL 2010F
- N030J TEM - 2010 LaB6
- N030K FESEM - FEI NNS 630
ESEM - FEI Quanta 200
- N031B TEM - Philips 420
- N031A SPM - JEOL 4500
FIB - FEI Quanta 200 3D

Molecular Spectroscopy & Thermal Analysis

- N007 FTIR - Bruker
UV-Vis-NIR-Lambda 950
Raman - Witec
TGA-MS
DSC
DTA
Optical microscope

Sample Prep

- N031N EM prep
Cutting
Polishing
Dicing
Optical microscope
- N032, N034, and N036
EM Prep
Fluorescence Microscopes
Critical Point Dryer
Sputter Coater
Microtomes
- N031M
Histology

X-Ray Diffraction

- N008 MRD
MPD
Laue
DMAX
Empyrean

Particle Analysis

- N004 Mastersizer
Nanosizer

Optical Microscopy

- N030E Confocal - Olympus FV 1000
Fluorescence - Olympus BX60
Fluorescence - Nikon TE-2000U

Electron Spectroscopy

- N031E XPS - Kratos Ultra
N031D AES - Phi 670

Surface Metrology

- N030C Optical Pro - Zygo NV7300
AFM - Bruker Icon
Triboindenter - Hystrom
- N030B AFM - DI 3100