Hourly Use Rates for the Material Research Laboratory Facilities

Rates for Private Sector companies and researchers.

If you have any questions, please contact the MRL Business Office at 217-333-1372. Rates valid from January 1, 2026 and are subject to change by ILLINOIS per terms agreed upon in LICENSEE's usage contract.

Center for Excellence in Soft Materials

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
Malvern Zetasizer	Particle Size and Zeta Potential Measurements	$130	$220
Metrohm 915 KF Ti-Touch	Volumetric Karl Fischer Titration	$130	$220
Metrohm 917 Coulometer	Coulometric Karl Fischer Titration	$130	$220
Nanoparticle tracking NS300	Nanoparticle tracking analysis	$130	$220
Novocontrol C47 Analyzer	Dielectric, Conductivity and Impedance Spectrometer	$130	$220
Q50-TGA	Thermogravimetric Analysis	$130	$220
Q800-DMA	Dynamic Mechanical Analysis	$130	$220
Shimadzu DTA-50	Differential Thermal Analysis	$130	$220
TA DHR-3 Rheometer	Discovery Hybrid Rheometer	$130	$220
TA DSC 2500	Differential Scanning Calorimetry	$130	$220
TGA-MS Netzsch TG309-QMS403	Thermogravimetric Analysis with Mass Spectrometry	$140	$230
Tosoh EcoSEC GPC	Gel Permeation Chromatography	$130	$220

Laser and Spectroscopy Facility

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
Agilent CARY 5000	Spectrophotometry	$160	$250
Custom Experiment	Custom Laser Experiments	$160	$250
Ellipsometer-RC2-JAWoollam	Spectroscopic and Mueller matrix ellipsometry	$170	$260
FTIR-Microscope-Bruker	Fourier Transform Infrared Spectroscopy	$160	$250
Gaertner Ellipsometer	Ellipsometry	$160	$250
Horiba Xplora-Nano TERS-TEPL	Tip Enhanced Raman and PL Spectroscopy	$160	$250
Inspire OPO Laser	Time-Domain Thermoreflectance, Custom Laser Experiments	$160	$250
LIBS - Keyence EA-300	Laser Induced Breakdown Spectroscopy	$160	$250
Keyence VK-X1000	Optical Profiler	$180	$270
MOKE - steady state	Magneto optical Kerr Effect mapping	$160	$250
Montana Cryo Station	Closed He Cycle Optical Cryo Station	$70	$160
Nanophoton Raman 11	Raman Spectroscopy/Microscopy	$160	$250
Neaspec IR AFM	Tip Enhanced Infrared Spectroscopy	$160	$250
Newport Solar Simulator	Custom Experiments	$160	$250
Nicolet Nexus 670 FTIR	Fourier Transform Infrared Spectroscopy	$160	$250
OL 750 Spectroradiometer	Spectroradiometry	$160	$250
Oxford Cryo Station	Closed He Cycle Cryo Station	$70	$160
Photoluminescence	Photoluminescence/Fluorescence	$160	$250
Quantum Diamond Microscope	N-vacancy magnetometry	$160	$250
Rame-Hart Contact Angle	Contact Angle Goniometry	$160	$250
Resonant Raman-PL	Resonant Raman and photoluminescence	$160	$250
SLM-ISS Fluorometer	Photoluminescence/Fluorescence	$160	$250
Solar Simulator - Oriel	Solar Simulator illuminator source	$160	$250
Thermo-Nicolet Is-50 FTIR	Fourier-Transform IR spectroscopy	$160	$250
Time Resolved PL	Photoluminescence/Fluorescence	$160	$250
Tsunami Ti-Sapphire Laser	Time-Domain Thermoreflectance	$160	$250
Tsunami Ti-Sapphire Laser 2	Time-Domain Thermoreflectance	$160	$250
Two Photon Microscopy	Optical Microscopy	$160	$250
Varian Cary5G UV-VIS-NIR	Spectrophotometry	$160	$250
Witec Alpha NSOM	Near Field Scanning Optical Microscopy	$160	$250
Woollam VAS Ellipsometer	Spectroscopic Ellipsometry	$160	$250

Micro & Nano-Fabrication Facility			
Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
ADT 7122 Wafer Dicer	Automated sample dicer	$160	$250
AJA Sputter Coater	Sputter Coater	$160	$250
AJA Sputter Coater 2	Sputter Coater	$160	$250
AJA Sputter Coater 3	Sputter Coater	$170	$260
AJA Sputter Coater 4	Sputter Coater	$170	$260
Atomic Layer Deposition	Atomic Layer Deposition	$160	$250
Atomic Layer Deposition 2	Atomic Layer Deposition	$160	$250
Ball Bonder	Ball Bonder	$160	$250
Cleanroom	Cleanroom	$160	$250
CM Furnace	Furnace	$70	$160
DC Sputtering IQUIST AJA 2200	Sputter Coater	$0	$0
Desert Cryo Probe Station	Probe Station	$160	$250
E-beam Evaporator 1	Electron Beam Evaporation	$160	$250
E-beam Evaporator 2	Electron Beam Evaporation	$160	$250
E-beam Evaporator 4	Electron Beam Evaporation	$170	$260
Graphene Furnace	Furnace for the growth of carbon nanotubes and graphene layers	$70	$160
Harrick Plasma Cleaner	Plasma Cleaner	$160	$250
Heidelberg Maskless Writer	Maskless wafer aligner	$170	$260
Hydrogen Vacuum Furnace	Furnace	$70	$160
Ion Mill Evaporator	Ion Mill & Thermal Evaporator	$160	$250
Jandel 4 Point Probe	Four point probe	$160	$250
Lapping polishing bonding PM6	Precision Lapping and Polishing with Wafer Bonding	$164	$254
Lindberg 3 Zone Furnace-2 inch	Furnace	$70	$160
March RIE2	Reactive Ion Etcher for polymer samples	$160	$250
Mitutoyo Microscope	Optical Microscope	$160	$250
MTI Furnace - 2 inch	Furnace	$70	$160
Nanomaster RIE	Reactive Ion Etcher for polymer samples	$160	$250
Nanoscribe 3D Printer	Laser lithography 3D printer	$165	$255
Olympus Microscope	Optical Microscope	$160	$250
Oven-Vacuum	Oven	$70	$160
Parylene Coater	Parylene Deposition - SCS Labcoter 2	$160	$250
PEALD Lesker 150 LX	Plasma Enhanced Atomic Layer Deposition	$160	$250
PECVD 2	Plasma Enhanced Chemical Vapor Deposition	$160	$250
Probe Station	Probe Station	$160	$250
Raith EBPG5150	Electron Beam Lithography	$210	$300
Raith e-Line	Electron Beam Lithography	$160	$250
RaithPrep	Cleanroom	$160	$250
Reactor Vacuum Furnace	Furnace	$70	$160
RIE - Plasma-Therm	Reactive Ion Etcher	$160	$250
RIE - SAMCO 10NR	Reactive Ion Etcher	$160	$250
RTA Furnace	Furnace	$160	$250
RTA Furnace-MTI 1200X-4-RTP	Furnace	$160	$250
Suss MJB3 - Deep UV	Mask Aligner - Deep UV	$0	$210
Suss MJB3 - Mask Aligner	Mask Aligner	$0	$210
Suss MJB4 - Mask Aligner	Mask Aligner	$0	$210
Thermal Evaporator	Thermal Evaporation	$160	$250
Tube Furnace - 6 inch	Furnace	$70	$160
UV-Ozone Cleaner	UV-Ozone substrate cleaning tool	$0	$90
Wedge Bonder	Wedge Bonder	$160	$250
Westbond Bonder	Wire Bonder	$160	$250
** Deposition of gold, platinum or palladium incurs an additional charge of $4 per every 10 nm deposited or fraction thereof.			

Microscopy-Scanning Probe

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
AFM Asylum Vero	Atomic Force Microscopy/Interferometric AFM	$160	$250
AFM Offline Analysis	AFM Offline Analysis	$2	$92
AFM Quesant	Atomic Force Microscopy	$70	$160
Asylum AFM 1	Atomic Force Microscopy	$140	$230
Asylum Cypher AFM	Atomic Force Microscopy/High Resolution	$160	$250
Asylum MFP-3D-Bio AFM	Atomic Force Microscopy for biological materials	$150	$240
Dektak 3030	Surface Profilometry	$130	$220
Hysitron Tip	Nanoindentation	$70	$160
Hysitron TriboIndenter	Nanoindentation	$130	$220
Indentation Plastometer - PLX	Nanoindentation	$130	$220
Leitz Microhardness	Microhardness tester	$70	$160
Molecular Vista PiFM-Raman	Photo-induced Force Microscopy	$160	$250
Piuma Nanoindenter	Nanoindentation	$130	$220

Microscopy-Scanning Electron

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
HELIOS 600i FIB	Scanning Electron/Focused Ion Beam Microscopy	$190	$280
Hitachi S4800 SEM	Scanning Electron Microscopy/High Resolution	$180	$270
JEOL 7000F SEM	Scanning Electron Microscopy/Analytical SEM	$180	$270
Scios 2 FIB	Scanning Electron/Focused Ion Beam Microscopy	$190	$280
SEM ThermoFisher NOVA	Scanning Electron Microscopy	$180	$270
Thermo Axia ChemSEM	Scanning Electron Microscopy/Low Vacuum	$180	$270

Microscopy-Transmission Electron

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
Hitachi 9500	Transmission Electron Microscopy	$180	$270
JEOL 1400 TEM	Transmission Electron Microscopy	$180	$270
JEOL 2010 LaB6	Transmission Electron Microscopy	$170	$260
JEOL 2100 Cryo TEM	Transmission Electron Microscopy	$170	$260
Thermo Talos F200X TEM-STEM	Transmission Electron Microscopy	$210	$300
Thermo Themis Z TEM-STEM	(Scanning) Transmission Electron Microscopy/Analytical	$220	$310
ThermoFisher Glacios Cryo-TEM	Cryo-TEM for SPA, tomography and micro-ED	$220	$310

Support Equipment

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
Allied Multiprep	TEM sample preparation	$70	$160
Carbon Rod Coater	SEM Carbon Coater	$70	$160
FEI Vitrobot	Cryo-plunge for TEM sample preparation	$70	$160
FEI Mark IV Vitrobot	Cryo-plunge for TEM sample preparation	$70	$160
Gatan CryoPIPS	Cryo-Ion Miller for TEM sample preparation	$70	$160
Gatan PECS II	Ion Miller for SEM sample preparation	$70	$160
Leica EM UC6 Microtome	Microtome for TEM sample preparation	$70	$160
PicoIndenter	Nanoindentation	$165	$255
Princeton WS-25 Wire Saw	Wire Saw - High Precision	$70	$160
SEM Sputter Coater 1	SEM Sputter Coater	$70	$160
SEM Sputter Coater 2	SEM Sputter Coater	$70	$160
Tergeo EM Plasma Cleaner	Plasma Cleaner for TEM sample preparation	$70	$160
Vibratory Polisher 1	Vibratory Polisher	$70	$160
Vibratory Polisher 2	Vibratory Polisher	$70	$160

Physical Property Measurement

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
QD MPMS3 SQUID	Magnetic Property Measurment System	$70	$160
QD MPMS3 SQUID B	Magnetic Property Measurment System	$70	$160
QD Opticool	Optical Cryostat	$70	$160
QD PPMS	Physical Property Measurment System	$71	$161
QD PPMS B	Physical Property Measurment System	$71	$161
QD PPMS Cart	Physical Property Measurment System cart	$0	$90

Surface Analysis

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
Cameca LEAP 5000XS APT	Local Electrode Atom Probe Tomography	$200	$290
Kratos Supra XPS	X-Ray Photoelectron Spectroscopy / Imaging and Depth Profiling	$170	$260
NEC Pelletron	Ion Accelerator/Rutherford Backscattering Spectroscopy	$160	$250
PEI Trift-III TOF-SIMS	Secondary Ion Mass Spectroscopy/Time-of-Flight	$160	$250

X-ray Analysis

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
Bruker D8 Advance	X-ray diffraction with high-temperature stage	$170	$260
Dexco Laue	X-ray Diffraction/Laue	$160	$250
PANalytical XPert	High-resolution X-ray diffraction and reflectometry	$160	$250
SAXS	X-Ray scattering: SAXS, WAXS, GI-SAXS and GI-WAXS	$160	$250
Shimadzu EDXRF	X-Ray Fluorescence	$160	$250
Siemens-Bruker D5000 XRD	X-Ray Diffraction/Powder	$160	$250
XRF-WDXRF Rigaku Supermini200	Wavelength-dispersive x-ray fluorescence spectroscopy	$160	$250

MRL Carver BioMaker Lab

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
Autoclave	Sterilization	$50	$140
Biosafety Cabinet-Room 0014	Biosafety Cabinet	$0	$90
Biosafety Cabinet-Room 0015	Biosafety Cabinet	$0	$90
CarverBioMakerLab	Lab suite access for sample prep and imaging	$20	$110
Cellink BioX 3D bioplotter	3D printing (tissue, cell, etc. using bioinks)	$160	$250
Fisher Gravity Incubator	Gravity Incubator	$0	$90
Fisher Isotemp Incubator	Isotemperature Incubator	$0	$90
Freeze-substitution Leica	Freeze Substitution/TEM Sample Prep	$10	$100
GESIM nanoplotter	3D printing for cell spotting	$160	$250
High-Pressure Freezer Leica	High-Pressure Freezing/TEM Sample Prep	$10	$100
Microfluidics flow control	Optional flow control for the printer	$50	$140
Microfluidics printer	3D printing of microfluidics structures	$160	$250
MTI electrospinner	3D printing of nanofibers	$160	$250
Nanodrop	DNA, RNA or protein concentration measurement	$70	$160
Optima LE-80 Ultracentrifuge	Ultracentrifuge	$70	$160
Polarized Optical Microscope	Optical Microscopy	$160	$250
Thermo CO2 incubator-bottom*	CO2 incubator	$20	$110
Thermo CO2 incubator-top*	CO2 incubator	$20	$110
Zeiss Axio-Inverted Microscope	Fluorescence Microscopy	$160	$250
Zeiss LIVE7 Confocal Microscope	Fluorescence Confocal Microscopy	$160	$250

*Maximum charge of 2 hours per day of usage.

Biomaterial Services Lab

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
Bio-BioSEM	Bio SEM Prep	N/A	$78
Bio-Embed	Embedding & Deparaffinization	N/A	$78
Bio-EMScopeVM	VDL Scope Tech Time	N/A	$93
Bio-LMSect	Trim & LM Sectioning	N/A	$78
Bio-NegDevelop	Negative Development	N/A	$95
Bio-NegScan	Negative Scanning	N/A	$80
Bio-NegStain	Negative Staining & Grids	N/A	$80
Bio-OptoMicro	Optical Camera Tech Time	N/A	$220
Bio-TEMSect	Trim & TEM Sectioning	N/A	$94
Reichart Ultracut	Microtome for TEM sample preparation	$70	$160

AMTEL-Advanced Materials Testing and Evaluation Laboratory

Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
Servo-hydraulic 1*	Uniaxial testing	$200	$290
Servo-hydraulic 2*	Uniaxial testing	$200	$290
Servo-hydraulic 3*	Uniaxial testing	$200	$290
Servo-hydraulic 4*	Uniaxial testing	$200	$290
Servo-hydraulic 5*	Uniaxial testing	$200	$290
Servo-hydraulic 6-Bi-Axial*	Bi axial testing (axial and torsion)	$300	$390
Electro-Mechanical 1*	Uniaxial testing	$200	$290
Electro-Mechanical 2*	Uniaxial testing	$200	$290
Electro-Mechanical 3*	Uniaxial testing	$200	$290
Thermo-Mechanical 1*	Uniaxial testing with combined thermal loading	$300	$390
Thermo-Mechanical 2*	Uniaxial testing with combined thermal loading	$300	$390
Thermo-Mechanical 3*	Uniaxial testing with combined thermal loading	$300	$390
Thermo-Mechanical 4*	Uniaxial testing with combined thermal loading	$300	$390
Thermo-Mechanical 5*	Uniaxial testing with combined thermal loading	$300	$390
Split-Hopkinson Bar*	High strain rate material testing	$275	$365
Creep Stand*	Temperature dependent creep testing	$100	$190
Creep Stand 2*	Tension Dead Weight Creep	$100	$190
Rotating Bending*	Rotating bending high cycle fatigue testing	$100	$190
Dynamic Mechanical Analysis*	Dynamic mechanical analysis	$200	$290
High Speed - Thermal Camera*	High speed and/or thermal imaging	$100	$190
Strain - Thermal Acquisition Box*	Additional strain, thermocouple, analog input data acquisition	$100	$190
3D Digital Image Correlation*	Calibration, acquisition, and/or analysis of 3D surface coordinates	$100	$190
100lbf Electrodynamic Shaker*	Electrodynamic Shaker	$200	$290
Drop Tower - Instron 9450	High energy falling weight impact	$104	$194
Laser vibrometer*	Non-contact vibration measurements of a surface	$100	$190
Paint Booth	Speckle painting for digital image correlation sample preparation	$12	$102
Laser Engraver	Engraving for digital image correlation sample preparation	$12	$102
Sand Blasting	Sandblasting for digital image correlation sample preparation	$12	$102
Wet-Dry Sander 1	Polishing for digital image correlation sample preparation	$12	$102
Wet-Dry Sander 2	Polishing for digital image correlation sample preparation	$12	$102
Vibration Polisher	Polishing for high magnification digital image correlation sample prepara	$12	$102
Pico Saw	Diamond blade wafer saw for sample preparation	$24	$114
Ultrasonic Bath	Ultrasonic bath for sample preparation	$24	$114

* Maximum charge of 2 hours per day of usage.

Battery Fabrication and Characterization Laboratory			
Instrument	Technique	Self Use ($/hr)	Staff Assisted & Training ($/hr)
BatteryLabAccess	Access to 15+ tools for cells/pouch fabrication	$20	$110
Calendaring	Hot roller press	$50	$140
Coin cell fabrication	Li-ion batteries coin cell fabrication in glovebox	$50	$140
Electrochem characterization*	Potentiostat, gavanostat, electrchemical impedance	$70	$160
Magnetic stirrer	Stirring and mixing solutions	$20	$110
Mixer - Thinky	Slurry mixing	$20	$110
Pouch cell fabrication	Li-ion batteries pouch cell fabrication in glovebox	$50	$140
Slurry coater	Automated coater for metal foils	$60	$150
Vacuum Oven - Battery Lab*	Up to 150C heating under vacuum	$60	$150
Vigor glovebox	With sealer, die cutter, welding and crimper	$60	$150
* Maximum charge of 1 hour per day of usage.			