

CCMR Shared Facility Rates - External Academic and Nonprofit Use

(Updated August 21, 2024)

Some rates consist of a fixed charge plus an hourly rate or a minimum charge.

	Ext. Acad. Rate
Manager Labor Rate (charged in addition to instrument rates below for assisted use)	\$148.00 /hr

Electron Microscopy

Arctica-S/TEM	\$1,469.28 /day
Transmission Electron Microscopes:	
Andromeda, Kraken	\$109.56 /hr
Perseus, Biotwin	\$105.60 /hr
Titan	\$105.60 /hr
Scanning Electron Microscopes	
Zeiss Gemini/Sigma, Tescan Mira	\$109.56 /hr
Keck	\$105.60 /hr
Thermo-Helios-G4-UX-FIB	\$138.52 /hr
FEI Strata 400 STEM FIB	\$113.33 /hr
TEM Sample Preparation:	
Allied Multiprep Polishers	\$41.58 /hr
Allied TechCut5 Precision High Speed Saw	\$70.62 /use
Leica Cryo- & Ultra- Microtomes	\$70.69 /hr
Vibratory Polisher	\$70.68 /use

Microscopy, Spectroscopy, Surface Analysis

Thermo Nexsa G2 XPS Surface Analysis System	\$102.96 /hr
	<i>night</i>
	\$83.16 /hr
Surface-Science-Instruments-SSX-100-XPS-System	\$50 + \$6.60 /hr
Keyence VK-X260 3D Laser Scanning Confocal Microscope	\$52.80 /hr
Asylum-MFP3D-Bio-AFM-SPM	\$60.64 /hr
Tencor Alpha Step 500 Stylus Profilometer	\$32.22 /hr
WITec-Alpha300R-Confocal-Raman-Microscope	\$59.40 /hr
Renishaw InVia Confocal Raman Microscope	\$59.40 /hr
3i-Marianias-Spinning-Disk-Confocal-Microscope	\$32.22 /hr
Bruker Hyperion FT-IR Spectrometer & Microscope	\$60.64 /hr
Bruker Vertex Vacuum FT-IR	\$60.64 /hr
Cary 5000 UV Vis NIR Spectrometer	\$49.50 /hr ±

Edinburgh FLS1000 Fluorescence and Lifetime Spectrometer		\$49.50 /hr	±
JASCO 1500 CD Spectrometer		\$49.50 /hr	±

Soft Matter/Polymer Analysis

TA Instruments DHR3 Single Head Rheometer	\$26 +	\$24.95 /hr
Thermo Fisher Capillary Breakup Extensional Rheometer (CaBER)		\$50.31 /hr
Bruker Autoflex Max MALDI	\$125 +	\$166.32 /hr
Waters Ambient-Temperature GPC		\$44.88 /hr
Waters Ambient-Temperature Aqueous GPC		\$44.88 /hr
Waters Breeze DMF-GPC		\$44.88 /hr
TA-Instruments-TGA-5500		\$44.88 /hr
TA Instruments Auto 2500 Differential Scanning Calorimeter		\$44.88 /hr

X-Ray and Diffraction Analysis

Rigaku SmartLab X-Ray Diffractometer		\$60.64 /hr
Bruker D8 General Area Detector Diffraction System (GADDS)	\$27 +	\$67.22 /hr
Bruker D8 Powder Diffractometer		\$67.22 /hr
Multiwire Back-Reflection Laue Detector		\$100.49 /hr

Mechanical Properties Testing and Analysis

TA Instruments DMA Q800 Dynamic Mechanical Thermal Analysis (DMTA)	\$16 +	\$56.00 /hr
TA Instruments Q400EM Thermomechanical Analysis (TMA)		\$68.64 /hr
Micro Hardness Tester	\$6 +	\$7.92 /hr
Linkham Microscope Tensile Stage	\$100 +	\$3.96 /hr
ATM Sonic sifter		\$16.50 /hr

Thin Film Deposition, and Material Processing

Varian Thermal Bell Jar Evaporator Clark Hall		\$111.58 /use
Sputter Deposition		\$159.39 /use
KSV-NIMA-KN4010 Dip Coater	\$5.25 +	\$17.67 /hr
KSV-NIMA-KN2002 Langmuir Blodgett Trough	\$10.50 +	\$17.67 /hr

Laurell WS-400A Spin Coater	\$10.50 +	\$16.50 /hr
Heat Treating		
furnace, ovens, air furnaces, controlled atmosphere furnaces, etc.	\$6 +	\$3.96 /hr
Carbolite 1600C Vacuum Tube Furnace	\$6 +	\$4.75 /hr

Electronic & Magnetic Measurements

Quantum Design Physical Property Measurement Systems (PPMS)	\$35 +	\$19.20 /hr
Quantum Design MPMS3 SQUID Magnetometer	\$35 +	\$23.76 /hr
Lakeshore Tabletop Magnetic-Cryogenic Probe System		\$20.79 /hr
Cascade CPS-06 Four Point Probe	\$6 +	\$25.70 /hr

Sample Preparation, Cutting, Polishing, etc.

Sample Prep

Enerpac Hydraulic Press		\$16.50 /hr
Buehler Simplemet II mounting press	\$10 +	\$16.50 /hr
Inert Gas Glove Box (+ monthly storage fee)		\$33.00 /use
Labconco Inert Gas GloveBox HQ Graphene 2D Xfer Station	\$16 +	\$11.35 /hr
Ball Mill		\$8.37 /hr
Spex 8000 MIXER /MILL	\$23 +	\$2.64 /hr

Cutting/Cleaning/Polishing

Glass Bead Abrasive Unit (sand blasting)-Clark		\$26.40 /hr
SS White Sand Blasting Unit	\$10 +	\$26.40 /hr
Struers Rotapol		\$44.48 /hr

Welding/Bonding

WestBond-747630E Wire Bonder	\$5 +	\$16.50 /hr
TPT HB05 Manual Wire Bonder	\$5 +	\$16.50 /hr
Portable Spot Welder Hughes HRW250B (Clark Hall)	\$12.90 +	\$1.32 /hr

Test Equipment Lending Library

(more info at <http://www.ccmr.cornell.edu/instruments/test-equipment-library/>)

Visit the library in D21 Clark Hall to see all instruments, rates, or to consult with staff)

8000-Varian-979-Helium-Leak-Detector	\$16 +	\$2.64 /hr
8003 Helium Leak Detector	\$16 +	\$3.30 /hr
8001-8002 - Portable RGA Pump Stations (Extorr or SRS)	\$16 +	\$1.32 /hr
8010-8013 - Portable Turbo Pump Stations (Clark & Bard)	\$6 +	\$0.78 /hr
8020-8024 - Rough Pumps (Clark Hall)	\$6 +	\$0.39 /hr
9000, 9016 - Stanford Research SR844 RF Lock-in Amplifier	\$6 +	\$0.30 /hr
9001-9009, 9017 - Signal Recovery 7265 Lock-in Amplifiers	\$6 +	\$0.17 /hr
9015 - Zurich Instruments 50MHz HF2LI Lock-in Amplifier	\$6 +	\$0.74 /hr
9014, 9018 - Signal Recovery 7270 Dual Lock-in Amplifier	\$6 +	\$0.24 /hr
9023-9025 - Signal Recovery 5113 Preamplifiers	\$6 +	\$0.10 /hr
9026-9030 - Stanford Research SR560 Low Noise Amplifiers	\$6 +	\$0.10 /hr
9040-9045 - Agilent E3630A Triple Output Power Supplies	\$6 +	\$0.03 /hr
9060-9065 - Yokogawa 7651 DC Programmable Power Source	\$6 +	\$0.13 /hr
9070 - Agilent 33250A 80MHz Arbitrary Waveform Generator	\$6 +	\$0.15 /hr
9072-9076 - HP 3325A Function Generators	\$6 +	\$0.07 /hr
9079 - Agilent 33250A-80MHz Arbitrary Waveform Generator	\$6 +	\$0.15 /hr
9080-9084 - Agilent E8257 PSG Analog Signal Generators	\$6 +	\$0.75 /hr
9085 - HP 8657B 2GHz Signal Generator	\$6 +	\$0.07 /hr
9091-9092 - Picosecond 10070A Pulse Generators	\$6 +	\$0.54 /hr
9107-9109 - Agilent 200MHz Digital Oscilloscopes	\$6 +	\$0.09 /hr
9112 - LeCroy 8500A Wavemaster Oscilloscope	\$6 +	\$0.74 /hr
9120 - Agilent 35670A 102kHz Dynamic Signal Analyzer	\$6 +	\$0.60 /hr
9121 - Agilent E5061A 1.5GHz Network Analyzer	\$6 +	\$0.20 /hr
9122 - Hewlett Packard 8753D 6GHz Network Analyzer	\$6 +	\$0.64 /hr
9123 - Agilent 8722ES Network Analyzer	\$6 +	\$0.74 /hr
9131 - Agilent E4408B 26.5GHz Spectrum Analyzer	\$6 +	\$0.74 /hr
9133 - Agilent 8563E Spectrum Analyzer	\$6 +	\$0.17 /hr
9141-9144 - FW Bell Hall Probes	\$6 +	\$0.07 /hr
9152 - Extech IRC40 Thermal imager	\$6 +	\$0.07 /hr
9164-9167 Keithley Sourcemeters	\$6 +	\$0.19 /hr
9168-9169 Keithley Sourcemeters	\$6 +	\$0.15 /hr

9170-Andeen-Hagerling-2700A-Multi-frequency-Capacitance/Loss-Bridge	\$6 +	\$0.74 /hr
9171-Agilent-4284A-Precision-LCR-Meter	\$6 +	\$0.51 /hr
9180-9186 - National-Instruments USB-GPIB adaptors	\$6 +	\$0.03 /hr