

CHARACTERIZATION.NANO EQUIPMENT USAGE RATES

EFFECTIVE JULY 2026

TOOL	COST (\$/HR)	
	EXTERNAL	START.NANO
	Self use For staff-assisted rate, add 322.50/hr	Self use For staff-assisted rate, add 217.50/hr
ATOMIC FORCE MICROSCOPY		
AGILENT 5500 AFM	225.75*	152.25*
BRUKER ICON AFM	225.75*	152.25*
CYPHER S AFM	225.75*	152.25*
CYPHER VRS AFM	225.75*	152.25*
CLEANROOM METROLOGY		
AFM-ASYLUM JUPITER XR		Rates for these and other cleanroom metrology instruments can be found at: nanousers.mit.edu/fabnano-rates
SEM-HITACHI REGULUS 8100		
SEM-ZEISS SIGMA 300		
ELECTRON MICROSCOPY		
AQUILOS CRYO-FIB/SEM	376.25	253.75
FEI HELIOS 600 FIB	376.25	253.75
FEI TECNAI TEM	301.00	203.00
GEMINI 450 SEM	258.86	174.58
HITACHI HF5000 ETEM	301.00	203.00
HITACHI HF5000 UHV	301.00	203.00
JEOL 2010F FEG TEM	301.00	203.00
JEOL 2011 TEM	301.00	203.00
QUATTRO ESEM	258.86	174.58
SIGMA HDVP SEM	258.86	174.58
TFS TALOS F200I	301.00	203.00
THEMIS Z STEM	376.25	253.75
VELION FIB SEM	352.17	237.51

<u>ZEISS MERLIN HRSEM</u>	258.86	174.58
<u>MICROSCOPY ANALYSIS COMP</u>	21.50	14.50
MAGNETIC		
<u>MPMS3 DC AC VSM</u>	43.00	29.00
MATERIALS PREP		
<u>ALLIED MULTIPREP POLISHER</u>	54.18	36.54
<u>ALLIED TECHCUT</u>	54.18	36.54
<u>EMS150T SPUTTER COATER</u>	76.76/hr + 180.60/run	51.77/hr + 121.80/run
<u>FISCHIONE 1010 ION MILL</u>	43.00	29.00
<u>FISCHIONE 1051 TEM MILL</u>	43.00	29.00
<u>FREEZE STAGE</u>	86.00	58.00
<u>GATAN PIPS</u>	43.00	29.00
<u>MICRO BALANCE</u>	206.40	139.20
<u>MICROSCOPE AXIOSKOP</u>	159.10	107.30
<u>MICROSCOPE SZX16</u>	129.00	87.00
<u>PELCO SC7 SPUTTER COATER</u>	76.76/hr + 180.60/run	51.77 + 121.80/run
<u>PLASMA CLEANER</u>	159.10	107.30
<u>UV OZONE CLEANER</u>	120.40	81.20
<u>VTI GLOVE BOX</u>	76.76/hr + 129.00/run	51.77/hr + 87.00/run
OPTICAL SPECTROSCOPY		
<u>ALPHA300 APYRON CONFOCAL RAMAN</u>	225.75	152.25
<u>FTIR 6700</u>	141.90	95.70
<u>FTIR IS50</u>	141.90	95.70
<u>ICP AES 5100</u>	150.50	101.50
<u>LEICA STELLARIS CRS</u>	225.75	152.25
<u>RENISHAW REFLEX RAMAN</u>	159.10	107.30
<u>UVVISNIR PE1050</u>	129.00	87.00
SURFACE ANALYSIS		
<u>BRUKER TRIBOINDENTER NANOINDENTER</u>	210.70*	142.10*
<u>FILMETRICS REFLECTOMETER</u>	159.10	107.30
<u>PHI 700 AUGER</u>	189.20	127.60
<u>PHI VERSAPROBE XPS</u>	189.20	127.60
<u>PROFILOMETER XT</u>	189.20	127.60
<u>QCM-D</u>	141.90	95.70

X-RAY DIFFRACTION & IMAGING		
<u>BRUKER DISCOVER PLUS</u>	219.30**	147.90**
<u>HANDHELD XRF</u>	219.30	147.90
<u>LAUE</u>	219.30**	147.90**
<u>PANALYTICAL EMPYREAN</u>	219.30**	147.90**
<u>PANALYTICAL XPERT</u>	219.30**	147.90**
<u>SAXS</u>	219.30**	147.90**
<u>SMARTLAB</u>	219.30**	147.90**
<u>VERSA 620 XRM</u>	225.75	152.25
<u>XRAY INSPECTION</u>	180.60	121.80
CLASSROOM TRAINING		
<u>SEM CLASSROOM TRAINING</u>	193.50 flat	130.50 flat
<u>XPS CLASSROOM TRAINING</u>	193.50 flat	130.50 flat
<u>XRD CLASSROOM TRAINING</u>	193.50 flat	130.50 flat

Please note that rates are subject to change.

* Rate drops to 50% regular rate after 8 hours for long sessions.

** For long runs, rate drops to 50% regular rate overnight.

TOOL	COST (\$/HR)					
Note: START.nano Cryo-EM rates are equal to the external rates.	MIT		OTHER ACADEMICS		EXTERNAL	
	Self use	Staff assisted	Self use	Staff assisted	Self use	Staff assisted
CRYO-EM						
<u>CHAMELEON</u> Grid consumable, per grid: \$36	128.16 / session	217.44 / session	356.00 / session	604.00 / session	996.80 / session	1,691.20 / session
<u>CLIPPING STATION</u> C-clip & ring consumable, per grid: \$10 C-clip & cryo-FIB ring consumable, per grid: \$33	9.00 / session	58.32 / session	25.00 / session	162.00 / session	70.00 / session	453.60 / session
<u>GP2</u>	61.20 / session	150.84 / session	170.00 / session	419.00 / session	476.00 / session	1,173.20 / session
<u>HYDRA BIO PFIB/SEM</u>	28.80 / hr	58.68 / hr	80.00 / hr	163.00 / hr	224.00 / hr	456.40 / hr
<u>TALOS ARCTICA G2 CRYO-TEM</u>	26.28 / hr	56.16 / hr	73.00 / hr	156.00 / hr	204.40 / hr	436.80 / hr
<u>TITAN KRIOS G3I CRYO-TEM</u>	34.92 / hr	64.80 / hr	97.00 / hr	180.00 / hr	271.60 / hr	504.00 / hr
<u>VITROBOT</u>	61.20 / session	150.84 / session	170.00 / session	419.00 / session	476.00 / session	1,173.20 / session

For the most up-to-date Cryo-EM tool rates, visit cryoem.mit.edu/rates.