

# CHARACTERIZATION.NANO TOOL PRICING

**AY 2024–2025**

TOOL	COST (\$/HR)					
	MIT ACADEMICS		OTHER ACADEMICS		EXTERNAL	
	Self use	Staff assisted	Self use	Staff assisted	Self use	Staff assisted
<b>AFM</b>						
<b><u>AGILENT 5500 AFM</u></b>	30.94	99.19	44.20	141.70	132.60	425.10
<b><u>BRUKER ICON AFM</u></b>	52.50	112.25	75.00	172.50	225.00	517.50
<b><u>CYPHER VRS AFM</u></b>	52.50	120.75	75.00	172.50	225.00	517.50
<b><u>NANOSCOPE V AFM</u></b>	44.00	112.25	62.86	160.36	188.58	481.08
<b>ANALYSIS</b>						
<b><u>MICROSCOPY ANALYSIS COMP</u></b>	5.01	73.26	7.15	104.65	21.45	313.95
<b>CRYOEM</b>						
<b><u>AQUILOS CRYO-FIB/SEM</u></b>	19.80	27.06	60.00	82.00	171.00	233.70
<b><u>CHAMELEON</u></b> Grid consumable, per grid: \$33	299.97 / session	386.10 / session	909.00 / session	1,170.00 / session	2,590.65 / session	3,334.50 / session
<b><u>CLIPPING STATION</u></b> C-clip & ring consumable, per grid: \$10	7.92 / session	46.53 / session	24.00 / session	141.00 / session	68.40 / session	401.85 / session
<b><u>TALOS ARCTICA G2 CRYO-TEM</u></b>	23.76	30.69	72.00	93.00	205.20	265.05
<b><u>TITAN KRIOS G3I CRYO-TEM</u></b>	31.35	38.61	95.00	117.00	270.75	333.45
<b><u>VITROBOT</u></b>	71.28 / session	146.52 / session	216.00 / session	444.00 / session	615.60 / session	1,265.40 / session
<b>DUALBEAM</b>						
<b><u>FEI HELIOS 600 FIB</u></b>	87.50	155.75	125.00	222.50	375.00	667.50
<b><u>VELION FIB SEM</u></b>	81.90	150.15	117.00	214.50	351.00	643.50
<b>MAGNETIC</b>						
<b><u>MPMS3 DC AC VSM</u></b>	10.00	78.25	14.29	111.79	42.87	335.37
<b>MATERIALS PREP</b>						
<b><u>EMS150T SPUTTER COATER</u></b>	17.85	86.10	25.50	123.00	76.50	369.00

<b><u>PELCO SC7 SPUTTER COATER</u></b>	17.85	86.10	25.50	123.00	76.50	369.00
<b><u>FISCHIONE 1010 ION MILL</u></b>	9.26	77.51	13.23	110.73	39.69	332.19
<b><u>FISCHIONE 1051 TEM MILL</u></b>	9.26	77.51	13.23	110.73	39.69	332.19
<b><u>GATAN PIPS</u></b>	9.26	77.51	13.23	110.73	39.69	332.19
<b><u>VTI GLOVE BOX</u></b>	17.85	86.10	25.50	123.00	76.50	369.00
<b><u>FREEZE STAGE</u></b>	20.00	88.25	28.57	126.07	85.71	378.21
<b><u>MICRO BALANCE</u></b>	48.00	116.25	68.57	166.07	205.71	498.21
<b><u>PLASMA CLEANER</u></b>	37.00	105.25	52.86	150.36	158.58	451.08
<b><u>UV OZONE CLEANER</u></b>	28.00	96.25	40.00	137.50	120.00	412.50
<b><u>MICROSCOPE AXIOSKOP</u></b>	37.00	105.25	52.86	150.36	158.58	451.08
<b><u>MICROSCOPE SZX16</u></b>	30.00	98.25	42.86	140.36	128.58	421.08
<b>SEM</b>						
<b><u>JEOL 5910 SEM</u></b>	60.20	109.20	86.00	156.00	258.00	468.00
<b><u>GEMINI 450 SEM</u></b>	60.20	109.20	86.00	156.00	258.00	468.00
<b><u>SIGMA HDVP SEM</u></b>	60.20	109.20	86.00	156.00	258.00	468.00
<b><u>ZEISS MERLIN HRSEM</u></b>	60.20	109.20	86.00	156.00	258.00	468.00
<b>SPECTROSCOPY</b>						
<b><u>ALPHA300 APYRON CONFOCAL RAMAN</u></b>	52.50	120.75	75.00	172.50	225.00	517.50
<b><u>ICP AES 5100</u></b>	35.00	103.25	50.00	147.50	150.00	442.50
<b><u>FTIR 6700</u></b>	33.00	101.25	47.14	144.64	141.42	433.92
<b><u>FTIR IS50</u></b>	33.00	101.25	47.14	144.64	141.42	433.92
<b><u>RAMAN REFLEX</u></b>	37.00	105.25	52.86	150.36	158.58	451.08
<b><u>UVVISNIR PE1050</u></b>	30.00	98.25	42.86	140.36	128.58	421.08
<b>SURFACE ANALYSIS</b>						
<b><u>FILMETRICS REFLECTOMETER</u></b>	37.00	105.25	52.86	150.36	158.58	451.08
<b><u>PHI 700 AUGER</u></b>	44.00	112.25	62.86	160.36	188.58	481.08
<b><u>PHI VERSAPROBE XPS</u></b>	44.00	112.25	62.86	160.36	188.58	481.08
<b><u>PROFILOMETER XT</u></b>	44.00	112.25	62.86	160.36	188.58	481.08
<b><u>QCM-D</u></b>	33.00	101.25	47.14	144.64	141.42	433.92
<b>TEM</b>						
<b><u>FEI TECNAI TEM</u></b>	70.00	138.25	100.00	197.50	300.00	592.50
<b><u>HITACHI HF5000 ETEM</u></b>	63.78	132.03	91.12	188.62	273.36	565.86

<b><u>JEOL 2011 TEM</u></b>	70.00	138.25	100.00	197.50	300.00	592.50
<b><u>JEOL 2010 HRTEM</u></b>	70.00	138.25	100.00	197.50	300.00	592.50
<b><u>JEOL 2010F FEG TEM</u></b>	70.00	138.25	100.00	197.50	300.00	592.50
<b><u>THEMIS Z STEM</u></b>	87.50	155.75	125.00	222.50	375.00	667.50
<b>XRD</b>						
<b><u>BRUKER GADDS</u></b>	51.00	119.25	72.86	170.36	218.58	511.08
<b><u>BRUKER HRXRD</u></b>	51.00	119.25	72.86	170.36	218.58	511.08
<b><u>LAUE</u></b>	51.00	119.25	72.86	170.36	218.58	511.08
<b><u>HANDHELD XRF</u></b>	51.00	119.25	72.86	170.36	218.58	511.08
<b><u>PANALYTICAL XPERT</u></b>	51.00	119.25	72.86	170.36	218.58	511.08
<b><u>PANALYTICAL EMPYREAN</u></b>	51.00	119.25	72.86	170.36	218.58	511.08
<b><u>SAXS</u></b>	51.00	119.25	72.86	170.36	218.58	511.08
<b><u>SMARTLAB</u></b>	51.00	119.25	72.86	170.36	218.58	511.08
<b><u>VERSA 620 XRM</u></b>	52.50	120.75	75.00	172.50	225.00	517.50

\*Training rate for SEM and XRD is \$200 flat fee for all equipment and classroom group training