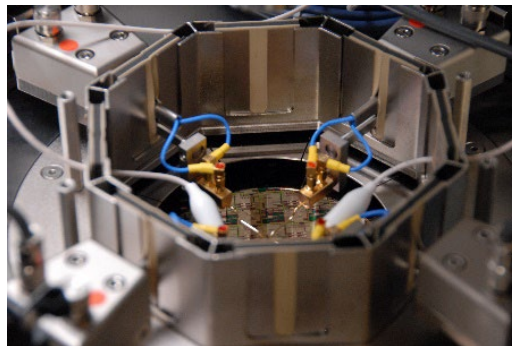
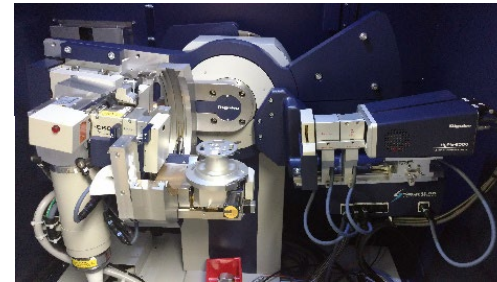


# Analysis Research Service Center (ARSC)

## ARSC user rates-effective 3/1/22

Fee description	comments	external	internal
Tier 1 hourly equipment fee	per piece of equipment, same rate for training	\$ 30	\$ 10
Tier 2 hourly equipment fee	per piece of equipment, same rate for training	\$ 45	\$ 15
Tier 3 hourly equipment fee	per piece of equipment, same rate for training	\$ 75	\$ 25
Tier 4 hourly equipment fee	per piece of equipment, same rate for training	\$ 105	\$ 35
Tier 5 hourly equipment fee	per piece of equipment, same rate for training	\$ 150	\$ 50
Tier 6 hourly equipment fee	per piece of equipment, same rate for training	\$ 225	\$ 75
Monthly project cap*	external soft cap: rate=internal after cap	\$ 3,327.50	\$ 665.50
Monthly project minimum charge	only billed when facility is accessed	\$ 500	\$ 100

\*excludes purchased consumables (e.g. specialty chemicals, deposition materials, substrates, tweezers, notebooks, etc.)



# ARSC Equipment Tiers and Consumables

ARSC Consumables Charges	
	External
Gold	\$4.50/run
Iridium	\$14.95/run
FIB	\$7.48/hour
1 run = 2 nm of Iridium or Gold	
Quartz 8 mm perpendicular sample holder	\$224.25/ea
Quartz 8 mm transverse sample holder	\$194.35/ea
Boron Nitride Spacer	\$451.49/ea
Boron Nitride Cup	\$367.77/ea
PCTFE Spacer (threaded)	\$197.34/ea
PCTFE Cup (threaded)	\$98.67/ea
AFM Tips Type A, HQ.NSC14/Al BS, 160kHz, 5 N/m, 125 µm	\$16.45/ea
AFM Tips Type D, HQ.NSC15/Al BS, 325kHz, 40 N/m, 125 µm	\$26.91/ea
AFM Tips Type E, HQ.NSC19/Al BS, 65kHz, 0.5 N/m, 125 µm	\$26.91/ea
AFM Tips Type F, RTESPA-525, 525 kHz, 200 N/m, 125 µm	\$49.34/ea
AFM Tips Type K, HQ.NSC14/Pt, 160kHz, 5 N/m, 125 µm	\$25.42/ea
AFM Tips Type L, HQ.NSC15/Pt, 325kHz, 40 N/m, 125 µm	\$28.41/ea
AFM Tips Type P, PtSi-FM, 75 kHz, 2.8 N/m, 225 µm	\$198.84/ea
PELCO® Center-Marked Grids, 200 mesh, Nickel	\$43.48/100 grids
PELCO® Slot Grids, 1 x 2mm, Molybdenum	\$137.78/25 grids
PELCO® Slot Grids, 1 x 2mm, Aluminum	\$166.00/25 grids
PELCO® FIB Lift-Out TEM Grids, 2 wide posts, copper	\$129.40/100 grids
Carbon Type-B, 200 mesh TH, Nickel	\$174.30/50 grids
Lacey Formvar/Carbon, 200 mesh, Copper approx. grid hole size: 97µm	\$195.88/50 grids
PELCO® TEM Grid Storage Box	\$7.80/ea

For internal consumables, divide external by 1.495

ARSC FY22 Equipment Tiers	
Equipment	Tier
Linear Four Point Probe	1
Hermes	1
Pelco Dimpler	1
Surface Profilometer	1
Ultramicrotome	1
Ultrasonic Disk Cutter	1
UV-Vis Spectrometer	1
Wire Saw	1
Wire Bonder	1
Critical Point Dryer	2
Cronus	2
Cryotome	2
Ellipsometer	2
FTIR	2
Hirox Digital Microscope	2
Glass Knife Maker	2
Imaging Sputter Coater - Iridium & Carbon*	2
Leica TXP Microscopy Sample Preparation System	2
Nano Mechanical Analyzer	2
Optical Microscope	2
Argon Polisher	3
Raman-AFM	3
VSM	3
AFM	4
Nexsa XPS	4
Dynacool PPMS	4
XRD	4
FV3000 Confocal	5
SEM	6
Talos TEM	6
Leica Cryo-ultramicrotome	1 for room temp, 3 for Cryo
JEOL SEM	4 for standard, 5 for CL