Center for Nanoscale Systems (CNS) – Harvard University
NON-ACADEMIC RATES (effective 07/01/08)

Imaging and Analysis Facilities

INSTRUMENT	Rate/ Unit	On-Site Staff Assistance	Remote Staff Assistance	Quarterly Cap Eligible	Comments
HAR-001 JEOL 2010 FEG TEM/STEM	$300/hour	$150/hour	$200/hour	N	
Zeiss Libra200 FEG TEM	$300/hour	$150/hour	$200/hour	N	
Technai Cryo-Bio FEG TEM	$300/hour	$150/hour	$200/hour	N	
HAR-027 JEOL 2100 TEM	$300/hour	$150/hour	$200/hour	N	
SEMs (LEO SEM, Zeiss Ultra55, Zeiss Supra55, Zeiss EVO)	$200/hour	$150/hour	$200/hour	N	
Orion Helium Ion Microscope	$200/hour	$150/hour	$200/hour	N	
HAR-004 Quanta 200 ESEM	$200/hour	$150/hour	$200/hour	N	
HAR-34 Freeze Etching System	$150/hour	$150/hour	$200/hour	N	
B15A Sample prep tools: Baltec Sputter Coater	$50/use	$150/hour	$200/hour	N	
B15A Sample prep tools: Cryoplunge	$50/use	$150/hour	$200/hour	N	
B15A Sample prep tools: 1010 Dual beam Ion-mill	$200/use	$150/hour	$200/hour	N	
B15A Sample prep tools: 1040 NanoMill	$250/use	$150/hour	$200/hour	N	
B15A Sample prep tools: Gatan 691 Ion Mill	$50/use	$150/hour	$200/hour	N	
B15A Sample prep tools: Cressington Sputter Coater	$50/use	$150/hour	$200/hour	N	
HAR-017 Ultramicrotome	$100/hour	$150/hour	$200/hour	N	
General Imaging and Analysis Staff Assistance	N/A	$150/hour	$200/hour	N	

1. Self-use is charged at the base rate.
2. The on-site or remote staff assistance rate is in addition to the base rate when CNS staff assists user on a tool.
3. Training counts as on-site assisted use if it is one-on-one training. There is no charge for training if it is a group or multiple-user training.
4. In addition to actual time used in the logbook, users will be charged for all unused time reserved in the Scheduling Tool.
5. Any CNS staff assistance in the preparation of samples using any Imaging and Analysis Facility tools not listed above is charged the General Imaging and Analysis Staff Assistance rate.
6. The LEO A SEM is located in the LISE Cleanroom. The General LISE Cleanroom Access charge applies when using this tool (See Nanofabrication Facilities Rate Sheet).

Center for Nanoscale Systems (CNS) – Harvard University
NON-ACADEMIC RATES (effective 07/01/08)

Materials Synthesis and Characterization Facilities

INSTRUMENT	Rate/ Unit	On-Site Assistance	Remote Staff Assistance	Quarterly Cap Eligible	Comments
HAR-014 DualBeam 235 FIB/SEM	$350/hour	$150/hour	$200/hour	N	
FIB-2 Zeiss Nvision40 FIB	$350/hour	$150/hour	$200/hour	N	
FIB-3 Zeiss Nvision40 FIB	$350/hour	$150/hour	$200/hour	N	6
G05 Bio-Materials Facility	$50/day	$150/hour	$200/hour	N	7
G06 Chemical Nanotechnology and SLF Facility	$50/day	$150/hour	$200/hour	N	7
HAR-007 XPS ESCA SSX-100	$200/hour	Included	$200/hour	N	Assistance is required
HAR-018 Confocal / Multiphoton Microscopes	$200/hour	$150/hour	$200/hour	N	
LZR-2 Versalaser Cutting / Engraving System	$100/hour	$150/hour	$200/hour	N	
SPM-1 Asylum AFM I	$200/hour	$150/hour	$200/hour	N	
SPM-2 Asylum AFM II (Coax)	$200/hour	$150/hour	$200/hour	N	
SPM-3 AFM/STM: Omicron VT-25	$2800/day	$150/hour	$200/hour	N	Minimum charge is one day
SPM-4 Witek NSOM	$200/hour	$150/hour	$200/hour	N	
SW-1 DISCO Dicing Saw	$50/hour	$150/hour	$200/hour	N	
XRA-2 X-Tek HMXST 225 MicroCT	$200/hour	$150/hour	$200/hour	N	
General Materials Synthesis Staff Assistance	N/A	$150/hour	$200/hour	N	

1. Self-use is charged at the base rate.
2. The on-site or remote staff assistance rate is in addition to the base rate when CNS staff assists user on a tool.
3. Training counts as on-site assisted use if it is one-on-one training. There is no charge for training if it is a group or multiple-user training.
4. In addition to actual time used in the logbook, users will be charged for all unused time reserved in the Scheduling Tool.
5. Any CNS staff assistance in the preparation of samples using any Materials Synthesis Facility tools not listed above is charged the General Materials Synthesis Staff Assistance rate.
6. The FIB-3 is located in the LISE Cleanroom. The General LISE Cleanroom Access charge applies when using this tool (See Nanofabrication Facilities Rate Sheet).
7. Daily facility charges (G05 and G06) is charged for all tools within facility whether or not the tool has a separate hourly or per use charge.

Center for Nanoscale Systems (CNS) – Harvard University
NON-ACADEMIC RATES (effective 07/01/08)

Nanofabrication Facilities

INSTRUMENT	Rate/ Unit	On-Site Assistance	Remote Staff Assistance	Quarterly Cap Eligible	Comments
LISE Cleanroom Access	$50/hr max $150/day	$150/hour	$200/hour	Y	1, 9, 10
ALD-1 Savannah Atomic Layer Deposition	$80/hour	$150/hour	$200/hour	Y	9
CVD-2 Nexx PECVD	$100/hour	$150/hour	$200/hour	Y	9
CVD-3 STS PECVD	$100/hour	$150/hour	$200/hour	Y	9
RIE-6 Nexx RIE	$100/hour	$150/hour	$200/hour	Y	9
RIE-7 Unaxis Shuttleline ICP RIE	$100/hour	$150/hour	$200/hour	Y	9
RIE-8 STS ICP RIE	$100/hour	$150/hour	$200/hour	Y	9
SP-2 AJA Sputtering System	$100/hour	$150/hour	$200/hour	Y	9
SPM-5 Veeco AFM	$100/hour	$150/hour	$200/hour	Y	9
MET-1 Toho FLX-2320 Stress Measurement System	$100/hour	$150/hour	$200/hour	Y	9
EE-3 Sharon E-Beam Evaporator	see note	$150/hour	$200/hour	Y	7, 9
EE-4 Denton E-Beam Evaporator	$100/hour	$150/hour	$200/hour	Y	9
EL-1 Raith-150 E-Beam	$300/hour	$150/hour	$200/hour	N	
EL-3 JEOL 7000F E-Beam	$300/hour	$150/hour	$200/hour	N	
EL-4 Elionix STS7000 E-Beam	$300/hour	$150/hour	$200/hour	N	
MW-1 Heidelberg Mask Writer	$150/hour	Included	$200/hour	N	2
Lakeshore 1.5K Probe Station	$100/hour	$150/hour	$200/hour	Y	8, 9
SW-2 Loomis Scriber	$100/hour	$150/hour	$200/hour	Y	9
WB-1 Wire Bonder	$100/hour	$150/hour	$200/hour	Y	9
Flip Chip Bonder	$100/hour	$150/hour	$200/hour	Y	9
General Nanofab Staff Assistance	n/a	$150/hour	$200/hour	N	3,4
Quarterly Cap (Quarter/User)	$5,000				5, 9

1. General LISE Cleanroom Access fee is charged for all entries up to the daily maximum. The General Access fee also covers all cleanroom tools not otherwise listed on the rate sheet as having a separate charge. All Cleanroom entries are rounded up to nearest full hour.
2. Fee for the Heidelberg Mask Writer does not include a $25 per mask charge that will be added to the total.
3. Staff Assistance on any Nanofabrication Facility tools not listed above is considered General Nanofabrication Facility Staff Assistance.
4. Training counts as on-site assisted use if it is one-on-one. There is no charge for training if it is a group or multiple-user training.
5. When a User reaches the Quarterly Cap, they can use all Cap eligible tools free of charge until the end of the quarter. Cap is strictly per User, not PI or Project. Quarters start on the 1st of July, October, January, and April.
6. In addition to actual time in the logbook, users will be charged for all unused time reserved in the Scheduling Tool.
7. Market rates apply for use of crucible metal. Charges based on thickness used. Rates posted in cleanroom.
8. User must bring their own liquid helium (see tool web page for details).
9. Remote Staff Assistance usage in all cases is not cap eligible regardless of tool or charge.
10. General LISE Cleanroom Access Fee is not charged for Remote Staff Assistance usage.