

User Fees

Researchers will be charged for the use of the facilities on a ½ **hourly basis** as logged by the Reservation System, and invoices will be distributed on a **monthly or quarterly basis**.

Analytical

<u>Tools</u>	<u>Manufacturer</u>	<u>Academic rate (per Hour)</u>	<u>Industrial rate (per Hour)</u>
IV/Spectral Response System	Neonsee	\$60/hr	\$180/hr
EQE System	Enli	\$60/job	\$180/job
Micro PCD	Semilab	\$60/hr	\$180/hr
Sinton Lifetime Tester, Suns-Voc	Sinton	\$60/hr	\$180/hr
Ex-situ Spectroscopic Ellipsometer (Sopra)	SOPRA	\$60/hr	\$180/hr
Vacuum-Cryostat Optoelectrical Characterization	UT	\$60/hr	\$180/hr
Nanometrics Hall Characterization Station	Nanometrics	\$60/hr	\$180/hr
2/4-Point Conductivity Measurement Probe	UT	\$60/hr	\$180/hr
Keithley Electrical Characterization Station	Keithley	\$60/hr	\$180/hr
Profilometer	Tencor	\$30/hr	\$90/hr
Optical Microscope (Leica)	Leica	\$30/hr	\$90/hr
Photoluminescence Facility (c/w Ar and other lasers, goniometer)	Custom	\$50/hr	\$150/hr
Optoelectronic Characterization Facility	Custom	\$50/hr	\$150/hr
Probe Station (2 and 4 point electrical characterization facility with Keithley 4200 source measuring units)	MPI	\$75/hr	\$225/hr
UV-Vis Spectrophotometer (Lamda)	Perkin Elmer	\$30/hr	\$9/hr

Light Soaking/Aging/Exposure System	Custom	\$25/hr	\$75/hr
Multiwavelength Raman Spectroscopy	Renishaw	\$100/hr	\$300/hr
Optical Microscope w/high-speed Camera	Leica	\$50/hr	\$150/hr

Synthesis

<u>Tool</u>	<u>Manufacturer</u>	<u>Academic</u>	<u>Industrial</u>
Laser micro-machining system	Newport/Optek	\$60/hr	\$180/hr
Spinner	Laurell Tech	\$25/hr	\$75/hr
Multi-target DC/RF Sputtering System (4 target, co-sputtering, reactive, cryopumped, heated substrate 250C, load-lock)	Custom	\$90/hr	\$270/hr
E-Beam Thermal Evaporation System (4 pocket, cryopumped, cooled substrate, load-lock)	Kurt J. Lesker	\$90/hr	\$270/hr
Gen 1.2 DCSF-RF Plasma Enhanced Chemical Vapour Deposition System amorphous carbon, diamond-like, polymeric-like, metallo-organic)	Torrovap	\$90/hr	\$270/hr
Gen 2.1, DCSF Plasma Enhanced Chemical Vapour Deposition System (multi-grid system, amorphous silicon (intrinsic, doped))	Komag, Torrovap	\$90/hr	\$270/hr
Gen 2.2, RF Plasma Enhanced Chemical Vapour Deposition System (multi-grid system, amorphous silicon (intrinsic, doped), hydrogen/deuterium plasma)	Torrovap	\$90/hr	\$270/hr
Gen 2.3, DCSF-RF Plasma Enhanced Chemical Vapour Deposition System (c/w In-situ Diagnostics, hydrocarbon films, diamond, graphene)	Torrovap	\$90/hr	\$270/hr
Gen 3.1, RF Plasma Enhanced Chemical Vapour Deposition - Sputter Deposition Cluster Thin Film Deposition Facility (8 port, load-lock, annealing, intrinsic aSi, n-aSi, p-aSi, sputtering, 156 mm square platform)	MVS	\$90/hr	\$270/hr
AIMS Facility - Advanced Integrated Materials Synthesis (PVD: nanogen, core-shell, quadrupole size selection, sputtering, soft e-beam, GLAD; CVD: atomizer, ionizer)	Mantis	\$125/hr	\$375/hr

HPTEC – Facility for Heterogeneous Photo-Thermo-Electro-Catalysis	Custom	\$125/hr	\$375/hr
Hot Plate		\$25/hr	\$75/hr
Wet Bench		\$40/hr	\$120/hr
Ozone Oxygen Ambient Oxidation System	Custom	\$50/hr	\$150/hr

Additional Fess

For a given project, additional nominal support fees also apply.