

CAMN Industrial Liaison Program (ILP) Equipment and Labor Rates

as of 03/01/11

	Research Rate	Liaison Rate	External Rate	
	for outside academic & gov't use, including sponsored research	for Full Membership in CAMN ILP	for Limited Collaboration Agreement in CAMN ILP	for Testing Agreement in CAMN ILP
ADDITIONAL FEES:	None	Membership fee varies by projected use	\$500 Access Fee	None
OVERHEAD APPLIED TO RATES SHOWN BELOW (not charged on Additional Fees):	61.00%	12.50%	43.00%	61.00%
LABOR RATES (including fringe benefits rate up to 34%):				
Students	25	25	25	
Technicians	50-60	50-60	50-60	
Research Scientists	50-75	50-75	50-75	
Faculty	100	100	100	
EQUIPMENT RATES:				
<i>Rates listed are 'per hour' and located in Whitaker Laboratory unless otherwise noted.</i>				
SEM's				
Hitachi 4300 FEGSEM	50	160	400	
JEOL 6400F CL SEM	35	125	350	
FEI Strata DB 235 FIB	50	160	400	
JEOL 733 EPMA Microprobe	35	125	350	
FEI XL30 ESEM (Environmental)	35	130	400	
JEOL 840 (student)	1	150	375	
TEM's				
JEOL 2000FX TEM	40	125	350	
JEOL 1200EX	15	100	300	
JEOL 2200FS	55	200	500	
STEM's				
VG HB 603 Scanning TEM	55	250	600	
GEMINI-LEO Electron Beam (Nanolithography) - <i>Sh. Fairchild Lab</i>	40	240	600	
Specimen Prep				
Ion Micro Mill (PIPS)	5/sample	5/sample	5/sample	
EM/SEM Specimen Coating	5/sample	7/sample	7/sample	
Fischione Low Angle Milling and Polishing Machine	5/sample	N/A	N/A	
Atomic Force Microscopy (Nanoscope/Hysitron)	15	100	250	
Atomic Force Microscopy (Asylum Research, MFP-3D Bio) - <i>Chemistry</i>	0	150	200	
Profilometer	20 up to 10 hrs; 1 over 10 hrs	40 up to 10 hrs; 2 over 10 hrs	60 up to 10 hrs; 3 over 10 hrs	
Sciencita ESCA 300 rates available on request - <i>Sinclair Lab</i>				
Laser Raman System	50	250 (or 2000/day)	312.50 (or 2500/day)	
UV-Vis-NIR Spectroscopy (Perkin Elmer Lambda 35)	0/sample	30/sample	60/sample	
UV-Vis Spectrometer (Laser Light Scattering)	30	50	100	
Solid State NMR	10 or max 75/day	45 or max 450/day	70 or max 700/day	
FTIR Spectrometer	24	75	175	
Perkin-Elmer FTIR Spectrum 100	10	20	50	
NMR Bruker AM-500	10	30	50	

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Light Optical Microscopy supplies	14/sample	24/sample	35/sample	
Leco Microhardness testers	20	40	60	
Light Optical Metallographs (Olympus Vanox)	10	20	30	
Quantitative Scope (Nikon Microphet w/Digitalizing pad)	12	20	30	
Automatic Polishers	12/run	20/run	30/run	
Clemex	25	50	100	
<u>Abrasive Cutting:</u>				
Buehler Isomet	2/cut	3/cut	4/cut	
Struers Accuton-50	4/cut	6/cut	8/cut	
<u>Furnaces and Salt Bath</u>				
(After 48 hrs, \$1-\$2-\$3/hr, respectively)	8	12	16	
With Gas	10	14	18	
Muffle Furnace	10	20	30	
X-Ray Facility	34	67	100	
Sputtering System	50/run	200/run	300/run	
TG/DTA Thermal Analysis (Dilatometer)	100/run	150/run	330/run	
High Speed Saw (Struers)	2/cut	10/cut	50/cut	
Wire Saw	4/cut	8/cut	12/cut	
Particle Size Analyzer (LA 910)	30/sample	60/sample	100/sample	
Resistance Furnace	2	4	5	
Isopress	25/run	50/run	75/run	
Spark Plasma Sintering < 24 hrs	40/run (run=<24 hrs)	200/run (run=<24 hrs)	500/run (run=<24 hrs)	
Spark Plasma Sintering > 24 hrs	2	8	20	
Hi Temp Furnace < 24 hrs	100/run (run=<24 hrs)	200/run (run=<24 hrs)	500/run (run=<24 hrs)	
Hi Temp Furnace > 24 hrs	2	8	20	
Vacuum Hot Press < 24 hrs	50/run (run=<24 hrs)	200/run (run=<24 hrs)	500/run (run=<24 hrs)	
Vacuum Hot Press > 24 hrs	2	8	20	
Diamond Saw (1 hr min)	2	4	6	
Rheovibron	2	6	20	
Clean Room DI H2O system	5/gal	20/gal	50/gal	
Clean Room (15 min minimum)	5	30	120	

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Inst Cap Rheometer - Packard Lab	7	14	50	
Brabender Extruder - Packard Lab	15	25	40	
Rotary Viscometer - Packard Lab	15	25	40	
Rheometrics w/o liquid nitrogen	20/run	50/run	200/run	
Rheometrics w/liquid nitrogen	30/run	75/run	250/run	
Tetrahedron Press	14	28	42	
DSC/TGA	10 for over 150 C; 5 for under 150 C	20	40	
DMA/TMA/DEA	10	20	40	
Flow Calorimetry	5/run	20/run	400/run	
Environmental Chambers	70/week	140/week	210/week	
Scanning Acoustic Microscope (C-SAM)	10	25	75	
UV Ozone Chamber	1 (30 minute min.)	2	5	
Contact Angle Goniometer	10	20	50	
Met Mechanical Testing	20	40	60	
- w/extensometer	25	50	80	
Instron Fatigue w/computer	5	12	25	
Instron Fatigue w/o computer	2	8	15	
Izod Impact Tester	0	1/sample	5/sample	
Evaporator System	10	20	40	
Thin Film Mech Test System	10	20	40	
Gleeble Thermo-Mechanical Simulator	10/run	50/run	150/run	
Static Laser Light Scattering Spectrometer	30	50	100	
Dynamic Laser Light Scattering Spectrometer	30	50	100	
Zeta Potential Analyzer	30	50	100	