

# MNC Industrial Rates--Access and Equipment Use

valid 8/1/18 to 7/31/19 RATES SUBJECT TO CHANGE

ACCESS/USE	LOCATIONS	UNITS	RATE	MONTHLY MAX
ACCESS FEE	PAN cleanroom, Keller cleanroom, Keller Areas 1-3	monthly fee	\$110.00	\$110.00
LAB USAGE FEE	PAN cleanroom, Keller cleanroom, Keller Areas 1-3	per lab session	\$83.00	\$664.00
PAN NANO-BIO LAB	PAN 181	per hour	\$96	\$768
PAN NANO-MATERIALS LAB	PAN 185	per hour	\$84	\$672

CATEGORIES	INCLUDED EQUIPMENT	UNITS	RATE
2D MATERIALS GROWTH	Graphene furnace, TMD furnace	minute	\$1.00
ALD-ATOMIC LAYER DEP	ALD Savannah 200, Fiji PEALD	minute	\$1.50
ALIGNERS	MA6, MABA6, MA6-P	minute	\$2.86
ANALYTICAL EQUIPMENT	AFM, P16, P7, HS SCOPE	minute	\$2.50
CRITICAL POINT DRYER	Tousimis system	minute	\$5.20
DRY ETCHING	Ion Mill, Oxford RIE, STS etcher, AV, Deep Trench etcher, XeF2 etcher	minute	\$2.90
E-BEAM EVAPORATION	CHA, Temescal and Varian	minute	\$2.40
E-BEAM LITHOGRAPHY	Vistec EBPG 5000+	minute	\$4.20
LASERWRITER	Heidelberg DWL 200	minute	\$1.92
LPCVD	Thermco LPCVD system	minute	\$6.19
MASKMAKING	Min feature size > 1.5um	per mask	\$621.04
MASKMAKING	1.0um < Min feature size < 1.5um	per mask	\$1400.00
MINIBRUTE FURNACE	Minibrute furnace	minute	\$1.60
NANOIMPRINTER	Nanonex	minute	\$4.42
ORIEL	Oriel	minute	\$1.46
OXIDATION/DIFFUSION	Tylan Oxidation system	minute	\$3.37
PARYLENE DEPOSITION	SCS COATER	minute	\$0.45
PECVD	PECVD, HD PCVD	minute	\$2.30
RAPID THERMAL ANNEALING	Modular Process RTA	minute	\$4.26
SEM	Jeol SEM, Amray SEM	minute	\$2.30
SPINNERS	CEE equipment, Headway spinner	minute	\$1.20
SPUTTERING	AJA I, AJA II and PE2400 DC system	minute	\$3.12
STEPPER	Canon Stepper	minute	\$3.55
THERMAL EVAPORATION	Thermal Evaporator	minute	\$2.90
WAFER BONDING	Karl Suss SB6	minute	\$3.59
WAFER SAW	DISCO	minute	\$1.87
<b>MISC CHARGE RATES</b>		<b>UNITS</b>	<b>RATE</b>
EQUIPMENT RESERVATIONS		per reservation	\$96.20
E-BEAM LITHO TRAINING		per session	\$625
HEIDELBERG LASERWRITER		Per session	\$200
STAFF LABOR		per hour	\$140.00
CLEAN SPACE FACILITY CHARGE		ft/month	\$65
NON-CLEAN SPACE FACILITY CHARGE		sq ft/month	\$1.40