

## LNF User Fees – Rates Summary as of July 1 2009

CleanRoom	Academic Rates
<b>Entry Fee:</b>	<b>\$5</b>
<b>Daily Fee:</b>	<b>\$42</b>
<b>Equipment Hourly Fees see below:</b>	
<b>ETCH</b>	
LAM 9400 (CMOS Only)	\$35
Trion (polySi etcher)	\$34
Oxford RIE	\$22
STS DRIE Etcher I	\$24
STS DRIE Pegasus	\$37
Xactic XeF2 Etcher	\$43
<b>FURNACES</b>	
A1: Sinter/Anneal	\$17
A2: Boron Doping	\$23
A4: Boron ANL/Oxide	\$20
B2: TCA-Oxide	\$20
B3: Phos- Dep	\$23
B4: Phos ANL/Oxide	\$20
C1: Gate Oxide	\$20
C2: LTO	\$20
C3: LPCVDPoly Si	\$26
C4: LPCVD SiO2 SiN	\$29
D1: Anneal	\$17
D2: Si3N4, HTO	\$36
D3: Poly, in-situ doped poly	\$32
D4: Clean LTO	\$31
<b>LITHOGRAPHY</b>	
Aligner EVG 620 (BA)	\$35
Aligner Suss MA/BA6 I	\$16
Aligner Suss MA/BA6 II	\$16
Aligner MJB3 I	\$13
Aligner MJB3 II	\$13
GCA AS200 Stepper	\$46
Mask Maker	\$40
Raith 150 Ebeam	\$74
ACS 200	\$25
<b>PACKAGING</b>	
Bonder EVG 501	\$40
Bonder Suss SB-6E	\$29
NanoPrep Suss NP12	\$34
Cleaner Suss CL-8	\$38

PECVD	
PECVD GSI	\$41
Uniaxis PECVD/RIE	\$33
Oxford ALD	\$41
<b>PVD</b>	
Evaporator Cooke	\$20
Evaporator Enerjet	\$33
Evaporator SJ 20	\$33
Evaporator SJ 26	\$27
Sputter Coater Enerjet	\$20
<b>Misc</b>	
PDS 2035CR Parylene Dep	\$18
Jetfirst100 RTP	\$6
Jetfirst150 RTP	\$6
Gold Plating Station	\$27
Tousimis 915B CPD	\$15
Tousimis 615B CPD	\$15
AFM	\$24
Zygo NewView 5000	\$21

*Note: Rates are subject to change based on the necessity to be in compliance with the guidelines outlined by the UM Office of Financial Analysis.*

<b>Wet Chemistry</b>	<b>Academic Rates</b>
<b>Entry Fee:</b>	\$2
<b>Daily Fee:</b>	\$26
<b>Equipment Hourly Fees see below:</b>	
Wet Processing	
Bench 1 (1436C-01 / Solvent)	\$33
Bench 2 (1436D-01 / EDP)	\$37
Bench 3 (1436D-02 / Acid)	\$33
Bench 4 (1436E-01 / Base)	\$37
CMP / Mechanical	
Logitech PM2A Lapper	\$17
K&S 4123 Wedge Bonder	\$17
OnTrak DSS 150 Wafer Cleaner	\$28
MA 1006 Dicing Saw	\$28
IPEC 472 CMP	\$33
Deposition	
PDS 2010 Parylene Coater	\$24

<b>DC Testing</b>	<b>Academic Rates</b>
<b>Entry Fee:</b>	\$1
<b>Daily Fee:</b>	\$12
<b>Equipment Hourly Fees see below:</b>	
Measurement	
PL	\$9
HP 4145	\$9
HP 4145	\$9
Keithley 4200	\$9
Analytical	
Denton Desk II Sputter Coater	\$11

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