

Institute for Micromanufacturing
 Cost-Center Fee Structure ^a
 --- 2016_December ---

| | | LA - public institution of higher education | LA - other | External |
|--|--|---|--------------------------------|--------------------------------|
| Equipment ^b for Fabrication and Metrology | ICP | \$ 40/hr | \$ 60/hr | \$ 80/hr |
| | Sputtering: common | \$ 80/hr | \$ 120/hr | \$ 160/hr |
| | Sputtering: precious | \$ 150/hr | \$ 220/hr | \$ 300/hr |
| | e-Beam: common | \$ 40 ^c + \$ 80/hr | \$ 60 ^c + \$ 120/hr | \$ 80 ^c + \$ 160/hr |
| | e-Beam: precious ^d | \$ 40 ^c + \$ 0.7/nm | \$ 60 ^c + \$ 1.0/nm | \$ 80 ^c + \$ 1.3/nm |
| | Lithographic masks | \$ 30 ^e + \$ 20/hr | \$ 50 ^e + \$ 30/hr | \$ 100 ^e + \$ 40/hr |
| | PlasmaTherm RIE | \$ 40/hr | \$ 60/hr | \$ 80/hr |
| | Aluminum Evaporation | \$ 20/hr | \$ 30/hr | \$ 40/hr |
| | Technics RIE | \$ 20/hr | \$ 30/hr | \$ 40/hr |
| | AMRAY SEM | \$ 45/hr | \$ 70/hr | \$ 90/hr |
| | Hitachi FESEM | \$ 75/hr | \$ 110/hr | \$ 150/hr |
| | Nova Pore Size Analyzer | \$ 60/test | \$ 80/test | \$ 120/test |
| | Foundry Services ^f | Metrology - XRD, TEM, etc. | - | NA |
| Fabrication - Dep, Etch, etc. | | - | NA | NA |
| Facilities Access (per user) ^g | General Lab Areas ^h | \$ 10/mo | -- | -- |
| | Cleanroom & STL | \$ 10/hr ⁱ | \$ 15/hr | \$ 20/hr |
| | Metrology | \$ 20/mo | \$ 10/day | \$ 40/day |
| Other Charges | Staff time ^j | \$ 15/hr | \$ 45/hr | \$ 80/hr |
| | Line nitrogen - unmetered ^k | \$ 20/month | N/A | N/A |
| | Line nitrogen - metered | billed x 1.05 | N/A | N/A |
| | Liquid nitrogen | \$ 2.50/kg | \$ 2.50/kg | \$ 2.50/kg |
| Disciplinary Fines (per incident) | Access deviancy ^l | \$ 200 + ban | contract default | contract default |
| | Usage deviancy ^m | \$ 200 + ban | contract default | contract default |
| | Logoff error ⁿ (1 st time) | \$ 0 | \$ 0 | \$ 0 |
| | Logoff error ⁿ (subsequent) | \$ 40 | \$ 40 | \$ 40 |
| | Logbook omissions ^o | \$ 30 | \$ 30 | \$ 30 |

Footnotes

- a- Check IfM web site for latest version. Hard copies may be obsolete
- b- Equipment usage is billed at a fractional hourly rate, unless identified otherwise
- c- Flat fee for the pump down time prior to film deposition (approximately 30 minutes)
- d- multiplier is per nm of gold. Silver is charged as "common" not as "precious"
- e- Charge for the mask blank
- f- LA Tech University researchers who are active IfM users may contact staff for assistance with additional metrology and fabrication services. Rates depend the foundry service provider.
- g- A "user" refers to an individual entering an area for the purpose of engaging in or supervising research activities; this excludes staff maintenance operations and tours
- h- General labs are assigned to some PIs and may contain a PIs specialized equipment. PIs specialized equipment in not generally available to other users, but external users who have interest in using such equipment may contact the IfM to negotiate availability and rates
- i- For internal accounts, there is a monthly billing cap of 8 hours per user for CR/STL combined
- j- Staff time is billed for process work and for user training on equipment and processes
- k- Per line to gun, glovebox, experiment, etc., in PI labs (not cleanroom, STL, or metrology lab)
- l- "Access deviancy" is willful violation of access policies (e.g. keycard swapping to avoid charges)
- m- "Usage Deviancy" refers to willful violation of equipment usage policies (e.g. delayed login to reduce charges)
- n- "Logoff Error" means failing to logout at the end of a process, thereby obligating IfM staff to review the entire day's security video to correct the usage time for billing purposes
- o- "Logbook Omission" means failing to create logbook entries before and after using equipment for which logbook entries are mandatory