

Application for Using the W. M. Keck Microfabrication Facility

Department of Physics and Astronomy, Michigan State University

<i>Information about yourself</i>	
First Name	Last Name
Department	
Address	
Phone Number	
Email address	
Please complete the information form attached	
<i>Information about your association</i>	
Advisor	
Address	
Phone number	
Email address	

User type: Please check one:

- Long-term user (≥ 1 year): MSU Proxy Card #: _____ Estimated termination date : _____
- 6 month user: MSU Proxy Card #: _____
- Hourly user (initial training charge applies)

Account Number: _____ - _____

TERMS AND CONDITIONS

1. A valid account number must be provided.
2. For long-term users, a monthly fee will be billed to the account, starting one month after the training date, through the Termination Date (the last date of using KMF). Other fees related to the KMF usage will also be billed to the account.
3. An initial cleanroom training charge of \$100 will be billed to hourly/monthly users, and also to other applicants who are unable to use the facility within one (1) month after the training.
4. IDs (passwords and access cards) are for authorized use only, and can not be shared with others or used by unauthorized persons. The ID holder is liable for any consequences caused by improper usage of the IDs.
5. All users of the KMF must abide by the rules and proper conduct for using the cleanroom facility. Violation will result in penalties and may result in permanent revocation of the privilege for using the facility.

STATEMENT OF RESPONSIBILITY

For the Applicant: As a user of the KMF,

1. I shall abide by the rules for using the cleanroom facility, and will operate the instruments therein with the utmost care.
2. I shall communicate with the management about any problems (process, equipment, users) in using the facility.
3. I am responsible for any misuse, or damage, to any instrument caused by my actions.

For the advisor/sponsor: As the advisor/sponsor of the above applicant/user,

I am responsible for the behavior of the user and agree to reimburse the facility for any costs related to repair of equipment caused by the actions of the user.

Signature of Applicant: _____ Date _____

Signature of Advisor/Sponsor: _____ Date _____

INFORMATION SHEET

First Name: _____ Last Name: _____ Today's date: _____

Position:

- Graduate Student. Expected graduation year: _____
 Post Doc Expected termination date at MSU: _____
 Other: _____

Previous experience

	Brand/Model # of the instrument
<input type="checkbox"/> Photolithography <input type="checkbox"/> Stepper <input type="checkbox"/> Contact mask aligner	
<input type="checkbox"/> Electron beam lithography	
<input type="checkbox"/> Energy dispersive spectrometer (EDS)	
<input type="checkbox"/> Thin film deposition <input type="checkbox"/> thermal <input type="checkbox"/> sputtering <input type="checkbox"/> Ebeam	
<input type="checkbox"/> Scanning electron microscopy	
<input type="checkbox"/> Optical microscopy	
<input type="checkbox"/> Scanning probe microscopy <input type="checkbox"/> AFM <input type="checkbox"/> MFM <input type="checkbox"/> STM	
<input type="checkbox"/> X-ray diffractometer	
<input type="checkbox"/> Raman spectroscopy <input type="checkbox"/> FT-Raman <input type="checkbox"/> Grating based	
<input type="checkbox"/> Plasma etcher	
<input type="checkbox"/> Surface profiler	
<input type="checkbox"/> Wafer dicing saw	
<input type="checkbox"/> Web etching Materials etched:	
<input type="checkbox"/> Dry etching Materials etched:	
<input type="checkbox"/> Working in a cleanroom environment	

Project goal

Equipment to be used in KMF

<input type="checkbox"/> Photolithography (AB-M mask aligner)	<input type="checkbox"/> Thermal evaporator
<input type="checkbox"/> Scanning electron microscopy (Hitachi 4S-4700 FESEM)	<input type="checkbox"/> Electron beam lithography (NanoPattern Generation System)
<input type="checkbox"/> Scanning probe microscopy (DI Dimension 3100) <input type="checkbox"/> AFM <input type="checkbox"/> MFM	<input type="checkbox"/> Raman spectroscopy (KOSI MicroRaman spectrometer)
<input type="checkbox"/> Optical microscopy	<input type="checkbox"/> X-ray diffractometer (Bruker-AXS Discover 8)
<input type="checkbox"/> Plasma etcher (March Instruments PX-250)	<input type="checkbox"/> Surface profiler (Dektak3)
<input type="checkbox"/> Wafer dicing saw (MicroAutomation MA1006)	<input type="checkbox"/> Energy dispersive spectrometer (Edax/Hitachi)