

Centralization of UCF Shared Microfabrication, Mechanical Manufacturing and Physical Science Cryogenic NMR Facilities (11/20/18)

As per an MOU signed by UCF Vice President Elisabeth Klonoff and Dean Johnson (COS), Dean Georgiopoulos (CECS), and Dean Saleh (CREOL), UCF has implemented as of July 1st of 2018 the centralization of operations of the following research shared facilities:

1. A centralized microfabrication (cleanroom) facility.
Composed by CECS, CREOL and Physics-MPF cleanrooms
2. A centralized mechanical manufacturing (machine shop) facility.
Composed by CECS, CREOL and Physics shops
3. A centralized Physical Science Cryogenic NMR facility
Composed by the PSB helium liquefier/recovery system, PSB LN2, and Chemistry NMRs

A **Faculty and Staff Committee** has been charged with the responsibility of overseeing the centralized operations of the facilities and is composed by the following members:

MICROFABRICATION FACILITY (Point of Contact: Reza Abdolvand - reza@ece.ucf.edu)

CECS faculty rep: Reza Abdolvand (reza@ece.ucf.edu)

CECS technical rep: Ed Dein (Edward.Dein@ucf.edu)

CREOL faculty rep: Sasan Fathpour (fathpour@creol.ucf.edu)

CREOL technical rep: James Ross (jross@creol.ucf.edu), Ivan Divliansky (ibd1@creol.ucf.edu) and Mark

Wagenhauser (markw@creol.ucf.edu)

COS faculty rep: Robert Peale (Robert.Peale@ucf.edu)

COS technical rep: Nathan Aultman (naultman@creol.ucf.edu)

MECHANICAL MANUFACTURING FACILITY (Point of Contact: Robert Peale - Robert.Peale@ucf.edu)

CECS faculty rep: Yoav Peles (Yoav.Peles@ucf.edu) and Kurt Stresau (Kurt.Stresau@ucf.edu)

CECS technical rep: Jennifer Fackler (Jennifer.Fackler@ucf.edu)

CREOL faculty rep: Winston Schoenfeld (winston@creol.ucf.edu)

CREOL technical rep: Richard Zotti (rzotti@creol.ucf.edu) and Mark Wagenhauser (markw@creol.ucf.edu)

COS faculty rep: Robert Peale (Robert.Peale@ucf.edu)

COS technical rep: Robert Wong (Robert.Wong@ucf.edu)

PHYSICAL SCIENCE CRYOGENIC NMR FACILITY (Point of Contact: Enrique del Barco – delbarco@ucf.edu)

COS Chemistry faculty rep: James Harper (James.Harper@ucf.edu)

COS Physics faculty rep: Enrique del Barco (delbarco@ucf.edu)

COS technical rep: David Richardson (David.Richardson@ucf.edu)

The following sections provide the **user policies** and **fee structures**, as well as **users contacts** per facility.

Microfabrication (cleanroom) Facility

CECS cleanroom users contact: Giji Skaria (Giji.Skaria@ucf.edu)

CREOL cleanroom users contact: Mark Wagenhauser (markw@creol.ucf.edu)

Physics-MPF cleanroom users contact: Nathan Aultman (naultman@creol.ucf.edu)

User fees:

- There is a daily entrance fee for each cleanroom unit that covers access to general purpose equipment such as fume hoods for chemical processing and microscopes (the list of equipment covered by the entrance fee could be requested by users from each unit)

- An additional fee (per “use”) is set for access to equipment not covered by the entrance fee. The rate for different equipment is provided to users by each unit.
- The definition of “use” varies by equipment and is also provided by each cleanroom unit for all equipment that are charged an individual fee.

General usage policies:

- Each unit has usage manual that is provided to users upon request.
- Users should contact the corresponding user contact in order to get trained on general safety rules and gain access to cleanroom.
- Access to individual tools will also be managed by the cleanroom contact for each cleanroom but the actual training may be performed by experienced users or cleanroom staff.

Mechanical Manufacturing (machine shop) Facility

CECS machine shop users contact: Kurt Stresau (Kurt.Stresau@ucf.edu)

CREOL machine shop users contact: Richard Zotti (rzotti@creol.ucf.edu)

Physics machine shop users contact: Robert Wong (Robert.Wong@ucf.edu)

User fees:

\$35 per hour service fee for machining jobs requested by internal customers. \$105 per hour for machining jobs requested by external customers. No fees for student machine shop use on research projects. All users are responsible for the cost of direct materials used on their jobs.

General usage policies:

Student use will be confined to times when supervision by the professional is available. Student privilege of working in the machine shop will be based on individual assessment by the shop professionals of that student's competence and safety considerations. Internal customers are those employed by UCF. External customers comprise any who are not employed by UCF. Any customers may bring jobs to any of the three shops, and priority is based on the order in which job requests are received.

Physical Science Cryogenic NMR Facility

Facility users contact: David Richardson (David.Richardson@ucf.edu)

User fees:

Liquid nitrogen (only PSB users*): PSB users \$0.30/liter

Liquid helium (only PSB users*): PSB users \$2.00/liter (recovered) \$14, i.e., market price (unrecovered)

NMR: Internal users - M-F 9am - 7pm / Service 300: \$1/hr, services 400 and 500: \$3/hr

M-F 7pm - 9pm and Sat, Sun / Service 300: \$0.25/hr, services 400 and 500: \$0.75/hr

External users - \$60/hr (Measurements performed only by facility operator)

* Liquid nitrogen and helium will only be provided to users in the PSB and connected to the systems. Exceptional requests by non-PSB users at UCF will be contemplated on an individual basis.

General usage policies:

- UCF users will be trained by the facility manager before allowed to acquire liquid cryogenics and/or use the NMRs.
- Users of the helium liquefier will need to be in PSB and their labs physically connected to the helium recovery system.
- Usage data will be compiled and sent to ORC for billing purposes monthly.