For more information, visit our website:
http://mfc.engr.arizona.edu

FEES

For a listing of academic user & industrial user fees please check our website:

http://mfc.engr.arizona.edu/access

Contact Omid Mahdavi for more details. We have a flexible fee structure depending on the type and duration of the desired facility use.

CONTACT INFORMATION

Mailing Address
Micro/Nano Fabrication Center
1230 E. Speedway Blvd, Rm 230F
PO BOX 210104
Tucson, AZ 85721-0104

E-mail Inquiries: omidm@email.arizona.edu

Administration

Omid Mahdavi, Facility Supervisor
omidm@email.arizona.edu
(520) 621-9849 phone, (520) 626-7877 fax
Omid has many years of industry experience as a Sr. technical contributor at Motorola, Burr Brown, & Texas Instruments. He has also been a consultant to industry on processing & quality improvements.

Gregg Cure, Maintenance Supervisor
gcure@ece.arizona.edu
(520) 626-1987 phone, (520) 626-7877 fax
Gregg brings 25 years of industry experience. He was a Site Coordinator for SpeedFam-IPEC for both domestic and Southeast Asia operations.

Garth Perry, Business Manager ARL
perryg@email.arizona.edu
(520) 621-0640 phone
The Micro/Nano Fabrication Center was created in 2004 to be a flexible foundry, offering industrial space & facilities, industrial cleanroom space & facilities, device processing & characterization equipment. We have academic & industrial users working in the areas of semiconductors, bioengineering, MEMS, optics, and thermoelectrics.

**Class 10 & 100 Cleanroom Space** — We have 4000 sq. ft. of work area available in our Class 10 & Class 100 cleanroom, equipped with acid & solvent exhaust, easy access to power, nitrogen, DI water, drain to the neutralization system, space for vacuum pumps in the immediate chase area.

**Class 10,000 Space** — Our Class 10,000 chase area of approximately 10,000 sq. ft. has access to acid & solvent exhaust, easy access to power, nitrogen, DI water, drain to the neutralization system, and space for vacuum pumps.

**In-house High Capacity Ultra-pure Water** — We can supply thousands of gallons of 18 Mohm ultra pure water to our users.

**In-house Waste Treatment** — We can neutralize wet bench waste streams without the need for users to collect their waste. This is a great feature allowing users to install and operate their own wet benches and processing equipment.

The Center has assisted companies with their:

- **FEASIBILITY STUDIES**
- **PROTOTYPING**
- **PRODUCT DEVELOPMENT**
- **DEFERMENT OF MAJOR CAPITAL EXPENSES**
- **SHORT COURSES**

**PROCESSING SERVICES**

**Photolithography**—High resolution image transfers on substrates up to 6” diameter. Frontside/Backside alignment capability. Low resolution images on substrates up to 12 inch square.

**Etch/Cleans**—A number of different plasma etch/clean systems for a variety of films and treatments. Wet benches and chemicals for a variety of wet etching in both class 10 & class 100 areas. Wafer spin rinse dryers available. CO₂ cleaner available.

**Chemical Mechanical Planarization (CMP)**—Solutions for Dielectrics and Metals, IPEC 372M and 372 MU. We also have access to an APD-800 300mm R&D polisher.

**CVD** —Low pressure and plasma enhanced capabilities to deposit SiN, Poly Si, a-Si, Low Temperature SiO₂ (LTO), n -doped LTO (PSG), n – doped Poly Si, Si Rich Oxide (SRO) on substrates up to 6” in diameter.

**Thermal Oxidation & Anneal**—Substrates up to 6” in diameter and temperatures as high as 1200C.

**Metallization**—E-beam & thermal evaporation of a number of metals including but not limited to Ag, Au, Pt, Al, Cu, Ti, Ni, Cr, Ge, Bi, Te

**Metrology**—Ellipsometer, profilometers, AFM, 4 pt probe, Filmetrics & Nanospec for thickness, Surfscan particle measurement. We have access to a number of SEM/EDX facilities on campus.

**Assembly tools include**—Wafer Saw, Die Attach, Wire Bonder and Wire Bond pull tester.

**RESEARCH**

**EDUCATION**

**INDUSTRY**

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