

...because a µg of understanding is worth a ton of guessing...

Price List Effective: November 2011

ANALYTICAL SERVICES

SURFACE ANALYSIS,

Auger Electron Spectroscopy (JEOL Jamp10S), 50nm resolution, w/SEM function and X-ray Analysis, Depth profiles collected using rotational depth profiling. Digital imaging.

\$ 325/hr

SCANNING ELECTRON MICROSCOPY JEOL- 840 with EDS x-ray, digital imaging (computer image files sent by email or disk- no charge!).

\$ 275/hr

ELECTRON MICROPROBE, with fully automated (4) wavelength & energy-dispersive x-ray analysis with detectabilities to 10ppm. SEM resolution 70Å. Digital images & data (image files & report sent by email or disk- no charge!).

\$ 325/hr

LABORATORY SERVICES:

Metallography- Custom sample preparation, mounting, sections, polishing, plating thickness prep, etc.

\$ 175/hr

Optical Microscopy- Bench & Stereo.

Profilometry- Sloan Dektak 3030 for surface roughness, step heights, etc.

\$50/scan (min. 3)

Microhardness- Vickers indentation

\$200/hr

PRODUCTS

*Digital imaging, stage automation, EPMA- P.O.R
Pre-owned SEMs and Electron Probes- P.O.R*

COUNTER ROTA-CUTTER

Buehler ISOMET (CRC-B 901) \$1250
Buehler ISOMET w/ Hollow Chuck, CRC-BH901 \$1650
LECO VC-50 (CRC-L901) \$1250
LECO VC-50 (CRC-LH901) w/ Hollow Chuck \$1250
Struer's Minitom (CRC-S901) \$1430
Struer's Minitom (CRC-SH901)w Hollow Chuck \$1830
Hollow Chuck Vise attach. for any mfg. saw \$ 450

SPECIMEN HOLDER: TRH (JEOL 840/6400) \$ 845
(for 2- 1 1/4" samples w/o JEOL airlock ext.)

Terms:

- Foreign delivery order (must be prepaid. Payment to be made against a U.S. bank in U.S. dollars, letter of credit or wire transfer.
- Payment is net 30 days subject to credit approval. Late fee of 1.5%/month for delinquent accounts.
- Shipping: FOB Topsfield, Ma. Delivery: Stock to 30 days.

American Express, VISA, and Master Charge, & Corporate P-cards gladly accepted.

PRODUCTS, continued

ION SPUTTER CALIBRATION STANDARDS

ISC-SIO2-200 SiO₂ (~230 ± 2.3Å) on 4" Si wafer \$ 975
ISC-SIO2-500 SiO₂ (~500 ± 25Å) on 4" Si wafer \$ 475
ISC-SIO2-1029 SiO₂ (~1006 ± 10Å) on 4" Si wafer \$ 975
ISC-TA2O5 Ta₂O₅ on Ta, ~1000Å (37mm²) \$ 300
NiCr-3 12 layers Cr(60nm)/Ni(60nm) on Silicon (1cmX3cm) \$ 600
ISC-Si3N4-1000 Si₃N₄ (~1000Å) on Si (1cmX3cm) \$ 300

ULTRA-HIGH VACUUM ELEMENTAL STANDARDS

Without standards With std.

UHV-EL-6 Mount for 6 elements \$ 130 \$ 620
UHV-EL-9 Mount for 9 elements \$ 165 \$ 905
UHV-EL-12 Mount for 12 elements \$ 200 \$ 1190
UHV-EL-15 Mount for 15 elements \$ 230 \$ 1470
UHV-EL-18 Mount for 18 elements \$ 260 \$ 1750
UHV-EL-37H Mount for 37 elements \$ 375 \$ 3700
(note: the UHV-EL-37 with std. is shipped under vacuum in a - VAC-U-STORR (VUS-J-S) desiccator)
UHV-EL-37PI PHI Mount adapters: \$ 300
UHV-EL-37VG for VG Instruments \$ 300
UHV-EL-37Stub (Amray, FEI, LEO, Cambridge-specify size) \$ 100
UHV-EL-40RE Replacement elements . . . \$ 100
(your choice, or singly)
UHV-EL-Diamond (1mm) crystal, polished. \$ 140
UHV-EL-SRM482 (5) NIST Cu: Au wires . . \$ 200
UHV-EL-AI-Cu X-ray Calibration. std. (NIST traceable) \$ 140
JN-1 SEM demonstration standards (not UHV compatible) \$ 590

VAC-U-STORR (VUS) Desiccators

VUS-J-S (Glass) \$ 140
VUS-J-M (Glass) \$ 250
VUS-J-L (Glass) \$ 300
VUS-J-XL \$ 425
VUS-SS-4.5 4" Conflat flange, no top \$ POR
VUS-SS-4.63 4 5/8" Conflat flange, no top \$ POR
VUS-SS-6 6" Conflat flange, no top \$ POR
VUS-SS-8 8" Conflat flange, no top \$ POR
..call for prices on covers, gaskets & misc. parts.

Traceability accredited to ISO-17025, ACLASS Registrar

MAGNIFICATION REFERENCE STANDARDS	MR-1	MRS-3	MRS-4	MRS-5
MRS-#NT (Not traceable)	n/a	\$ 490	\$ 990	\$ 3000
MRS-#XY (XY traceable)	n/a	\$ 1500	\$ 2100	\$ 4900
MRS-#XYZ (XYZ traceable)	n/a	\$ 1800	\$ 2400	n/a
MR-1X (X traceable only 0.01 X 150 mm)	\$ 1200			

RECERTIFICATION & CLEANING	XY	MRS-3	MRS-4	MRS-5
"	XYZ	\$ *600	\$ 1000	\$ 1300
MRS Cleaning only		\$ 150	\$ 150	\$ 150

RETAINERS & miscellaneous

MRS-SEM/R Retainer (1" OD X 1/8") \$ 100
MRS-OM/R (optical microscope adapter 1"X2") \$ 100
MRS-Glass (1" X 3" glass slide mounting) \$ 100
MRS-3 or 4 (for TEM, etc.) 3mmφX 0.25mm \$ 175
* MR-1 is X only