

**MTU Department of Materials Science and Engineering  
Fiscal Year 2006 Equipment/Facility User Rates  
effective July 1, 2005, through June 30, 2006**

revised 10/18/2006

		MTU Department of Materials Science and Engineering Fiscal Year 2006 Equipment/Facility User Rates effective July 1, 2005, through June 30, 2006			
Staff	MTU Index	Laboratory or Instrument	MTU Research (On Campus)		Consulting (Off-Campus) <sup>1</sup>
			without operator	with operator	
Mills	D98024	6400 Scanning Electron Microscope	\$25/hr.	\$25/hr. + operator time <sup>3</sup>	\$75/hr.
Mills	D98026	4000FX Transmission Electron Microscope (TEM) <sup>2</sup>	\$75/hr.	\$75/hr.+ operator time <sup>3</sup>	\$150/hr.
Drelich	D98027	Atomic Force Microscope (AFM)	\$18/hr.	\$18/hr. + operator time	\$100/hr.
Kramer	D98034	Heat Treating (Furnaces)	\$2.25/hr.	\$2.25/hr. + operator time <sup>3</sup>	\$10/hr.
Kramer	D98035	Hardness Testers	\$15/hr.	\$15/hr. + operator time <sup>3</sup>	\$30/hr.
Forsell	D98036	Dake - Hydraulic Press	\$15/hr.	\$15/hr. + operator time <sup>3</sup>	\$20/hr.
Forsell	D98037	Hot Isostatic Press (HIP)	\$75/sample	\$75/sample + operator time <sup>3</sup>	\$125/sample
Forsell	D98038	Cold Isostatic Press (CIP)	\$20/sample	\$20/sample + operator time <sup>3</sup>	\$30/sample
Forsell	D98039	Helium Pycnometer	\$15/sample	\$15/sample + operator time <sup>3</sup>	\$25/sample
Forsell	D98040	BET - Surface Measurement	\$25/sample	\$25/sample + operator time <sup>3</sup>	\$40/sample
Forsell	D98041	Encapsulator	\$15/sample	\$15/sample + operator time <sup>3</sup>	\$25/sample
Kramer	D98042	Instrons (rooms U208 & R413)	\$30/hr.	\$30/hr. + operator time <sup>3</sup>	\$50/hr.
Forsell	D98044	MTS Machines (room R413)	\$45/day	\$45/day + operator time <sup>3</sup>	\$90/day
Kramer	D98045	Optical Microscopy	\$8/hr.	\$8/hr. + operator time <sup>3</sup>	\$20/hr.
Kramer	D98046	Metallography	\$15/hr.	\$15/hr. + operator time <sup>3</sup>	\$30/hr.
Laitila	D98048	X-Ray Diffraction (XRD)	\$4.50/hr.	\$4.50/hr. + operator time <sup>3</sup>	\$12/hr.
Laitila	D98049	Pole Figures (PTS-XRD)	\$75/pole figure	\$75/pole figure + operator time <sup>3</sup>	\$125/pole figure
Laitila	D98050	X-Ray Fluorescence (XRF)	\$75/sample + \$10/standard calibration	\$75 sample + \$10/standard calibration + operator time <sup>3</sup>	\$150/sample + \$20/standard calibration
Forsell	D98051	Metal Casting/Foundry	N/A <sup>4</sup>	\$40/hr. <sup>4</sup> (includes operator)	\$150/hr. <sup>4</sup> (includes operator)
Mills	D98061	Hitachi S-4700 FE SEM	\$40/hr.	\$40/hr. + operator time <sup>3</sup>	\$100/hr.
Mills	D98062	Hitachi FB-2000A FIB	\$30/hr.	\$30/hr. + operator time <sup>3</sup>	\$100/hr.
Mills	D98071	Hummer 6.2 Sputter Coater	\$50/hr.	N/A	\$75/hr.
<sup>1</sup> MTU policy forbids non-MTU employee use of any equipment. Staff and faculty consulting fees vary, and must be negotiated with appropriate individual first.					
<sup>2</sup> Due to the intrinsic time-consuming nature of using the 4000FX high resolution TEM, each user will incur a two (2) hour minimum charge per logbook entry.					
<sup>3</sup> Operator hourly rates including fringe benefits for all technical staff are available upon request.					
<sup>4</sup> Foundry use <u>requires</u> operator.					

**MTU Department of Materials Science and Engineering**  
**Fiscal Year 2006 Equipment/Facility User Rates**  
**effective July 1, 2005, through June 30, 2006**

revised 10/18/2006
