

**Available Instrumentation: Western Kentucky University**

Advanced Materials Institute	Thermogravimetric Analyzer (TGA)	Edwin Stevens	MC
Advanced Materials Institute	Anion Liquid Chromatography (ALC)	Edwin Stevens	MC
Advanced Materials Institute	Bomb Calorimetry (BC)	Edwin Stevens	MC
Advanced Materials Institute	Mercury Analyzer (MA)	Edwin Stevens	MC
Advanced Materials Institute	Inductively Coupled Plasma Emission Spectroscopy (ICP-ES)	Edwin Stevens	MC
Advanced Materials Institute	Gas Chromatography Mass Spectrometry (GCMS)	Edwin Stevens	MC
Advanced Materials Institute	Liquid Chromatography Mass Spectrometry (LCMS)	Edwin Stevens	MC
Advanced Materials Institute	Single Crystal X-ray Structure Determination (SC-XRD)	Edwin Stevens	MC
Advanced Materials Institute	X-ray Powder Diffraction (XRD)	Edwin Stevens	MC
Advanced Materials Institute	X-ray Fluorescence Spectroscopy (XRF)	Edwin Stevens	MC
Advanced Materials Institute	Atomic Force Microscopy (AFM)	Edwin Stevens	MC
Architectural & Manufacturing Sciences	Mitch McConnell Advanced Manufacturing & Robotics Laboratory	Bryan Reaka	ME
Architectural & Manufacturing Sciences	CNC Mill	Bryan Reaka	ME
Architectural & Manufacturing Sciences	CNC Lathe	Bryan Reaka	ME
Architectural & Manufacturing Sciences	CNC Router	Bryan Reaka	ME
Architectural & Manufacturing Sciences	Laser Engraver	Bryan Reaka	ME
Architectural & Manufacturing Sciences	Water Jet	Bryan Reaka	ME
Architectural & Manufacturing Sciences	3D Printer	Bryan Reaka	ME
Architectural & Manufacturing Sciences	Manual Machining Lab	Bryan Reaka	ME
Architectural & Manufacturing Sciences	Micro Machining Lab	Bryan Reaka	ME
Architectural & Manufacturing Sciences	Manual Woodworking Lab	Bryan Reaka	ME
Architectural & Manufacturing Sciences	Food Service Lab	John Khouryieh	ME
Architectural & Manufacturing Sciences	Materials Testing Lab	Bryan Reaka	MC
Architectural & Manufacturing Sciences	Computer Aided Drafting Lab	Neal Downing	ME
Architectural & Manufacturing Sciences	Computer Aided Manufacturing Lab	Neal Downing	ME
Architectural & Manufacturing Sciences	Architecture Resource Center	Neal Downing	ME
Architectural & Manufacturing Sciences	Hot Metals Laboratory	Bryan Reaka	MC, ME

Architectural & Manufacturing Sciences	Model Building Lab	Neal Downing	ME, CV
Architectural & Manufacturing Sciences	Electronics Lab	Bryan Reaka	ME
Biology	Zeiss Axioplan 2 Fluorescence microscope	Naomi Rowland	MO, LS
Biology	Leica MZ16 Fluorescence microscope	Naomi Rowland	MO, LS
Biology	Vibratome Cryostat Ultra Pro Lite	Naomi Rowland	LS
Biology	Microtome RMC MT990	Naomi Rowland	LS
Biology	Getinge Autoclave x 2 (one requires Animal Room access)	Naomi Rowland	LS
Biology	Eppendorf master cycler pro x3	Naomi Rowland	LS
Biology	Fluorchem HD2 Imager	Naomi Rowland	MO, LS
Biology	DI water systems for EBS and Snell	Jessica Dunnegan	SP, LS
Biology	Thermo scientific Nanodrop	Naomi Rowland	SP, LS
Biology	Sorvall RC5C large centrifuge	Naomi Rowland	LS
Biology	ABI 3130 genetic analyzer	Naomi Rowland	LS
Biology	Agilent 2100 Bioanalyzer	Naomi Rowland	LS
Biology	Scientek Cage Washer (requires Animal Room access)	Naomi Rowland	LS
Biology	Polymerase Chain Reactor (ABI RT-PCR 7300)	Naomi Rowland	LS
Biology	JEOL Scanning Electron Microscope (5400LV SEM with IXRF EDS)	John Andersland	LS, MC
Biology	JEOL Transmission Electron Microscope (1400 Plus TEM with IXRF EDS)	John Andersland	LS, MC
Center for Water Resource Studies	GC-MS	Olivia Williams	SP
Center for Water Resource Studies	Konelab	Olivia Williams	SP
Center for Water Resource Studies	TOC	Olivia Williams	SP
Center for Water Resource Studies	Tri-Carb Scintillometer	Jason Polk	MC
Chemistry	NMR spectrometer	Les Pesterfield	MO
Chemistry	WATERS HPLC system	Eric Conte	SP, LS
Chemistry	Fourier-Transform Infrared Spectrometer (Perkin Elmer) with ATR cell	Matthew Nee	MO, MC
Chemistry	Ultraviolet-visible absorption spectrometer	Matthew Nee	MO, MC
Chemistry	Flouescence spectrometer	Matthew Nee	MO, MC
Chemistry	Probe-assisted Raman Spectrometer (Raman Systems)	Matthew Nee	MO, MC
Chemistry	Liquid Chromatography/Mass Spectrometer	Darwin Dahl	MO, SP
Chemistry	Gas Chromatograph	Darwin Dahl	MO

Chemistry	Water deionization (IC) apparatus	Alicia Pesterfield	SP
Dept Geography and Geology	Malvern Particle Analyzer	Jason Polk	SP, MC
Engineering	FLIR IR Camera S60	Robert Choate	CV, ME
Geography and Geology	Kentucky Mesonet (includes an array of scientific instrumentation and equipment for weather and climate monitoring)	Stuart A. Foster Rezaul Mahmood	FO
Geography and Geology	NOAA-PORT, Continental-scale meteorological observational data receiving system	Rezaul Mahmood	FO
Geography and Geology	Leica M165 C microscope with acamera and 22" Widescreen LCD Monitor	Nahid Gani	MC
Geography and Geology	Chipmunk Jaw Crusher, Type VD-241-34S2	Nahid Gani	MC
Geography and Geology	MakerBot Replicator Mini Compact 3D Printer	Nahid Gani	MC
Geography and Geology	Portable Centrifuge Helme Z206A Lannet	Nahid Gani	MC, SP
Geography and Geology	IEC Clinical Centrifuge	Nahid Gani	MC, SP
Geography and Geology	Isotemp Oven	Nahid Gani	MC
Geography and Geology	Millipore DI water filter	Nahid Gani	SP
Geography and Geology	Laser range finder (TruPulse)	Royhan Gani	FO
Physics & Astronomy	Bell Observatory Telescope	Michael Carini	FO
Physics & Astronomy	Robotically Controlled Telescope	Richard Gelderman	FO
Physics & Astronomy	SEM	Ed Kintzel	MC
Physics & Astronomy	Excimer Laser	Ali Oguz Er	MC
Physics & Astronomy	Ultra High Vacuum Chamber	Ali Oguz Er	MC
Physics & Astronomy	Electron Gun	Ali Oguz Er	MC
Psychological Sciences	EGI 128 Channel Geodesic EEG System 300 with ERP Package and Smart Eye Pro Eyetracker System	Sharon Mutter	CV, LS
Psychological Sciences		Sharon Mutter	CV, LS
Thermal Analysis Laboratory	Thermogravimetric Analysis (TGA)	Edwin Stevens	MC
Thermal Analysis Laboratory	High-Resolution/Modulated Thermogravimetric Analysis (HR/MTGA)	Edwin Stevens	MC
Thermal Analysis Laboratory	Differential Scanning Calorimetry (DSC)	Edwin Stevens	MC
Thermal Analysis Laboratory	Simultaneous TGA and DSC (SDT)	Edwin Stevens	MC
Thermal Analysis Laboratory	Pressurized/Modulated Differential Scanning Calorimetry (P/MDSC)	Edwin Stevens	MC
Thermal Analysis Laboratory	High-Pressure Thermogravimetric Analysis (HP-TGA)	Edwin Stevens	MC
Thermal Analysis Laboratory	Evolved Gas Analysis (TGA-MS, TGA-MS, and TGA-MS/FTIR)	Edwin Stevens	MC
Thermal Analysis Laboratory	Isothermal Calorimetry (IC)	Edwin Stevens	MC
Thermal Analysis Laboratory	Micro-Calorimetry (MC)	Edwin Stevens	MC

Thermal Analysis Laboratory	Thermomechanical Analysis (TMA)	Edwin Stevens	MC
Thermal Analysis Laboratory	Dynamic Mechanical Analysis (DMA)	Edwin Stevens	MC
Thermal Analysis Laboratory	Vapor Sorption Analysis (VSA)	Edwin Stevens	MC
Thermal Analysis Laboratory	Dielectric Thermal Analysis (DEA)	Edwin Stevens	MC
Thermal Analysis Laboratory	Surface Area Analysis (SAA)	Edwin Stevens	MC
Thermal Analysis Laboratory	Discovery Hybrid Rheometer (DHR)	Edwin Stevens	MC
Thermal Analysis Laboratory	High Temperature Viscometer (HTV)	Edwin Stevens	MC
Thermal Analysis Laboratory	Guarded Heat Flow Meter (GHF)	Edwin Stevens	MC
Thermal Analysis Laboratory	LASER Flash Diffusivity (LFD)	Edwin Stevens	MC
Thermal Analysis Laboratory	Thermal Differential Dilatometry (TDD)	Edwin Stevens	MC
Thermal Analysis Laboratory	Atomic Absorption Mercury Analyzer (AAMA)	Edwin Stevens	MC
Thermal Analysis Laboratory	Automatic Mercury Porosimeter (AMP)	Edwin Stevens	MC
Thermal Analysis Laboratory	Gas Chromatography/Mass Spectrometry	Edwin Stevens	MC
Thermal Analysis Laboratory	Pyroprobe-GC/MS System	Edwin Stevens	MC
Thermal Analysis Laboratory	Micro-Thermal Analysis	Edwin Stevens	MC
Thermal Analysis Laboratory	Optical Microscopy	Edwin Stevens	MC
University Wide	HighPerformance Computer	Claire Rinehart	CV, LS, MO, MC

**FO:** Field and Observational    **MO:** Molecular properties    **MC:** Materials Characterization    **SP:** Solution phase analysis  
**CV:** Computation and Visualization                      **LS:** Life Sciences                      **ME:** Manufacturing, Engineering, and Design