



<u>Current Rates for Westerns Supercritical and Advanced Material Analysis/Testing</u> <u>Facility</u>

Services Supercritical Fluid Equipment	University	Corporate
FTIR/Raman Insitu Reactor (5000 psig)	\$500/day	\$700/day
Autoclave Engineering Berty Reactor	\$250/day	\$350/day
Supercritical Fluid Extraction	\$500/day	\$700/day
Supercritical Fluid Chromatography	\$50/sample	\$75/sample
Supercritical Water Gasification Reactor	\$500/day	\$700/day

(N.B. These are specialty experiments that often require valving re-configuration and significant system modification, Please call and discuss with Prof. Charpentier as research always has first priority so we can determine funding mechanisms later. Often multiple experiments can be run in one day)

Polymer and Catalyst Characterization Equipment

GPC-Triple Detection (Viscotek)	\$40/sample	\$75/sample
GPC High Temperature (Polymer Labs)	\$75/sample	\$150/sample
(Analysis of data)		
Particle Size Analyzer (Malvern Nanosizer)	\$20/sample	\$50/sample
UV/VIS-NIR with Integrating Sphere	\$20/sample	\$50/sample
FTIR-NIR with Integrating Sphere	\$20/sample	\$50/sample
Photoluminescence-NIR	\$50/sample	\$75/sample
Raman Spectroscopy with Microscope	\$50/sample	\$75/sample
Atomic Force Microscope (AFM-Veeco)	\$100 (1/2 day)	\$200 (1/2 day)
High Temp DTA/TGA Rheometer (TA Instruments) (up to 1500 °C)	\$50/sample	\$75/sample
Differential Scanning Calorimetry (-90 to 600°C)	\$20/sample	\$50/sample

Testing Equipment

Polymer Mixer Extruder (Twin Screw) Thermo-Electron	\$75 (1/2 day)	\$200 (1/2 day)
Injection Molder–Thermo Electron	\$100 (1/2 day)	\$200 (1/2 day)
Polymer Rheometer (TA Instruments)	\$100 (1/2 day)	\$200 (1/2 day)
Instron	\$100 (1/2 day)	\$200 (1/2 day)
Ultrasonic Tester for Nanocomposites	\$50 (1/2 day)	\$100 (1/2 day)
Rheometer	\$30/sample	\$75/sample
Chemisorption Analyzer	\$30/sample	\$75/sample
Pyncnometer	\$20/sample	\$40/sample
Fuel Cell Simulator	\$50/sample	\$75/sample
Solar Simulator (Newport Scientific)	\$100/24 hours	\$200/24 hours