



UNIVERSITY OF SOUTH ALABAMA

## Instrumentation

Housed within the chemistry building are 15 research labs, seven instructional labs, and one computer lab. When considering the instrumentation available to those enrolled our instructional labs, conducting research experiences, and with active collaborations, there is an abundance of modern instrumentation. The acquisition and maintenance of state-of-the-art equipment is one of our highest priorities. The instrumentation used both in our instructional and research activities include:

### NMR Spectrometer

- JEOL 500 MHz NMR with multi-nuclear and variable temperature capabilities

### Single Crystal X-ray Diffractometer

- Oxford Excalibur with EOS Detector

### LC-Mass Spectrometer

- Thermo Fisher LTQ-Velos LCMS

### Microwave Reaction Unit

- CEM Microwave (2)

### UV-Vis Spectrometers

- Shimadzu UV-Vis UV-2501
- Shimadzu UV-Vis UV-1601
- Thermo Evolution 350

### Gas Chromatographs

- Buck Model 910 (2)
- Buck Model 310 GC (2)

### Liquid Chromatographs

- Perkin-Elmer Model 200 System with TotalChrom CDS (2)
- Shimadzu Prominence System, including Fraction Collector, Evaporative Light Scattering Detector, and EZStart CDS

DEPARTMENT OF CHEMISTRY

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### Liquid Chromatographs-cont.

- Shimadzu Prominence System with LCSolution CDS

### IR Spectrometers

- JASCO FTIR-4100 (2) with ATR accessory
- Thermo Scientific Nicolet iS50 FTIR with built-in ATR accessory

### Atomic Spectroscopy

- Agilent 4100 MP-AES
- Perkin Elmer AAnalyst 600 GFAAS

### Electrochemical

- Bioanalytical Systems MF-9030 Voltammograph

### Fluorescence Spectrometer

- Photon Technology International Model QM40 (2)

### Circular Dichroism Spectrophotometer/Polarimeter

- JASCO Model J-810-150S
- JASCO P-1020 Polarimeter

### Mercury Analyzer

- Teledyne Leeman Labs Hydra-C Mercury Analyzer

### GC-Mass Spectrometer

- Shimadzu GCMS-QP5000 (2)

### Thermal Analysis

- TA Instruments Differential Scanning Calorimeter
- TA Instruments Thermogravimetric Analyzer