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Campus-wide Mass Spectrometry Center (CWMSC)

Karl Wood

Purdue University, kvw@purdue.edu

Purdue University Office of Research and Partnerships

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Campus-wide Mass Spectrometry Center (CWMSC)
http://www.chem.purdue.edu/cwmsc/
Karl Wood (765-497-0160; kvw@purdue.edu)

Since 1985 the Campus-wide Mass Spectrometry Center has assisted Purdue faculty in solving research problems by providing access to mass spectrometers, guidance on defining investigators mass spectroscopy needs, and training in the use of mass spectrometers. The facility works with a diverse group of researchers encompassing greater than 25 different departments on campus. Services include a complete range of mass spectrometric ionization and sample introduction methods that are performed on the following spectrometers:

- **Applied Biosystems Voyager DE PRO.** For matrix-assisted laser desorption ionization (MALDI). Nonvolatile components to m/z 100000.
- **Agilent 5975C GC/MS.** Utilizes an electron impact (EI) and chemical ionization (CI) probe coupled with capillary gas chromatography (GC/MS). Volatile components to m/z 1000.
- **ELEMENT2.** Inductively coupled argon plasma (ICP). Multi-element analyses.
- **Hewlett Packard Engine.** Utilizes an EI and CI probe coupled with capillary GC/MS. Volatile components to m/z 1000.
- **Agilent 6320 Ion Trap.** For electrospray ionization (ESI), atmospheric pressure chemical ionization (APCI) and liquid chromatography/mass spectrometry/mass spectrometry (LC/MS/MS). Nonvolatile components to m/z 50,000.
- **ThermoFisher LTQ Orbitrap with Laser Ablation Electrospray Ionization (LAESI) interface.** With the capability for high resolution mass measurements.

The director and staff mass spectrometrists are available for consultation on the appropriate techniques to solve a problem and for assistance in analyzing spectra.

**Authors:** Karl Wood and Purdue University Office of Research and Partnerships

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