

Mass Spectrometry (MS) Laboratory

in the Department of Chemistry at Dalhousie University

Instrumentation:

CEC 21-110B sector
Bruker microTof Focus orthogonal ESI-TOF
VG/Micromass Quattro triple quadrupole
ThermoFinnigan LCQ duo ion trap
MALDI upon special request

MS Capabilities:

EI – electron ionization
CI – chemical ionization
ESI – electrospray ionization
APCI – atmospheric pressure ionization
MALDI – matrix-assisted laser desorption ionization

Routine MS services: run by Technologist

- EI**
- low resolution
 - high resolution/accurate mass[†]
 - MS/MS[†]
 - thermal profile[†]
 - isotope ratio[†]

- CI**
- low resolution
 - MS/MS[†]

- ESI**[‡]
- low resolution
 - high resolution/accurate mass[†]
 - positive mode
 - negative mode
 - MS/MS

- APCI**[‡]
- positive mode
 - negative mode

- MALDI**^Δ
- low resolution
 - MS/MS

[†] Low resolution spectrum required prior to all MS/MS, thermal profile, accurate mass or ratio experiments.

[‡] For ESI and APCI, samples are injected as a solution; provide neat sample or solutions <10⁻⁴ mol/L. For ESI, only MeOH and water may be used; for APCI various solvents may be used – discuss with Technologist.

^Δ Bulk discount available (ask in advance).

^Σ All prices in Canadian dollars, billed semi-annually (academic), or upon delivery (non-academic).

Prices:^Σ **Academic rate:** \$60 per hour, \$10 per sample
Non-academic rate: \$300 per hour, \$50 per sample

Hands-on Services: please contact us.

Advanced Services: please contact us.

Sample Submission: send samples and a completed sample submission form to Xiao Feng, Department of Chemistry, Dalhousie University, Halifax, NS, B3H 4J3. To comply with WHMIS regulations, all samples must be labeled with users name, sample identifier, and hazards. Blank forms can be downloaded from the Dalhousie University Department of Chemistry Mass Spectrometry Laboratory website (http://chemistry.dal.ca/Research/Centres_and_Facilities/Mass_Spectrometry_LA.php).

Please state on the form whether you require the spectrum/spectra to be mailed, faxed (additional charge incurred, \$5 per spectrum) or sent via e-mail as an ASCII file. Please see the 'more detailed information' document on the web-site for further information, or contact a member of the Mass Spectrometry Laboratory.

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