



Mass Spectrometry Current Applications and Future Perspectives

11 – 13 August 2014

Mass Spectrometry has become the method of choice for the analysis of complex systems in proteomics where the detection and quantification of large numbers of analytes is required. The workshop will cover the basic operational principles and applications of mass spectrometry (MS) in proteomics and development bioanalysis. The fundamentals of MS including types of MS, mass resolving power, mass accuracy, isotopes, and future perspectives will be discussed. The basic format of this workshop includes two to three 45-60 minutes lectures followed by one and a half days of hands-on training in LC-MS and MALDI TOF (or) Q-TOF as well as panel-guided discussions.

Lecture topics:

Basic concepts in Mass Spectrometry

Ionization techniques

Mass Analyzers

Types of Mass Spectrometry

Future Perspectives

Laboratory Techniques:

Liquid Chromatography MS

Triple Quadrupole Mass Analyzers

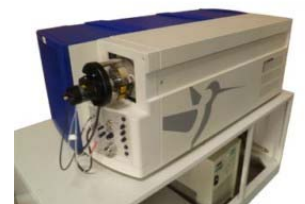
Matrix Assisted Laser Desorption Ionization –Time of Flight MS

Quadrupole Time of Flight MS

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UNE
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Workshop Schedule

Monday 11 August

Time	Schedule
09:00 – 10:30	Lecture : Introduction to mass spectrometry
10:30 – 11:00	Team based assessment
11:00 – 12 noon	Lecture : Types of Mass Spec
12:00 – 01:00	Lunch
01:00 -01:30.p.m.	Tour : Analytical Facility and Equipment
01:30 – 04:00	Lab : LC-MS. Analysis of biologics and small molecules
04:00 -05:00	Data analysis and discussion

Tuesday 12 August

09:00 – 10:00	Lecture : Triple Quad LC-MS
10:00 – 12 noon	Lab : Triple Quad LC-MS and sample analysis
12:00 – 01:00	Lunch
01:00 – 03:00	Lab : trouble shooting Triple Quad LC-MS
03:00 – 04:00	Lecture/Lab : data interpretation and system maintenance
04:00 -05:00	Discussion

Wednesday 13 August

09:00 – 10:00	Lecture : introduction to MALDI-TOF
10:00 – 12 noon	Lab : MALDI-TOF and general overview
12:00 – 01:00	Lunch
01:00 – 03:00	Lecture : future perspective of Mass Spec (HR-MS)
03:00 – 04:00	Lab/Lecture : MALDI-TOF data interpretation Wrap-up and Discussion

REGISTRATION FORM: Mass Spectrometry Current Applications & Future Perspectives

Name _____ Title _____ Organization _____

Address _____

City _____ State/country _____ Postal Code _____

Telephone _____ Fax _____ Email _____

Signature _____ Date _____

Please return to: Department of Pharmaceutical Sciences, College of Pharmacy, University of New England, 232 Pharmacy Bldg.
716 Stevens Ave, Portland, ME 04103, Phone: 207-221-4078 Fax: 207-523-1926. **Email: dbrazeau@une.edu.**

Course location: The course will be held at the University of New England, Hanaford Auditorium, 716 Stevens Ave, Portland, ME.

Fee: Individual fee: \$50 UNE Faculty/staff, \$500 for faculty and researchers. This includes course documentation, laboratory supplies and reagents, and mid-session refreshments each day. Credit cards or checks made payable to: University of New England

Registration: Please register ASAP in view of the limited course capacity of 10 participants. Confirmation of registration will be returned upon receipt, together with an invoice for the course fee. Registration will not be final until payment is received.

Cancellations: Cancellations with a full refund may be made until 14 July 2014. No refund is possible on cancellations received after this date. Substitutions may be made at any time.