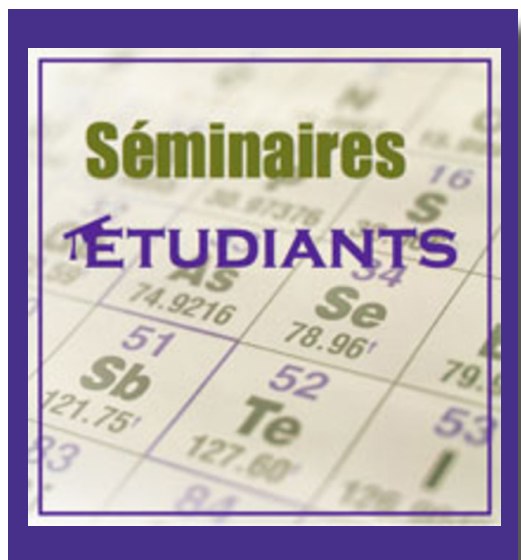


SÉMINAIRES DE CHIMIE ÉTUDIANTS PH.D.



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« Advanced Proteomic analysis using high-field asymmetric waveform ion mobility coupled to mass spectrometry (FAIMS-MS)

RÉSUMÉ: Sample complexity observed in cell extracts places considerable demands on MS instruments to obtain comprehensive proteome analyses. Despite remarkable advances in MS sensitivity and resolution, the depth of proteomic analyses is often limited by the difficulty of sequencing low abundance peptides that are confounded with co-eluting isobaric ions and give rise to chimeric MS/MS spectra. In this context, gas phase ion separation using high field asymmetric waveform ion mobility spectrometry (FAIMS) is a useful separation technique to enhance peak capacity and MS sensitivity while reducing peptide co-fragmentation. We report here the application of a compact FAIMS interface coupled to the newest generation of Orbitrap mass spectrometers. FAIMS enables signal to noise ratio increase by a factor of 10 to 50 enabling identification of low abundant ions undetected with the conventional source. The additional peak capacity provided with FAIMS also alleviates the issue of peptide co-fragmentation and reporter ion signal compression for isobaric labeling and provides more accurate quantitation measurements.

- > Vendredi 15 septembre 2017
- > 11:45
- > Salle **G-715**
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