
BIOGRAPHICAL SKETCH

NAME Cheng LIN	POSITION TITLE		
eRA COMMONS USER NAME -----	Research Assistant Professor of Biochemistry		
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Beijing University, Beijing, P.R. China	B.S.	1996	Chemistry
Cornell University, Ithaca, NY	M.S.	1999	Physical Chemistry
Cornell University, Ithaca, NY	Ph.D.	2003	Physical Chemistry
Cornell University, Ithaca, NY	Postdoc	2003-2004	Mass Spectrometry
Boston University School of Medicine, Boston, MA	Postdoc	2004-2008	Mass Spectrometry

Professional Experiences

Postdoctoral Research Fellow	Cornell University, Ithaca, NY	2003-2004
Postdoctoral Research Fellow	Boston University School of Medicine, Boston, MA	2004-2008
Research Assistant Professor	Boston University School of Medicine, Boston, MA	2009-present

Memberships

American Chemical Society, American Society for Mass Spectrometry, Sigma Xi

Selected Publications

Mode Specific Energy Disposal in the 4-Atom Reaction $\text{OH} + \text{D}_2 \rightarrow \text{HOD} + \text{D}$

Strazisar, B. R.; Lin, C.; Davis, H. F. *Science* **2000**, *290*, 958.

Vibrationally Inelastic Scattering of High-n Rydberg H Atoms from N_2 and O_2

Strazisar, B. R.; Lin, C.; Davis, H. F. *Phys. Rev. Lett.* **2001**, *86*, 3997.

Oxygen Atom Rydberg Time-of-Flight Spectroscopy

Lin, C.; Witinski, M. F.; Davis, H. F. *J. Chem. Phys.* **2003**, *119*, 251.

Nonergodic and Conformational Control of the Electron Capture Dissociation of Protein Cations

Breuker, K.; Oh, H.-B.; Lin, C.; Carpenter, B. K.; McLafferty, F. W. *Proc. Nat. Acad. Sci. USA* **2004**, *101*, 14011.

Infrared Photodissociation Spectroscopy of Electrosprayed Ions in a Fourier-Transform Mass Spectrometer

Oh, H.-B.; Lin, C.; Hwang, H. Y.; Zhai, H.; Breuker, K.; Zabrouskov, V.; Carpenter, B. K.; McLafferty, F. W. *J. Am. Chem. Soc.* **2005**, *127*, 4076.

A New Hybrid Electrospray Fourier Transform Mass Spectrometer: Design and Performance Characteristics

O'Connor, P. B.; Pittman, J. L.; Thomson, B. A.; Budnik, B. A.; Cournoyer, J. J.; Jebanathirajah, J.; Lin, C.; Moyer, S.; Zhao, C. *Rapid Commun. Mass. Spectrom.* **2006**, *20*, 259.

Stepwise Deamidation of Ribonuclease A at Five Sites Determined by Top Down Mass Spectrometry

Zabrouskov, V.; Han, X.; Welker, E.; Zhai, H.; Lin, C.; van Wijk, K. J.; Scheraga, H. A.; McLafferty, F. W. *Biochem.* **2006**, *45*, 987.

Detecting Deamidation Products in Proteins by Electron Capture Dissociation

Cournoyer, J. J.; Lin, C.; O'Connor, P. B. *Anal. Chem.* **2006**, *78*, 1264.

Long-lived electron capture dissociation product ions experience radical migration via hydrogen abstraction

O'Connor, P. B.; Lin, C.; Cournoyer, J. J. *J. Am. Soc. Mass Spectrom.* **2006**, *17*, 576.

The Effect of Radical Trap Moieties on Electron Capture Dissociation Spectra of Substance P

Belyayev, M. A.; Cournoyer, J. J.; Lin, C.; O'Connor, P. B. *J. Am. Soc. Mass Spectrom.* **2006**, *17*, 1428.

Use of a Double Resonance Electron Capture Dissociation Experiment to Probe Fragment Intermediate Lifetimes

Lin, C.; Cournoyer, J. J.; O'Connor, P. B. *J. Am. Soc. Mass Spectrom.* **2006**, *17*, 1605.

Quantitating the Relative Abundance of Isoaspartyl Residues in Deamidated Proteins by Electron Capture Dissociation

Cournoyer, J. J.; Lin, C.; Bowman, M. J.; O'Connor, P. B. *J. Am. Soc. Mass Spectrom.* **2007**, *18*, 48.

First Signal on the Cryogenic Fourier-Transform Ion Cyclotron Resonance Mass Spectrometer

Lin, C.; Mathur, R.; Aizikov, K.; O'Connor, P. B. *J. Am. Soc. Mass Spectrom.* **2007**, *18*, 2090.

Probing the Gas Phase Folding Kinetics of Peptide Ions by IR Activated DR-ECD

Lin, C.; Cournoyer, J. J.; O'Connor, P. B. *J. Am. Soc. Mass Spectrom.* **2008**, *19*, 780.

Use of ¹⁸O Labels to Monitor Deamidation during Protein and Peptide Sample Processing

Li, X.; Cournoyer, J. J.; Lin, C.; O'Connor, P. B. *J. Am. Soc. Mass Spectrom.* **2008**, *19*, 855.

The Effect of Fixed Charge Modifications on Electron Capture Dissociation

Li, X.; Cournoyer, J. J.; Lin, C.; O'Connor, P. B. *J. Am. Soc. Mass Spectrom.* **2008**, *19*, 1514.

Numerous Isomers of Serine Octamer Ions Characterized by Infrared Photodissociation Spectroscopy

Kong, X.; Lin, C.; Infusini, G.; Oh, H.-B.; Jiang, H.; Breuker, K.; Wu, C.-C.; Charkin, O. P.; Chang, H.-C.; McLafferty, F. W. *ChemPhysChem* **2009**, *in press*.