

*Curriculum Vitae*  
**Mary L. Kraft**

Chemical & Biomolecular Engineering  
UNIVERSITY OF ILLINOIS, URBANA-CHAMPAIGN

**EDUCATION:**

- 10/2003 – 06/2007**     **Stanford University**  
Postdoctoral Fellow  
Advisor: Professor Steven G. Boxer
- 09/1998 – 10/2003**     **University of Illinois at Urbana-Champaign**  
Ph.D., Chemistry  
Advisor: Professor Jeffrey S. Moore  
*Thesis:* “Development and Characterization of Fatty Acid-Coated Microgels within Microfluidic Systems”
- 09/1993 – 05/1998**     **University of Illinois at Chicago**  
B.S. Biochemistry

**ACADEMIC POSITIONS:**

- 07/2007-present**     Assistant Professor, Chemical & Biomolecular Engineering, University of Illinois, Urbana-Champaign

**FELLOWSHIPS AND AWARDS:**

- 03/2008**     Excellence in Undergraduate Advising Award, College of Engineering, University of Illinois at Urbana-Champaign
- 01/2007–12/2011**     Burroughs Wellcome Career Award at the Scientific Interface
- 01/2003 – 12/2006**     Kirschstein Postdoctoral Fellow; National Institutes of Health (NIH) NRSA

**PUBLICATIONS:**

- (1) Jeffrey S. Moore and Mary L. Kraft, “Synchronized Self-Assembly,” Invited perspectives article, *Science* **2008**, 320, 620-621.
- (2) Mary L. Kraft, Peter K. Weber, Marjorie L. Longo, Ian D. Hutcheon, and Steven G. Boxer, “Phase separation of lipid membranes analyzed with high-resolution secondary ion mass spectrometry,” *Science* **2006**, 313, 1948-1951. Perspectives Article in *Science* **2006**, 313, 1901-1902; News of the Week in *Chemical and Engineering News* **2006**, 84, 11; Research Highlights in *Nature Nanotechnology* **2006**, doi:10.1038/nnano.2006.105.

- (3) Mary L. Kraft, Simon F. Fishel, Carine Galli Marxer, Peter K. Weber, Ian D. Hutcheon, and Steven G. Boxer, "Quantitative analysis of supported membrane composition using the NanoSIMS," *Applied Surface Science* **2006**, 252, 6950-6956.
- (4) Carine Galli Marxer, Mary L. Kraft, Peter K. Weber, Ian D. Hutcheon, and Steven G. Boxer, "Supported membrane composition analysis by secondary ion mass spectrometry with high lateral resolution," cover article, *Biophysical Journal* **2005**, 88, 2965-2975.
- (5) Chiaki Yoshina-Ishii, Gregory P. Miller, Mary L. Kraft, Eric T. Kool, and Steven G. Boxer, "General method for modification of liposomes for encoded assembly on supported bilayers," *Journal of the American Chemical Society* **2005**, 127, 1356-1357.
- (6) Mary L. Kraft and Jeffrey S. Moore, "Multitechnique characterization of fatty acid-modified microgels," *Langmuir* **2004**, 20, 1111-1119.
- (7) Mary L. Kraft and Jeffrey S. Moore, "*n*-Alkyl fatty acid-modified microgels: ion permeation as a function of chain length," *Langmuir* **2003**, 19, 910-915.
- (8) Mary L. Kraft, Scott J. Robinson, and Jeffrey S. Moore, "Fatty acid-coated microgels: transmission electron microscopy study," *Surface and Interface Analysis* **2003**, 35, 1065-1068.
- (9) Kyle N. Plunkett, Mary L. Kraft, Qing Yu, and Jeffrey S. Moore, "Swelling kinetics of disulfide crosslinked microgels," *Macromolecules* **2003**, 36, 3960-3966.
- (10) Mary L. Kraft and Jeffrey S. Moore, "Surfactant-induced lysis of lipid-modified microgels," *Journal of the American Chemical Society* **2001**, 123, 12921-12922.
- (11) David J. Beebe, Jeffrey S. Moore, Qing Yu, Robin H. Liu, Mary L. Kraft, Byung-Ho Jo, and Chelladurai Devadoss, "Microfluidic tectonics: A comprehensive platform for microfluidic systems," *Proceedings of the National Academy of Sciences of the United States of America* **2000**, 97, 13488-13493.