

# “Introduction to High Performance Liquid Chromatography”

October 2-4, 2007 ....

It's time again for the MCF's three day workshop in Beginning Liquid Chromatography! This workshop is to provide introductory training in the applications of HPLC to practical industry and laboratory analytical problems. A full day of “Hands On” training with instrumentation from local vendors is included!

**Program:** Sessions will begin at 8:00 AM and end at approximately 3:30 PM. Lunch will be provided each day along with morning and afternoon breaks. Parking is available nearby (pay lot).

Instructors: Dr. David Johnson (3M) and Dr. Larry Felice (Surmodics)  
 Date/Time: October 2-4, 2007; 8:00 am ~ 3:30 pm  
 Location: University of Minnesota, St. Paul Campus  
 Earle Brown Continuing Education Center  
 1890 Buford Avenue, Room 156  
 Vendors: To Be Announced (refer to Web-site! www.minnchrom.org)

## HPLC AGENDA

<u>Day One</u>	<u>Day One Cont'd</u>	<u>Day Three Cont'd</u>
I. Introduction II. Chromatographic Theory III. Column Chemistry A. Background B. Instrumentation C. Modes of Chromatography D. Solvents E. Column Misc. IV. System Concerns (Practical) A. Column Considerations and Care	B. Solvent Selection and Use C. Plumbing/Fittings D. Detectors E. Sample Concerns F. Injection Misc. <b>Day Two</b> Laboratory Exercises <b>Day Three</b> I. Post-Lab Discussion II. Sample Prep	III. Signal Processing IV. Methods Development V. Maintenance VI. Troubleshooting VII. Column Survey •Traditional Si-based Bonded Phases •Non-traditional Si-based Bonded Phases •Non-Si-based Columns

For class information, contact Jan Jopke, at (952) 934-5082. For further course content information e-mail David Johnson at [ddjohnson2@mmm.com](mailto:ddjohnson2@mmm.com). To register for the course, complete the form below and send it with a check for \$750, payable to the Minnesota Chromatography Forum. Major Credit card's accepted.

**Mail to:**

Minnesota Chromatography Forum  
 c/o CCS Associates  
 6611 Countryside Drive  
 Eden Prairie, MN 55346

or FAX to: (952) 934-6741

Name, Title: \_\_\_\_\_

Institution or company: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Telephone/FAX: \_\_\_\_\_

e-mail Address: \_\_\_\_\_

Credit Card: \_\_\_\_\_ exp \_\_\_\_\_

Vegetarian lunch? Yes \_\_\_\_\_ No \_\_\_\_\_

**Cancellation Policy:** Refunds (minus a 10% administration fee) will be issued for cancellations prior to the registration deadline. Refunds for cancellations made after the deadline will be made only if the spot is filled with another student.

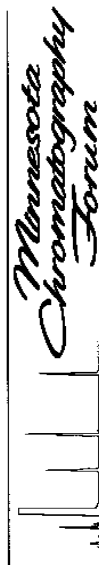
**\*Note:** If confirmation is not received within 5 business days, contact Jan at (952) 934-5082.

**Deadline for Registration: September 17, 2007**  
**Class limit 24! Register Early.**

### *Meet the Instructors...*

**Dr. David Johnson** received his B.S. in chemistry from the University of Minnesota in Minneapolis, and his Ph.D. in analytical chemistry from the University of Arizona in Tucson. After completion of his schooling, he began his career in industry with 3M. His first 5 years he worked in the 3M Corporate Laboratories Separations group developing methods and doing general problem solving with various separations technologies including LC, GC, CE, and SPE. In addition, he performed research into novel sorbent systems and applications for SPE. Subsequently, he joined the Intellectual Properties and Competitive Analysis group whose mission is to protect 3M's intellectual property interests through scientific inquiry. He is now a Technical Manager in 3M's Corporate Analytical laboratory with supervisory responsibilities over the Electron and Optical Microscopy, X-ray, Elemental Analysis and Surface Characterization areas. In addition to his work at 3M, Dr. Johnson is also an adjunct professor with the St. Paul Technical College, and an instructor in 3M's STEP program - a science encouragement outreach program for St. Paul high school students.

**Dr. Larry Felice** received his B.A. in chemistry from Queens College, New York, and his Ph.D. in analytical chemistry from Purdue University. He also completed a fellowship in environmental toxicology at Vanderbilt University. Dr. Felice began his career as a research scientist in the Environmental Chemistry Section at Batelle, N.W. in Richland, Washington. In 1984 he accepted the position of Assistant Professor at the University of Minnesota in the Department of Veterinary Diagnostic Medicine and in 1990 received a promotion to Associate Professor of Analytical Toxicology. In these positions he performed grant funded research on veterinary toxicology, taught professional and graduate courses in toxicology and advised graduate students.



6611 Countryside Drive  
Eden Prairie, MN 55346

*Beginning HPLC Course !!*

## ***Introduction to High Pressure Liquid Chromatography***

*October 2-4, 2007*

### *Day One*

- I. Introduction
- II. Chromatographic Theory
- III. Column Chemistry
  - A. Background
  - B. Instrumentation
  - C. Modes of Chromatography
  - D. Solvents
  - E. Column Misc.
- IV. System Concerns (Practical)
  - A. Column Considerations and Care
  - B. Solvent Selection and Use
  - C. Plumbing/Fittings
  - D. Detectors
  - E. Sample Concerns
  - F. Injection Misc.

### *Day Two*

- I. Laboratory Exercises

### *Day Three*

- I. Post-Lab Discussion
- II. Sample Prep
- III. Signal Processing
- IV. Methods Development
- V. Maintenance
- VI. Troubleshooting
- VII. Column Survey
  - A. Traditional Si-based Bonded Phases
  - B. Non-traditional Si-based Bonded Phases
  - C. Non-Si-based Columns

### ***Instructors Con't...***

From 1995 to 2004, Dr. Felice directed an R&D group at Medtox Laboratories, responsible for the development of assays for the measurement of drugs in biological samples using HPLC, GC, GC/MS and LC/MS/MS.

Currently, Dr. Felice is a Senior Chemist at Surmodics, where he is involved in the development of polymer coatings for medical device applications and polymer based drug delivery systems.