

The Minnesota Chromatography Forum Presents...

Advanced HPLC Method Development

December 6th and 7th, 2011

Announcing MCF's workshop on Advanced HPLC Method Development...

This 2-day workshop is designed for laboratory workers involved in HPLC method development as well as those who must transfer existing methods between laboratories. It is designed to provide training and insight into advanced applications and method development. The class focuses on separation fundamentals and applies them in a time-proven strategy for developing robust HPLC methods quickly. Attendees will gain practical skills to develop realistic HPLC methods in a short time. The techniques can be used as a stand-alone strategy or added to existing method development procedures to help streamline the overall process. Students will be introduced to HPLC method development software in addition to the classroom instruction.

Instructor: Dr. John Dolan (LC Resources)

Date/Time: December 6th-7th, 2011; 8:00am ~ 4:00pm

Location: University of Minnesota, Saint Paul Campus
Earle Brown Continuing Education Center – **Room 52**
1890 Buford Avenue
Saint Paul, MN 55108

Tuition: \$750 per person

**Register for both Advanced
HPLC Method Development
(Dec 6-7th) and HPLC
Troubleshooting (Dec 8-9th)
and receive 10% off your total
registration cost.**

Registration deadline is November 29th, 2011
Class size is limited so register early.

Course Outline

Day One

- I. Introduction to HPLC Method Development
- II. HPLC Basics
- III. HPLC Columns
- IV. Reversed-Phase Separation
- V. Dealing with Ionic Samples
- VI. Ion Pair Chromatography

Day Two

- I. Gradient Elution
- II. Normal Phase and HILIC
- III. Quality Issues
- IV. Other topics may include:
 - Chiral Separations
 - Ion-Exchange Chromatography
 - HPLC – UHPLC Tradeoffs
 - Sample Preparation

The Minnesota Chromatography Forum Presents...

HPLC Troubleshooting

December 8th and 9th, 2011

Announcing MCF's workshop on HPLC Troubleshooting..

This course is designed for anyone who works with HPLC. It is an intensive two-day course that teaches you the ins and outs of solving problems that occur with your LC methods. More importantly, you'll learn how to prevent many of these problems from happening in the first place. You'll learn to demystify your instrument, find simple solutions to your most frustrating problems and learn how to prevent many of them. By solving real case studies with other students, you'll learn how to apply troubleshooting principles when you need them most. This practical course is a must for anyone and everyone who uses HPLC.

Instructor: Dr. John Dolan (LC Resources)

Date/Time: December 8th-9th, 2011; 8:00am ~ 4:00pm

Location: University of Minnesota, Saint Paul Campus
Earle Brown Continuing Education Center – **Room 52**
1890 Buford Avenue
Saint Paul, MN 55108

Tuition: \$750 per person

**Register for both Advanced
HPLC Method Development
(Dec 6-7th) and HPLC
Troubleshooting (Dec 8-9th)
and receive 10% off your total
registration cost.**

Registration deadline is November 29th, 2011
Class size is limited so register early.

Lecture Topics

- Principles of Troubleshooting
- Performance Qualification
- The Separation: Physical Problems with Columns
- The Separation: Chemical Problems with Columns
- Special Problems with Gradients and UHPLC
- Reservoirs, Pumps and Autosamplers
- Detectors
- Problems with Quantification

The Minnesota Chromatography Forum Presents...

Advanced HPLC Method Development and HPLC Troubleshooting

December 6-7th and 8-9th, 2011

Meet the Instructor...



Dr. John Dolan is a Principal Trainer and consultant for LC Resources, Inc.. John received his Ph.D. from the University of California at Davis in 1976 and has more than 30 years of HPLC experience. After finishing graduate school, he did postdoctoral work at Northeastern University and then joined Technicon Instruments Corporation, where he worked for three years developing clinical HPLC technology. He moved to IBM Instruments, where he was involved in design and support of LC, IR, and UV products. As a columnist for LC/GC magazine, he has written over 300 installments of the "LC Troubleshooting" monthly column since 1983. In 1984, John and Lloyd Snyder founded LC Resources, which offered support to the separations community via teaching, software, consulting, and laboratory services. In 2002, LC Resources sold its software products to Molnar Institute, the laboratory to Bioanalytical Systems, and retained the training business. After acting as General Manager of the BASi Northwest Laboratory for three years, John now spends full time teaching and consulting. He has written more than 100 scientific papers on LC theory, instrumentation, and applications as well as a book on troubleshooting LC instruments and methods. John is the 2002 recipient of the MCF Palmer Award.

For **registration information and questions** contact Jan Jopke at ccsevents@comcast.net

For **course content information** contact Dr. John Dolan at John.Dolan@LCResources.com

The registration form can be found online at <http://www.minnchrom.com/>

Register for both Advanced HPLC Method Development (Dec 6-7th) and HPLC Troubleshooting (Dec 8-9th) and receive 10% off your total registration cost.

Lunch, as well as refreshments for morning and afternoon breaks, are provided each day. Please note any dietary restrictions on your registration form.

Parking is available in nearby pay lots (Lots S-104 and S-108, cash or check only).

Visit <http://www1.umn.edu/twincities/maps/CECC/> for more information about the location, available parking and to map directions from your address.