



MCF RETENTION TIMES

Official Newsletter of MCF

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PRESIDENT'S CORNER

Emilie Kuehl, MCF President

Allow me to begin by introducing myself as this year's MCF President. Although I began my career applying chromatographic principles as a protein purification chemist, I am currently a LIMS Administrator (Laboratory Information Management Systems) for the Analytical Laboratory at Boston Scientific. To be honest, the story of MCF's manifestation is what really drew me to this organization... "over a pitcher of green beer". I guess each year we have opportunities to look for improvements! Perhaps it really is time to Go Green!

A special thanks to all of you who were able to attend this year's 29th annual Spring Symposium. I would like to encourage each of you to invite others to attend the 30th annual Spring Symposium in 2009.

Please join me in welcoming the new MCF Board members:

- President Elect – Ron Schoonmaker
- First Year Director – Carrie Coppock
- Secretary Elect – Pat Sackett
- Membership Chair – Joanne Costello

Ron, Carrie, Pat, and Joanne please accept our sincere gratitude for volunteering as a member of the board. I'm looking forward to attending meetings together this year as we commit to fulfilling our roles and responsibilities. You can read more about the board member positions on the MCF website. As MCF members, please consider volunteering as part of the board of directors or a committee, attending quarterly meetings and / or the Symposium. Each and every one of us can make a difference and fulfill the mission of this organization.

I would like to thank our former board members for all of their service and dedication; Chris Marquardt – President, Becky Bilek-Secretary, and Steve Anderson-Third Year Director. I would like to send a special thanks to Dan Howman for his commitment and diligence as MCF treasurer, and his continued support as we seek his replacement.

In addition, please note that we are currently seeking a new treasurer as replacement for Dan Howman. If you are interested in the treasurer position, or other opportunities to volunteer, please contact me at Emilie.Kuehl@bsci.com.

And finally...I can't pass up the opportunity to share a quote!
"A discovery is said to be an accident meeting a prepared mind."
Albert Szent-Gyorgyi, Hungarian Biochemist, 1937 Nobel Prize for Medicine, 1893-1986

**Need to update your MCF e-mail or snail mail address?
Contact Joanne Costello (651-736-8441) or email
minnchrom@gmail.com.**

*** Next Quarterly Meeting ***

*The Role of Analytical Chemists in the
Sequencing of the Human Genome*

Professor Norman Dovichi

(University of Washington)

Monday, November 3, 2008

For more details, visit minnchrom.org

SYMPOSIUM CORNER

LeeAnn Higgins, Symposium Committee Chair

Symposium Committee Members: Peter Johnson – Program; Steve Albrecht - Vendors/Exhibits; Jan Jopke - Meeting Coordination; Nate Otte – Publicity / Facilities; Sandy McDonald – Program; Lori McNamara – Publicity/Recruiting

2008 MCF SYMPOSIUM RECAP

Minnesota Chromatography Forum held its 29th Annual Spring Symposium from May 5-7, 2008 at the Earle Brown Heritage Center Minneapolis, MN. Approximately 300 attendees enjoyed another successful and fun event!

Highlights on Monday and Tuesday morning included the annual short courses, including: 1) Basic Care, Maintenance and Troubleshooting of Capillary GC Systems by Daron Decker, 2) New Developments in Solid Phase Extraction, by Ron Majors, Ph.D., and Richard Henry, Ph.D., 3) Troubleshooting HPLC Systems, by John Dolan, Ph.D., 4) HPLC Method Development for LC-MS, by Shane Needham, Ph.D.

On Tuesday afternoon the Exhibition Keynote Speaker, Professor Richard Henry, gave a presentation titled: Ultra-HPLC in a Traditional HPLC World –The Impact of Small Particles, High Pressure and Small Volumes on Traditional Instrument Systems. Two discussion panels were held, which entailed open conversation about HPLC and GC techniques, including troubleshooting and method development. Thanks to John Dolan, Dan Marchand and Daron Decker for the participation in hosting the two popular sessions. A total of 5 posters were presented during the Tuesday afternoon reception and the Wednesday afternoon poster session. Posters are an important way to communicate research activities with fellow scientists, please continue to show your research efforts at future Symposiums and encourage your colleagues to do the same!

The technical program on Wednesday began with keynote address from Professor John Dorsey from Florida State University titled: "2-D or not 2-D? Approaches to High Resolution Liquid
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2008 MCF SYMPOSIUM RECAP *continued from Page 1*

Chromatography.” The Palmer Award recipient was announced: Congratulations to Larry Felice from SurModics of Eden Prairie, MN! The rest of the technical program featured presentations from three invited focus speakers: Dr. Dwight Stoll, University of Minnesota, Dr. Nicholas Snow, Seton Hall University and Dr. Hernan Cortes, Dow Chemical, plus 12 short technical presentations from local scientists. The recipient of the 2007 MCF Undergraduate Awardee, Anthony Wiseman from University of Minnesota, Duluth, gave an outstanding presentation titled: “Expanding the Scope of β -Allyldiisopinocampheylborane.” The participation in MCF from young scientists is very commendable and highly appreciated! Please don’t forget to enlighten young scientist colleagues about the Symposium and the Award opportunities.

The results of the 2008 Questionnaires will be compiled and presented in the Winter Newsletter. We appreciate the time each individual took to provide feedback from the event. We thank everyone for attending and for helping to make the program possible, and look forward to seeing everyone again next year in 2009! Don’t forget to spread the word to new colleagues about the MCF Symposium.

SPECIAL THANKS!

A total of 35 VENDORS displayed their products in the Exhibitor’s Room. A great hand of applause for the dedicated efforts and contributions from the vendors, who help to make the Symposium successful and possible!

Aerotek Scientific, Agilent Technologies, Analytical Instruments, Applied Biosystems, Beckman Coulter, Bruker Daltonics, Inc., Chromatography Tech. Services, Chrom Tech, Inc., Corning, Dionex, Eksigent Technologies, Fisher Scientific, Gerstel/ RAS LLC, Global Medical Instrumentation, Grace Division/ Alltech Associates, Lakeview, LEAP Technologies, Millipore Corporation, OI Analytical, Oxygen Service, Pace Analytical Services, Parker-Hannifin, Perkin Elmer, Phenomenex, Quant Technologies, Quantum Analytics, Restek Corp., SGE Inc., Shimadzu Scientific Inst., Supelco/ Sigma Aldrich, Thermo Fisher Scientific, Toll Company, Varian Inc, VWR Scientific Products, Waters Corporation, Whatman Inc.

Please join your local Chromatography Friends and Outstanding Instructors and Presenters next year, in May 2009!! (Details/Dates to be posted)



Agilent Technologies

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For information on advertising or listing a job posting with MCF visit our website www.minnchrom.org.



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EDUCATION CORNER

Jamie Koehler, Education Committee Chair
Erin Sloan, Education Committee Co-Chair

Committee Members: Gibbes Bailie, Wendy Christensen, Bill Cameron, Stephanie Drier, Kelly Higbee, Cara Mokaya, Jeanette Morrison, Kelly Neppl, Jean Seidel, DeWayne Townsend

MCF Symposium 2008 was a successful one for the Education Committee. Moving the Symposium dates earlier in the month did not seem to affect registrations for the four courses offered this year: HPLC Troubleshooting, with John Dolan (17 registrations); HPLC Method Development for LC/MS with Shane Needham (17 registrations); SPE with Ron Majors and Richard Henry (9 registrations); and Basic Care, Maintenance and Troubleshooting for Capillary GC with Daron Decker (23 registrations). Many thanks to our incredible instructors who continue to support the MCF!! SPE was a new course this year with two new instructors, and although the registration seems a bit low, this is a very typical registration number for a new course of similar types. The course was very well received, and we hope to offer it again in the future. Reviews were excellent for all courses offered this year. The Education Committee would like to thank everyone who filled out their course reviews and offered suggestions for course improvements or ideas for new courses. MCF is your organization, so we take membership suggestions very seriously. Please contact Jamie Koehler at Jamie_Koehler@cargill.com with education related suggestions, questions or concerns.

We would also like the vendors who made this year's GC laboratory a success: Agilent, GMI, Lakeview Associates, Perkin Elmer, and Shimadzu. We recognize the incredible amount of work and coordination required to set up a lab in a conference room, devoid of the necessary laboratory accoutrements. Please continue to support them; they are directly responsible for keeping your course costs down! A special thanks to John Kroska for donating the copper tubing used for the lab, and thanks to Toll for continuing to support the MCF by supplying gases and regulators at a reasonable cost.

Upcoming Courses:

Beginning GC, Dr. Gary Reineccius and Rick Rossiter, January 13-15, 2009

Design of Experiments, Dr. Lars Pekay, February 3-5, 2009

Fast HPLC, Dr. Pete Carr and Dr. Dwight Stoll (Dates yet to be determined.)

We look forward to seeing you at a class soon. Please visit www.minnchrom.org for upcoming course information or contact Jan Jopke, CCS Events at ccsevents@comcast.net or 952-934-5082. Thank you very much for your continued support!

MCF is going Green! Please allow your spam filters to accept mailings from minnchrom@gmail.com!

CLASS REVIEW**HPLC Troubleshooting***Reviewed by Cara L. Hagen*

Have you ever wondered where to start when it comes to HPLC troubleshooting? First, you need to review the basic chromatographic principles. One principle is to know what affects retention time. Retention time varies in direct proportion to flow rate. Temperature, mobile phase composition, column type and column dimensions can also affect the retention time for your peak of interest. One student expressed, "The course covered a broad range of topics and was useful for various levels of experience."

Although attendance was lower than previous years, probably due to recent changes in our economy, the course was well appreciated. HPLC Troubleshooting was one of the four short-courses offered at this year's MCF Spring Symposium on May 5-6, 2008, at the Earle Brown Heritage Center. In what has become a staple for HPLC education in the region, "HPLC Troubleshooting" with John Dolan, Ph.D. of LC Resources was once again well praised for his knowledge and his delivery of the information that can not be extracted from a textbook.

John Dolan has more than 30 years of HPLC experience. As a columnist for LC/GC Magazine, he has written over 200 installments of the "LC Troubleshooting" monthly column since 1983. He has written more than 90 scientific papers on LC theory,

instrumentation, and applications as well as a book on troubleshooting LC instruments and methods. John was also the 2002 recipient of the MCF Palmer Award.

John started the course by giving an overview called "HPLC Basics" which emphasized the five rules of thumb. Rule of 1 states that we should change just one thing at a time, which is also referred to as the scientific method. The rule of 2 reminds us that we should make sure the problem occurs at least twice, since an HPLC system can have spurious results. Next, put good working parts back into operation if the module substitution doesn't solve the problem. Many problems can be anticipated or forecasted based on system parameters, such as pressure, or operational time, such as for detector lamps. The fifth rule of thumb, keep good records of any maintenance activities.

John believes that the skill of troubleshooting is being lost on today's chromatographers due, in part, to the ease of use of today's systems. Troubleshooting is an incredibly valuable skill to have as a chromatographer and is worth putting effort into learning. Few chromatographers in any given lab possess such skills, making these individuals hot commodities. John recommends every chromatographer should subscribe to the LC/GC Magazine, since it is a valuable and free resource.

With his engaging teaching style, depth of knowledge and excitement about HPLC, John has once again presented a highly successful HPLC Troubleshooting course. A warm thank you goes out to John Dolan!

Minnesota Chromatography Forum
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