

# *Beginning Gas Chromatography*

*January 6-8, 2004*

Instructors: Professor Gary Reineccius (Dept. of Food Science, University of MN),  
and John Freeburg (retired from Agilent in Dec 2001, employed by  
Midwest Scientific)

Date/Time: January 6-8, 2004; 8:00 am - 5:00 pm

Location: University of Minnesota, St. Paul Campus  
Food Science & Nutrition Building, Room 23  
1334 Eckles Avenue (Corner of Eckles & Commonwealth)

Course Fee: \$650

## **Course Outline:**

<u>Day One</u>	<u>Day Two</u>	<u>Day Three</u>
<u>Morning:</u> Gas Chromatography Overview Column Theory - Packed and Capillary Injection Port and Oven	<u>Morning:</u> Qualitative Analysis Quantitative Analysis Detectors	<u>Morning:</u> Operation Parameters Trouble-Shooting Integrator and Data Systems
<u>Afternoon:</u> Hands On Laboratory Exercises	<u>Afternoon:</u> Hands On Laboratory Exercises	<u>Afternoon:</u> Hands On Laboratory Exercises

### ***Meet the Instructors...***

**Dr. Gary Reineccius** is a Professor in the Department of Food Science and Nutrition at the University of Minnesota. He has been actively involved in flavor research for more than 33 years. During this time he has published over 180 research articles. Dr. Reineccius has spent sabbatical leaves with Fritzsche Dodge and Olcott (New York, flavor creation and production), Nestle (Switzerland, reaction flavors) and most recently Robertet S.A. (France, taste modifiers and manufacturing).

Dr. Reineccius teaches courses in Chemical and Instrumental Analysis of Foods, Food Processing and Flavor Chemistry and Technology. He has written a College textbook on food flavors with Henry Heath. This is the first textbook in the flavor area which combines both flavor chemistry and technology. Dr. Risch and he edited, and were major contributors, to two books on flavor encapsulation. He is the editor of the Source Book on Flavors and is currently working on a new edition of his earlier Flavor Chemistry and Technology book.

Dr. Reineccius' achievements have been recognized by several local and international organizations. He is an honorary member of the Society of Flavor Chemists. He has also received the Distinguished Achievement and Service in Agricultural and Food Chemistry Award from the American Chemical Society and been presented the Stephen S. Chang Award by the Institute of Food Technologists. In addition, the Minnesota Chromatography Forum granted him the Palmer Award for his contribution to chromatography!

**John A. Freeburg** began training for his career while in the US navy where he served in the Submarine Service. There he received his initial education in electronics and computers. After the navy, John joined the University of Minnesota as a staff electronics technician working primarily with scientific instruments. While there he continued his education by taking classes and began his chromatography career with his first injection on a gas chromatograph (in 1966!). While at the university John developed an instrument for calibrating electrometers in gas chromatographs which was marketed by Alltech.

John joined Hewlett-Packard (now Agilent!) in December of 1972 as a customer service engineer for the Analytical Products group and was promoted to a Sales Representative in November of 1978. John has continuously encouraged Hewlett-Packard/Agilent to host meetings, contribute gifts, grants and donations to local colleges and universities and to host some of the MCF quarterly meetings. John retired from Agilent Technologies in Dec. of 2001 and worked for Zirchrom Separations Inc. in Anoka Mn. John left Zirchrom Separations in April of 2003 and is currently a sales representative for Midwest Scientific in Blaine Mn.

John has been involved with the MCF since its inception. He has contributed and participated in many ways: Providing MCF photography services, serving as chair of the education committee and contributing personally to the undergraduate award. John has also been a recipient of the MCF's Palmer award (1995). And of course, John's greatest contribution to the MCF is his time to help teach this course almost annually with Gary Reineccius since 1978.