



## *Society for Chemical Hazard Communication* **Professional Development Training**

### **Science for the Hazard Communicator**

Monday, March 24, 2014  
Charleston Marriott – Charleston, SC

#### **Course Description**

Many hazard communicators who now are responsible for developing MSDSs and labels may not have, or may have forgotten, the scientific background necessary to carry out these tasks with confidence. Although comprehensive science courses may be available at local colleges or universities, these often encompass material that goes beyond what is needed to perform an adequate hazard determination and to prepare hazard communication documents, and, in fact, may actually lack the specific information necessary to do so.

This course is intended to provide hazard communicators with a basic understanding of the physical science underlying hazard communication. The course will emphasize the chemistry of the hazard determination process and will cover the relevant concepts and facts of chemistry and physics. The course will concentrate on defining and understanding basic chemical and physical terminology and on providing a background of scientific facts that are essential for hazard communicators. The course will highlight areas where the impending Globally Harmonized System may alter the criteria for determining a chemical hazard.

#### **Course Director/Instructor**



Michael J. Reale, Ph.D.

Dr. Reale received his Ph.D. degree in organic chemistry in 1966 from Fordham University, and has 45 years' experience in the chemical field as an industrial chemist and consultant. In his practice he has worked extensively with the US, Canadian, and EU regulations on hazardous substances and mixtures, and has classified diverse consumer and specialty products - both pure substances and mixtures - and has, for many years, prepared Safety Data Sheets complying with the 16-section format. Dr. Reale lectures extensively in this field, and conducts training programs for clients.

He has been an active member of the Society for Chemical Hazard Communication since 1981 and was a member of its Board of Directors for 14 years. Dr. Reale lectures extensively on hazard communication, has co-authored Material Safety Data Sheets - A Writer's Desk Reference, authored a chapter in Improving Safety in the Chemical Laboratory, and provided informative responses to questions for Compliance Magazine.



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### Instructor

Douglas Eisner, M.S.

Mr. Eisner received his MS degree in organic chemistry in 1970 from San Jose State University. He has over 40 years experience in the chemical process industry, including chemical distribution, chemical manufacturing, water treatment, and consulting. Mr. Eisner recently retired from Siemens Water Technologies Corp. most recently serving as Regional Manager, Environmental, Health and Safety. During his career, Mr. Eisner has developed corporate-wide systems for Safety Data Sheet and precautionary label authoring and management and has authored numerous Safety Data Sheets and precautionary labels according to OSHA, WHMIS, and EU requirements. He is a Registered Specialist: SDS and Label Authoring, # 206814.

Mr. Eisner has been an active SCHC member since 1983, has served as the Society's Arrangements Chairman since 1985, and was a member of its Board of Directors for 6 years. Additionally, Mr. Eisner was a member of the ANSI Safety Data Sheet and Precautionary Labeling Task Groups. Additionally, Mr. Eisner is a faculty member of the University of Phoenix where he has taught courses on environmental science and mathematics.

### Intended Audience

This is an introductory course and there are no prerequisites.

### Course Fee

\$400.00 for members

\$490.00 for non-members



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**Course Topics and Schedule (Subject to Change)**

Sunday, March 23, 2014

8:00–8:30	<b>Registration</b> / Continental Breakfast
8:30-9:00	Introduction General requirements of the HCS; and how chemistry is related to health and physical hazards
9:00-10:00	Basic concepts: States of matter Atoms, molecules, compounds Organic vs. Inorganic Classes of chemicals: acids, bases, salts, etc.
10:00-10:20	Break
10:20-12:00	Chemical nomenclature Chemical change Chemical calculations
12:00 – 1:00	<b>Lunch</b> (provided)
1:00-2:40	Define and describe MSDS physical properties How mixtures behave (vapor pressure, flash point, boiling point, etc.) Other properties (e.g. viscosity, VOC, partition coefficient) How properties can affect hazards
2:40-3:00	Break
3:00-4:30	Physical Hazards Fire; explosivity; reactivity Decomposition; incompatibility Polymerization Other hazards
4:30-??	Discussion

**Text Book**

Students will be provided a copy of *Chemistry Made Simple* by John T. Moore, Ed.D (2004; New York: Broadway Books) on the day of the course. Those wishing to have it beforehand can purchase a copy through Amazon.com.

**Registration**

Admission to the course will be on a first come basis. Reserve space and obtain a registration number from the SCHC office by contacting Lori Chaplin at [schc.lori@verizon.net](mailto:schc.lori@verizon.net) or 703-658-9246. To avoid disappointment, do not send payment until a confirmation number has been obtained. Course fee is \$400.00 for SCHC Members and \$490.00 for nonmembers, and includes notebooks. Payment must be received by February 8, 2013, to secure your space. Space is limited.

Fill out the registration form located on SCHC's website <http://www.schc.org>. SCHC accepts checks, Visa, MasterCard and American Express.



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Cancellation Policy

No refunds will be given after February 8, 2014. No one will be admitted to the course unless all fees have been paid in advance. Substitutions are permitted. Every effort has been made to ensure the information in this brochure is accurate. SCHC reserves the right to modify this course without prior notice or to cancel the course 30 days prior to the course date. In the event this course is canceled, SCHC's obligation is limited to a full refund of the course fee.

Hotel Accommodations

Arrangements have been made for a block of rooms at the [Charleston Marriott](#) – 170 Lockwood Blvd., Charleston, SC 29403 (800.968.3569 or 843.723.2000) The rate is \$179/night single or double occupancy through February 28, 2014. You must identify yourself with SCHC when making reservations.