Especially for High School Teachers

by J. Emory Howell

Chemical Laboratory Information Profiles: CLIPs

Have you found commercial Material Safety Data Sheets (MSDS) easy to use? Do they provide the information you need? Can you find it quickly? My answer to these questions is often no. That is why I am excited about a new approach by Jay Young (p 444). The impetus for the series Chemical Laboratory Information Profiles (CLIPs) came from discussion with a group of teachers attending the ACS High School Program in San Francisco last spring. When asked what they would like to see included in *JCE*, several said they would like to see more chemical safety resources that were directly applicable to high school chemistry. CLIPs are one result. Each one-page CLIP lists the physical properties, exposure limits, hazardous characteristics, and storage requirements for a specific chemical substance. CLIPs for sodium hydroxide (p 447) and phenolphthalein solution (p 448) and a list of proposed CLIPs appear in this issue. You are encouraged to make suggestions about the chemicals included on the list and which ones that should be published first. Suggestions for clarification or improvements in the format are also welcome. Send suggestions by email to *jce@chem.wisc.edu* with CLIP in the subject line.

Other Items of Special Interest in This Issue

Whether you are new to chemistry teaching or a seasoned veteran, you will enjoy reading an interview with Frank Cardulla, recipient of the Conant Award in 2000 (p 437). Highly respected by both students and colleagues, Cardulla shares experiences and insights gained from 36 years of chemistry teaching and service to the chemical education community. He has inspiring stories that remind teachers of their ultimate goal, and a charge to current and future teachers.

Mark Alber, editor of the Interdisciplinary Connections feature, is a skillful practitioner of interdisciplinary education. He has teamed with an English teacher to incorporate creative writing into the chemistry curriculum. In this issue (p 478) he describes the historical research that he and his co-worker conducted in preparation for a student writing assignment. The article includes poems written by students who have gained insight into the nature of scientific discovery and the lives of scientists.

Chemical Principles Revisited, another feature targeted for high school teachers, reappears this month under the editorship of Cary Kilner. A note from Kilner and his biographical sketch appear on p 510. Readers are invited to share ways they introduce various chemical principles, how students apply and investigate these principles in the laboratory, and how student learning is then assessed.

In recent years the April issue has included a variety of chemical puzzles and games. This year, students with a second-year background in both chemistry and biology might be ready to tackle the "Protein Structure Wordsearch" (p 474) and the "Krebs Cycle Wordsearch" (p 515). Students and teachers who like murder mysteries that include a chemical problem will enjoy "The Chemical Adventures of Sherlock Holmes: The Shroud of Spartacus" (p 470).

Secondary School Feature Articles

- *JCE* Classroom Activity: #35. Just Breathe: The Oxygen Content of Air, p 512A.
- Creative Writing and Chemistry, by Mark Alber, p 478.
- "Almost Like Weighing Someone's Soul": Chemistry in Contemporary Film by Donald J. Wink, p 481.
- Teaching Chemistry in the Block Schedule, by Sally Craven, p 488.
- The Extent of Reaction, $\Delta\xi$—Some Nuts and Bolts, by Gavin D. Peckham, p 508

In Memoriam: Clifford L. Schrader

High school chemistry teachers and the entire chemical education community lost a valued member and friend on January 29, 2001, when Clifford L. Schrader died after a brief illness. Cliff, as he was known to colleagues worldwide, was a native of Indiana and received his B.S., M.S., and Ph.D. degrees from Purdue University. He taught chemistry for many years at Dover High School in Ohio and subsequently was Science Supervisor of the Summit County (Ohio) Educational Service Center. At the time of his death he was an assistant professor of chemistry at the University of Akron. He received numerous awards, including the James Bryant Conant Award in 1989. He was the author of more than 23 publications, most notably as a co-author of the *Heath Chemistry* textbook. Many teachers came to know Cliff through his unflagging effort to establish and carry out the Hazardous Waste Removal Program of the Ohio Department of Education, which is a model for other states. His untimely death brings sorrow to the field of chemical education, as we have lost a tremendous educator and friend.

We Would Like Talk with You

If you will be attending the National Science Teachers Association Convention in St. Louis (March 23–26), stop by the *JCE* Booth #2636 in the exhibition hall. If you live in the San Diego area, do not miss the High School Program, Tuesday, April 3. See the March 2001 issue of *JCE* for program details.

Visit CLIC, an Online Resource for High School Teachers at *http://jchemed.chem.wisc.edu/HS/*