"ONCE UPON A SPRINGTIME CHEERY, IN THE LAB OF SHAKHASHIRI ... "



1:00 p.m., Thursday, March 13, 1986 Room 1351 Chemistry Building This presentation is dedicated to the memory of Professor C. Harvey Sorum who taught chemistry to thousands of students at Wisconsin.

Professor Sorum was born on August 30, 1899 on a farm near Lanesboro, Minnesota. He attended St. Olaf College receiving a BA degree in 1919. He came to the University of Wisconsin as a Graduate Assistant in the Chemistry Department in 1924, and received his MS degree in 1925 and his Ph.D. in 1927, working under the direction of F.C. Krauskopf. Thereupon he was appointed to the faulty of the University of Wisconsin to begin a distinguished 43 year carreer as a teacher, scientist, and public servant.

Professor Sorum assembled a record of research accomplishments on colloids and on phase equilibria. He was well known for undergraduate teaching. His enthusiasm and total commitment toward teaching. his patience in working with his students, and his outstanding lecture skills are warmly remembered. He made extensive use of lecture demonstrations. Many of these he developed himself, and most are still used today in the General Chemistry Instructional Program. Generations of students remember his classes, years after leaving this campus. authored a series of successful books including Fundamentals of General Chemistry, A Laboratory Manual of Semimicro Qualitative Analysis, and How to Solve General Chemistry Problems. He was Chairman of a National Science Foundation sponsored Academic Year Institute for high school chemistry teachers and a member of several American Chemical Society committees on the chemistry curriculum. He recieved the Benjamin Smith Reynolds Award in 1961 for excellence in teaching future engineers.

Professor Sorum died on January 10, 1986 at the age of 86.

"There is no higher or lower knowledge, but one only, flowing out of experimentation."

Leonardo

Michael Faraday, the noted English physicist and chemist, lived from 1791 to 1867. He was a gifted lecturer and he began giving his Christmas Lectures for children at the Royal Institution of Great Britain in the 1840s. Faraday loved simplicity and he has a strong sense of the dramatic. His audience entered wholeheartedly into the world of science with him as guide. His ideas were still considered very unorthodox at that time, and children -- who had not yet adopted conventional ideas -- would react enthusiastically to the ones he presented. Eventually the Lectures became very popular and even the Prince of Wales attended and learned about the mysteries of electricity.

Faraday sought to awaken a sense of wonder in his listeners. He knew that once a person could be made to wonder about the world, it was only a short step to studying it. He strove to point out that if you looked closely at the most ordinary thing, such as the force of gravity, it ceased to be ordinary and became somehow miraculous. Faraday did all he could to urge his listeners to see and judge for themselves, to experiment -- to question nature directly -- whenever anyone discovered something out of the ordinary.

VOCABULARY LIST

acetone acid ammonia fountain base beaker biolumines cence. carbon dioxide chemiluminescence clock reaction color combustion copper copper oxide cryogenics cylinder disposal energy ethyl alcohol exothermic reaction explosion fire fire extinguisher

flammable (inflammable) flash paper flask gas hazard heat energy helium hydrogen indicator insoluble jumping discs latex balloon light energy light sticks liquid luminol lycopodium musical beakers nonflammable "orange tornado" oscillating reaction oxygen

periodic table polumer polystyrene polywrethane "pop bottle" precipitate pressure rubber safety goggles safety precautions smake solid soluble sound energy "space bar" spiral sublimation temperature time Tesla coil tornado visible light volume

Sources of Material for Home Experiments

Edmund Scientific Catalog 101 E. Gloucester Pike Barrington, NJ 08007

3-2-1 CONTACT magazine E=MC Square P.O. Box 2931 Boulder, CO 80321

THINGS OF SCIENCE 231 W. Center Street Marion, OH 43302

Science Television Programs to Watch

"3-2-1 Contact"	Channel 21	Monday-Friday	6:00 pm
	Channel 11	Monday-Friday	5:00 pm
"Newton's Apple"	Channel 26	Sunday	10:30 am
"Mr. Wizard's Wo	rld"	Monday-Friday	5:00 pm
	Cable 29	Sat-Sunday	8:30 am

Acknowledgments

The presentation was made possible through the cooperation and efforts of:

Evjue Foundation
Institute for Chemical Education
National Science Foundation
University of Wisconsin-Department of Chemistry
WHA-TV

Special Thanks to:

Jerry Bell
Bucky Badger
Glen Dirreen
Diana Duff
Vince Genna
Fred Juergens
Ron Perkins
Patti Puccio
Rod Schreiner
Dave Shaw
Charlie Stone



