



Annual
THEODORE WILLIAM RICHARDS
HOLIDAY CHEMISTRY LECTURE

"ONCE UPON A CHRISTMAS CHEERY
IN THE LAB OF SHAKHASHIRI"



Dr. Bassam Z. Shakhshiri
Professor of Chemistry, University of Wisconsin

Thursday, December 27, 1990
4:00 and 7:30 p.m.
MUSEUM OF SCIENCE
BOSTON, MASSACHUSETTS

Greeting by
Dr. David Ellis, President and Director,
Museum of Science

Welcome by
Dr. E. Joseph Billo, Boston College,
and Chairman, Northeastern Section,
American Chemical Society

Introduction of Dr. Shakhshiri by
Dr. Jerry A. Bell, Simmons College

Elves: Dr. Jerry A. Bell, Simmons College
Valerie A. Wilcox, Museum of Science

Michael Faraday's Christmas Lecture

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 1840's. Faraday loved simplicity and he had 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.



Bassam Z. Shakhashiri is Professor of Chemistry and Director of the Institute for Chemical Education at the University of Wisconsin-Madison. He was born in Lebanon where he attended high school. After a year at the American University in Beirut, he completed his undergraduate work at Boston University in 1960. He earned his MS and PhD degrees at the University of Maryland. Dr. Shakhashiri is well known for development and effective use of demonstrations in teaching chemistry. He has presented these demonstrations in schools as well as in less conventional settings such as shopping malls and retirement homes. As a consultant to the Chicago Museum of Science and Industry he helped develop an interactive chemistry exhibit, the first of its kind in this country. He taught at the University of Illinois from 1968-1970, where he learned about Michael Faraday's Christmas Lecture from Professor Gilbert P. Haight, Jr., who had learned about it from Princeton University's Professor Hubert Alyea. His most recent book, Chemical Demonstrations: A Handbook for Teachers of Chemistry, was published in 1983 (Vol. I), 1986 (Vol. II) and 1989 (Vol. III) by the University of Wisconsin Press (114 N. Murray Street, Madison, Wisconsin 53715).

Dr. Shakhashiri is well known not only as an outstanding scientist, but as a teacher well skilled in communicating his love of science and his enthusiasm for chemistry. Using wit, words and some ingenious demonstrations he will capture the attention and imagination of a diverse audience ranging from youngsters and the public at large to the professional scientist

**OUR MOST SINCERE THANKS
to the following:**

The Theodore William Richards Fund

Professor Theodore William Richards of Harvard was America's first science Nobel laureate, honored for his work on the determination of atomic weights. The Fund was set up to honor him and has been used to provide a medal for conspicuous achievement in chemistry since 1932. The Northeastern Section recognizes his dedication to chemical education with these Holiday Lectures.

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