

*"Once Upon a Christmas Cheery,
In the Lab of Shakhashiri . . ."*



7:30 p.m., Thursday, December 18, 1986

*Auditorium
National Academy of Sciences*

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 Assistant Director of the National Science Foundation for Science and Engineering Education. Prior to joining NSF in June of 1984 he was Professor of Chemistry and Director of the Institute for Chemical Education at the University of Wisconsin-Madison. Every December since 1970, when he joined the faculty at Wisconsin, he has conducted a special Christmas Lecture full of demonstrations for his first-year chemistry students and their friends. This program quickly became an annual event eagerly awaited by the Madison community, and beginning in 1973 the hour-long lecture was shown in its entirety on local television. In 1984 he presented his first Christmas Lecture at the National Academy of Sciences.

Bassam Shakhashiri was born in Lebanon and in 1957 came to Boston with his parents and two sisters. He received his bachelor's degree from Boston University and his M.Sc. and Ph.D. degrees from the University of Maryland. He taught at the University of Illinois from 1968 - 70, 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. Volume 2 of Chemical Demonstrations: A Handbook for Teachers of Chemistry, was published in 1985 by the University of Wisconsin Press. He is the recipient of the 1986 American Chemical Society Award in Chemical Education.

Acknowledgments

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