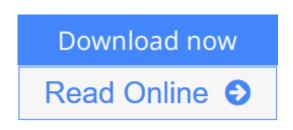


Chemical Demonstrations, Volume 5: A Handbook for Teachers of Chemistry

By Bassam Z. Shakhashiri



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Color and light are the focus of this long-awaited fifth volume in the *Chemical Demonstrations* series, which describes demonstrations that effectively communicate science to both students and general audiences. Using full color illustrations, the book provides meticulous instructions for safely demonstrating colorful phenomena and illustrating scientific principles. A rich introductory section explores the science of color and light, outlines the chemical processes of vision, and explains what happens when visual information enters the human eye and is perceived by the brain. With more than fifty demonstrations and multiple procedures included, this volume offers abundant opportunities to arouse and sustain interest in science for both classroom and public presentations.

Each demonstration includes:

- a brief description of the demonstration
- a materials list
- a step-by-step account of procedures to be used
- an explanation of the potential hazards involved
- information on safely storing and disposing the chemicals used
- a full discussion of the phenomena displayed and principles illustrated
- a list of references.

Created by acclaimed chemists and science educators Bassam Shakhashiri and his collaborators Rodney Schreiner and Jerry Bell, these demonstrations make an impressive addition to the earlier volumes, which have been lauded for guiding teachers and scientists in effectively communicating science. Like all volumes in the series, Volume 5 communicates chemistry using pedagogical knowledge to enhance the effectiveness of demonstrations to all audiences. **Read Online** Chemical Demonstrations, Volume 5: A Handbook fo ...pdf

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Review

"The most comprehensive set of chemical demonstrations handbooks ever created."—Roald Hoffmann, Nobel Laureate in Chemistry

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"Shakhashiri is a living legend of chemistry demonstrations. He is a masterful demonstrator and begins this volume by once again stressing the pedagogical requirement to have a detailed explanation for the phenomena his demonstrations display. . . . The book is worth the price alone for this introduction section which would make for an excellent primer. . . .[T]he package as a whole is a pleasure to own and you can't review volume 5 in isolation from the rest of the work which remains unmatched in its scale and quality and is an essential addition to any chemistry department's collection."—*Education in Chemistry*

About the Author

Bassam Z. Shakhashiri is professor of chemistry at the University of Wisconsin–Madison and founder of the Institute for Chemical Education (ICE) and the Wisconsin Initiative for Science Literacy (WISL). He formerly served as assistant director for science and engineering education at the National Science Foundation.

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