DESCRIPTION

Written as a textbook with an online laboratory manual for students and adopting faculties, this work is intended for non-science majors / liberal studies science courses and will cover a range of scientific principles of food, cooking and the science of taste and smell. Chapters include: The Science of Food and Nutrition of Macromolecules; Science of Taste and Smell; Milk, Cream, and Ice Cream, Metabolism and Fermentation; Cheese, Yogurt, and Sour Cream; Browning; Fruits and Vegetables; Meat, Fish, and Eggs; Dough, Cakes, and Pastry; Chilies, Herbs, and Spices; Beer and Wine; and Chocolate, Candy and Other Treats. Each chapters begins with biological, chemical, and /or physical principles underlying food topics, and a discussion of what is happening at the molecular level. This unique approach is unique should be attractive to chemistry, biology or biochemistry departments looking for a new way to bring students into their classroom. There are no pre-requisites for the course and the work is appropriate for all college levels and majors.

ABOUT THE AUTHOR

Dr Joseph J. Provost is a professor of chemistry at Minnesota State University Moorhead where he teaches biochemistry and conducts research in lung cancer. Provost is a long-time committee member and organizer for many of the American Society for Biochemistry and Molecular Biology and teaches a science of cooking class to over 125 students each semester.
Dr. Brenda S. Kelly has a biochemist from Gustavus Adolphus College in southern Minnesota where she created a upper division kitchen chemistry class that incorporates many modules of food and cooking with hands on learning.

Dr. Mark A. Wallert is a Minnesota ?Carnegie Foundation for the Advancement of Teaching MN Teacher of the Year and a professor of biology. Wallert has developed many hands on activities for majors and non-majors using inquiry as his focus.