Mastering Brewing Science is a comprehensive textbook for the brewing industry, with coverage of processes, raw materials, packaging, and everything in between, including discussion of essential methods in quality control and assurance. The book equips readers with a depth of understanding to deal with problems and issues that arise during production of beer from start to finish, as well as statistical tools for continual quality improvement. Brewery operations, raw material analysis, flavor, stability, cleaning, and methods of quality control, as well as the underlying science, are discussed in detail.

The successful brewing professional must produce beer with high standards of quality, consistency, efficiency, and safety. With a focus on quality and on essential applications of biology, chemistry, and process control, Mastering Brewing Science places emphasis on troubleshooting and reader understanding. It is the ideal learning tool for all brewing programs or as a resource for current industry professionals.

Features of Mastering Brewing Science include:

#Understanding through application. All key principles of science are applied to the brewing process, facilitating a better understanding of both.

#Check for Understanding. Each chapter includes a set of problems and questions that reinforce understanding of the material.

#Problem-solving. Several chapters conclude with practical case studies from real-world brewing experiences to further develop concepts through application of problem-solving skills.
Mastering Brewing Science is a comprehensive textbook for the brewing industry, with coverage of processes, raw materials, packaging, and everything in between, including discussion of essential methods in quality control and assurance. The book equips readers with a depth of understanding to deal with problems and issues that arise during production of beer from start to finish, as well as statistical tools for continual quality improvement. Brewery operations, raw material analysis, flavor, stability, cleaning, and methods of quality control, as well as the underlying science, are discussed in detail.

The successful brewing professional must produce beer with high standards of quality, consistency, efficiency, and safety. With a focus on quality and on essential applications of biology, chemistry, and process control, Mastering Brewing Science places emphasis on troubleshooting and reader understanding. It is the ideal learning tool for all brewing programs or as a resource for current industry professionals.

Features of *Mastering Brewing Science* include:

- Understanding through application. All key principles of science are applied to the brewing process, facilitating a better understanding of both.
- Check for Understanding. Each chapter includes a set of problems and questions that reinforce understanding of the material.
- Problem-solving. Several chapters conclude with practical case studies from real-world brewing experiences to further develop concepts through application of problem-solving skills.
- Comprehensive. Presented in the logical order of the brewing process, the book covers all aspects of raw materials, wort preparation, fermentation, conditioning, and packaging.
• Richly illustrated. Hundreds of unique, full-color illustrations, ranging from micrographs of spoilage bacteria to the inner workings of a beer keg, supplement clearly-written text, making this book easy to understand and appealing to the reader.

• Emphasis on Quality. Covers the underlying science and essential methods in quality control with discussion of data management and experimental statistics to ensure consistency in beer production.

• Safety. Safety notes for brewing operations prepare the reader for a culture of safety at the workplace.

• Glossary. A detailed and authoritative glossary with over 1,700 entries sets the standard for beer and brewing terminology.

• References. Each chapter includes key references to the primary and secondary literature, acquainting the student with fundamental sources of brewing science.

-----

### ABOUT THE AUTHOR

**Matthew Farber, PhD**, is the founder and director of the Brewing Science Certificate Program at the University of the Sciences in Philadelphia, where he is a faculty member in the Biology department.

**Roger Barth, PhD**, has been a faculty member in the Chemistry department at West Chester University since 1985. He created and teaches a course on the Chemistry of Beer and is the author of its textbook: *The Chemistry of Beer: The Science in the Suds* *(Wiley, 2013).*

For additional product details, please visit [https://www.wiley.com/en-us](https://www.wiley.com/en-us)