1. Record Nr. UNINA9910986143503321 Autore Kyzas George Z Titolo Oenology in Practice: Chemistry of Wines and Winemaking Protocols // by George Z. Kyzas, Fragkiskos Papageorgiou Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 9783031855313 3031855310 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (301 pages) Altri autori (Persone) PapageorgiouFragkiskos Disciplina 543 664.07 Soggetti Food - Analysis Chemistry Wine and wine making Chemical engineering Analytical chemistry Biotechnology **Food Chemistry** Oenology Food Analysis Chemical Engineering **Analytical Chemistry** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia

Nota di contenuto

Chapter 1 Introduction -- Chapter 2 Chemistry of wine -- Chapter 3 Type of wines -- Chapter 4 Wine analysis methods -- Chapter 5 Enological additives -- Chapter 6 Wine tasting.

Sommario/riassunto

This textbook offers a comprehensive and practical guide to oenology, detailing the scientific principles and techniques essential for producing various types of wines. It provides in-depth discussions on the chemistry behind wines and winemaking processes. Starting with an introductory overview, the textbook examines the fundamental components of wine chemistry, such as alcohols, acids, and phenolic compounds. It then explores a range of winemaking methodologies,

from traditional approaches to modern innovations, including detailed protocols for producing diverse wine types. Special attention is given to analytical methodologies crucial for assessing wine quality and authenticity, discussing parameters like sugars, acids, and phenolic content, as well as addressing potential adulterations. In the final sections, readers will gain insights into the role of oenological additives in shaping wine characteristics and their application in vinification processes. The last chapter covers the essentials of wine tasting, including setup, steps, sensory evaluation, types of tests, and the science behind flavors and aromas. Tailored for students, researchers, and oenology professionals, this textbook is also ideal for wine enthusiasts seeking to deepen their understanding of the scientific principles behind wine production and tasting.