Contents

Acknowledgments vii

Part One  The Chemistry of Wine 1
  1 Organic Acids in Wine 3
  2 Alcohols and Other Volatile Compounds 51
  3 Carbohydrates 65
  4 Dry Extract and Minerals 91
  5 Nitrogen Compounds 109
  6 Phenolic Compounds 141
  7 Varietal Aroma 205

Part Two  Stabilization and Treatments of Wine 231
  8 Chemical Nature, Origins and Consequences of the Main Organoleptic Defects 233
  9 The Concept of Clarity and Colloidal Phenomena 285
  10 Clarification and Stabilization Treatments: Fining Wine 301
  11 Clarifying Wine by Filtration and Centrifugation 333
  12 Stabilizing Wine by Physical and Physico-chemical Processes 369
  13 Aging Red Wines in Vat and Barrel: Phenomena Occurring During Aging 387

Index 429