

Preface

This book is designed for students of food flavours, and for those in related fields who seek an integrated overview of this area. Most books on flavours are edited contributions of individual scientists, each addressing a specialized aspect of the discipline. Here, we offer the joint perspectives of a flavour biochemist (CLF) and a neuroscientist (TRS), permitting a full sweep from synthetic chemistry through the chemical senses to the hedonic reactions of human tasters.

The purpose is to offer a deeper understanding of the chemical products generated in the food industry, and the biological and psychological reactions to them. By this means, our goal is to help position others to achieve a fuller understanding of current flavours and to discover new compounds to serve the flavour industry.

This book is presented in five chapters. The first offers an introduction to the complexities flavour scientists encounter. The second provides the chemical background on flavour compounds. In the third chapter, we describe the anatomy and physiology of the chemical sensory systems: olfaction and taste. In the fourth, we detail the sensory and the instrumental analyses of flavourants. Finally, we offer five complex flavour problems, and the methods by which students may be directed toward their solutions.

