



## Advances in Flavours and Fragrances

FROM THE SENSATION TO THE SYNTHESIS

edited by KARL A.D. SWIFT

## **Contents**

## **Structure Activity Relationships**

Structure Activity Relationships and the Subjectivity of Odour Sensation  Thomas Markert	3
Relationship of Odour and Chemical Structure in 1- and 2-Alkyl Alcohols and Thiols  Y. Sakoda and S. Hayashi	15
Analytical	
New Developments in Sorptive Extraction for the Analysis of Flavours and Fragrances  P. Sandra, F. David and J. Vercammen	27
Application of Chromatographic and Spectroscopic Methods for Solving Quality Problems in Several Flavour Aroma Chemicals  Michael Zviely, Reuven Giger, Elias Abushkara, Alexander Kern,  Horst Sommer, Heinz-Juergen Bertram, Gerhard E. Krammer,  Claus Oliver Schmidt, Wolfgang Stumpe and Peter Werkhoff	39
Natural Products and Essential Oils	
Commercial Essential Oils: Truths and Consequences  Brian Lawrence	57
Stable Isotopes for Determining the Origin of Flavour and Fragrance Components: Recent Findings  Daniel Joulain	84
Fragrant Adventures in Madagascar: The Analysis of Fragrant Resin from Canarium madagascariense Robin Clery	92
The Effect of Microgravity on the Fragrance of a Miniature Rose, 'Overnight Scentsation' on Space Shuttle (STS-95)  Braja D. Mookherjee, Subha Patel and Weijia Zhou	99

## Organic and Bioorganic Chemistry

Ambergris Fragrance Compounds from Labdanolic Acid and Larixol  Aede de Groot	113
The Synthesis of Fragrant Cyclopentanone Systems  Helen C. Hailes	127
Designing Damascone- and Ionone-like Odorants  Philip Kraft	138
Creation of Flavours and the Synthesis of Raw Materials Inspired by Nature Mark L. Dewis and L. Kendrick	147
Flavours/Foods	
New Results on the Formation of Important Maillard Aroma Compounds Peter Schieberle and Thomas Hofmann	163
Out of Africa: The Chemistry and Flavour Properties of the Protein Thaumatin Steve Pearce and Hayley Roth	178
Stability of Thiols in an Aqueous Process Flavour Chris Winkel, Paul B. van Seeventer, Hugo Weenen and Josef Kerler	194
High Impact Aroma Chemicals  David J. Rowe	202
Subject Index	227