

Preface to the Second Edition

Since the appearance of the first edition of this book at the end of 1972, the number of publications dealing with the isolation, analysis and identification of lipids has increased enormously. Modifications and improvements of established analytical techniques, and new analytical procedures have been introduced, such as increasingly sensitive NMR, IR, and mass spectrometric methods, and high-performance liquid chromatography. New lipid components have been discovered and the range of previously known lipid classes has been greatly extended. Several new books dealing with lipids and lipidology have appeared, for example, *Lipid Biochemistry* (Gurr and James 1980), *Lipid Biochemical Preparations* (Bergelson 1980), *Lipid Analysis* (Christie 1982), *Lipids in Plants and Microbes* (Harwood and Russell 1984) and *Biochemistry of Natural C-P Compounds* (Hori et al. 1984).

As a result, the present edition has become somewhat outdated and in need of revision. I have tried in this second edition not only to update procedures and instrumentation but also to enlarge the theoretical basis of the book when appropriate. For example, chemical structures of new lipid classes and components have been added and chemical reactions underlying analytical procedures, as well as formulae for calculation of analytical results, have been inserted. Procedures and techniques that are no longer useful or have been superseded or improved have been deleted or replaced by newer procedures. However, the overall format and organization has essentially not been altered. The index has been greatly expanded and

the cross-referencing has been increased.

It is hoped that this revised edition will be more useful to a wider group of researchers, as well as to the professional lipidologist, than the previous one.