

Preface

This collection of papers is dedicated to Sir Derek Barton on the occasion of his 75th birthday. The list of contributors has been drawn from among the many students and postdoctoral associates who have worked with him at various stages of his career.

Professor Barton is one of the most original and creative organic chemists of this century, and his influence on this field has been enormous, both in the significance and volume of his research and in the collateral productivity of his former coworkers. These scientists occupy positions of major importance in academic and industrial institutions throughout the world.

The organic chemical community owes a special debt to Professor Barton for his dedicated stewardship of the *Tetrahedron* group of journals. He has been involved in the development of these publications almost since their inception, and particularly, as Chairman of the Board of Editors, where he has provided wise guidance and sought the highest standards of excellence.

Sir Derek spent much of his early career at Imperial College in England, but when he reached retirement age there, he boldly took on a new major assignment as director of the Institute of Natural Products in Gif-sur-Yvette, France. Following retirement from that position, he became Distinguished Professor at Texas A & M University. In each of these settings, he developed research programs which bear the special Barton stamp of innovative, imaginative, and ground-breaking investigation.

One of his most far-reaching accomplishments was his pioneering work on the relationship between conformation and reactivity, a contribution which led to the Nobel prize in chemistry (shared with O. Hassel) in 1969. His long-standing interest in the reactions of radicals in nature and in synthesis formed the basis of an early study on the role of radical coupling of phenols in the biosynthesis of natural products. Along with this work came the research on the photolysis of nitrites (the Barton reaction), and more recently, a series of new investigations on the use of radicals in synthesis, some of which involve the long sought-after route to the selective functionalization of saturated hydrocarbons.

Sir Derek's love for chemistry is that of the artist who continues to be enthralled by beautiful landscapes. He evokes our admiration by the elegance of his work, challenges us with his penetrating critique and his encyclopedic knowledge of all branches of chemistry, and gives us a rare and inspiring role-model. We wish him many more healthy years of rewarding work.

Harry Wasserman