Preface

The idea for writing this book came about through discussions with Chris Stevens at the University of Ghent in Belgium. It was considered that this was a good time to write such a book, in view of the rapid developments in the subject over the past decade and, in particular, because of the progress made in commercialization of technologies in this area. The task of writing this book has been immense, but very enjoyable. Although the subject matter of this book is concerned with wood modification, many of the processes described are generic and could be applied to other lignocellulosic materials. In writing this book, I have tried to do justice to the area and cover all the topics in depth. However, as with any textbook, it is necessary to work within editorial constraints. Hence, although the bulk of this subject is covered, it is inevitable that some areas are covered in greater detail than others. In deciding which areas to concentrate upon, I have taken account of other textbooks that have dealt with some of these topics in depth, and made reference to these where appropriate.

This area is undergoing huge developments at the present time, driven in part by environmental concerns regarding the use of wood treated with certain preservatives. There has been considerable commercial interest shown in wood modification over the past decade, with products based upon thermal modification and furfurylation now being actively marketed. The next few years will see the commercialization of acetylation and impregnation modification. This is a new industry, but one that has enormous potential.

The technologies that have been developed for wood modification have required the combined efforts of many hundreds of researchers worldwide. However, it would be impossible to study the literature in this area without encountering the pioneering work of Alfred J. Stamm of the Forest Products Laboratory in Madison, Wisconsin, USA. Nearly every area of wood modification can trace its origins back to the seminal work of Stamm. All those who work in wood modification owe him a great debt.

I hope that this book proves useful to all those with an interest in wood modification. Finally, I should like to say that although I have made every effort to ensure that this book is error-free, any mistakes that may have crept through the very thorough review procedure are entirely my responsibility.

Callum A.S. Hill