Preface

There is an increased interest for nitrogen removal in waste water treatment all over the world. We have therefore found it useful to give an overview of the wide spectrum of nitrogen removal processes available today.

Part A gives a very brief overview of nitrogen pollution sources, the global nitrogen cycle and the treatment methods. Part B presents details of all biological methods for nitrogen removal, while Part C treats the physico-chemical nitrogen removal methods. Design examples related to Parts B and C are given in appendices.

The volume is not a textbook written for engineers, but is rather written for a wide spectrum of environmentalists who would like to have an overview of the available methods from a biological and chemical point of view. Design equations are given in the text, but more emphasis has been laid on the profound understanding of the biological and chemical processes and the basic factors that influence these processes. Parameters and regression equations for a quantitative description of these factors and their influence on the key processes are presented in several tables. This feature makes the volume very useful as a handbook on nitrogen removal processes.

The authors, Copenhagen, 24 June 1993