Preface

The idea of the first edition of Membrane Technology in the Chemical Industry was to review the available membranes for the broad variety of separation processes in the chemical sector. A further important decision was to invite well-known membrane scientists with recognized experience in the chemical industry to supply a deep analysis of the main membrane applications in this field. After 5 years the use of membranes is even more widespread, new membranes have entered the market, some are no longer commercialized and some applications have become more relevant, justifying now the second edition of the book. In the first part of this new edition, market statistics have been reviewed, as well as the currently available membranes and membrane materials. A new chapter on Fuel Cells has been added, a field that has grown considerably in recent years. Also, the balance of applications connected to gas separation has been critically reanalyzed. Part II has been reviewed by the various authors. The “future directions” have been reanalyzed. The major change in Part II is the inclusion of a chapter on Organic Solvent Nanofiltration, written by Andrew Livingstone, Ludmila G. Peeva and Pedro Silva, which reflects the rapid development of this field in recent years.

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