PREFACE

This volume contains the papers presented at the symposium PSE '97–ESCAPE-7 in Trondheim, Norway in 1997. PSE '97–ESCAPE-7 is a joint event initiated by the Executive Committee of the Process Systems Engineering Symposium Series and the EFCE Working Party on Computer Aided Process Engineering. It follows the previous PSE symposia in Kyongju, Korea (1994), Montebello, Canada (1991), Sydney, Australia (1988), Cambridge, England (1985), Kyoto, Japan (1982) and the previous ESCAPE symposia in Rhodes, Greece (1996), Bled, Slovenia (1995), Dublin, Ireland (1994), Graz, Austria (1993), Toulouse, France (1992) and Elsinore, Denmark (1992).

The aim of the symposium is to review the latest developments in Process Systems Engineering and Computer Aided Process Engineering, with emphasis on the use of computers and information technology tools and methods in the design and operation of process industries.

Mainly for review purposes the following five areas were identified:

1. Design and Synthesis
2. Control and Operations
3. Modelling and Simulation
4. Intelligent Systems (including scheduling and planning, decision support systems, plant and conditioning monitoring, AI methods, and neureal networks)
5. Industrial Applications and Case Studies

An International Programme Committee (IPC) consisting of 50 members was established to assist in setting up the technical programme. The deadline for submitting abstracts was 10 June 1996, and 577 abstracts were submitted in time to be considered. There was a quite even distribution in the five areas; ranging from 80 abstracts in area 5 to 140 abstracts in area 3. The abstracts were reviewed by the ten area coordinators in the IPC. Of the 577 submitted papers, 321 were invited to submit a full paper with deadline 10 November 1996. However, 158 of the 321 were told that the IPC had some doubt in accepting their abstract, and they were warned that the rejection rate in this category could be quite high. Subsequently, 242 full papers were submitted for consideration. Each of these were carefully reviewed by two members of the IPC, and 201 papers were finally accepted for inclusion in the symposium programme. In addition, two of the invited plenary presentations are included in this volume.

The papers in this volume appear in the same order as in the symposium session programme. Note that the sessions are not necessarily organized according to the five review areas mentioned above. Most of the papers and abstracts for the symposium were submitted electronically. This considerably simplified the paper handling, but we were not able to realize the full benefits as we did not make electronic submission a requirement. This journal volume was therefore produced in the old-fashioned manner.

We want to express our sincere thanks to the authors of the papers for the time and effort

spent in preparing their manuscripts and to the IPC for carrying out the difficult task of reviewing the abstracts and papers. We would also like to express sincere thanks to Norsk Hydro, Statoil and the City of Trondheim for their contributions to the conference.

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