

Preface

This book publishes papers presented at ESCAPE-20 held in Ischia, Italy, from 6th to 9th June 2010. This European Symposium on Computer Aided Process Engineering (ESCAPE) was the twentieth event of a series, started in Elsinore Denmark in 1992, of annual Symposia promoted by the Working Party "Computer Aided Process Engineering (CAPE)" belonging to the "European Federation of Chemical Engineering (EFCE)".

However, it must be acknowledged that the ESCAPE series emerged from a strong tradition of the Working Party dating back to 1968 when the first event on computer applications was organized in Tutzing, Germany. Twenty-three such symposia were then organized in almost a dozen European countries before a new departure of the Working Party with the ESCAPE series. Therefore, ESCAPE-20 was the 43rd event of the CAPE Working Party following most recent symposia organized in Romania, Bucharest 2007 (ESCAPE 17), France, Lyon 2008 (ESCAPE-18) and Poland, Cracow 2009 (ESCAPE-19). ESCAPE-20 was organized by AIDIC, the Italian Association of Chemical Engineering, a member society of the European Federation of Chemical Engineering.

The series serves as a forum for engineers, scientists, researchers, managers and students from academia and industry to present and discuss progress being made in the area of CAPE. CAPE refers to computer-aided methods, algorithms and techniques related to process and product engineering. The ESCAPE-20 scientific program reflected strategic complementary objectives of the CAPE Working Party: to check the status of historically consolidated topics by means of their industrial application and to evaluate their emerging issues. New windows have been hopefully opened to the CAPE audience by inviting adjacent research areas to co-operate in the creation of the technical program.

The symposium was organized on 5 themes and 14 topics, following the main trends in CAPE area: Modelling, Process Industry, Optimization, Dynamics and Control, Process Integration, Synthesis and Numerical Methods. Adjacent areas in Environmental impacts, biotechnology and human pathologies have been also investigated.

More than 570 abstracts from 60 Countries were submitted to the Symposium. Out of them 341 were finally selected for Poster and Lecture presentations. The review of abstracts, manuscripts and final acceptance were carried out by 61 members of an International Scientific Committee. We are very grateful to them for their efficient and fruitful collaboration. We hope that this book serves as a valuable reference lecture to the scientific community and will contribute to the progress of computer aided process engineering.

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