PREFACE

Manufacturing Engineering concept has evolved in the last years in order to adapt itself to both the changes in the technologies and the conceptual changes in the organization of the companies. In this new context, Manufacturing Engineering subjects cannot separate Technology and Management. Manufacturing Systems can be considered as the Manufacturing Engineering viewpoint that include Manufacturing Processes Planning, Control and Management of the Knowledge, Quality and Technologies Management for the best performance of business operations, mainly in complex companies. Innovative concepts associated to Manufacturing Systems joined to the advances in Computer Sciences and Technologies have promoted new perspectives to the new enterprise organizational requirements. This implies the conception of new Manufacturing Systems paradigms.

Advances in Manufacturing Systems collects a selection of papers presented to the 4th Manufacturing Engineering Society International Conference (MESIC2011), which was hold in September 2011 in Cadiz, Spain, on the topics related to Manufacturing Systems, and it is especially devoted to all manufacturing engineers who work in the aforementioned fields. Thereby, this issue contains peer reviewed selected contributions on the most recent advances in the most innovative trends in Manufacturing Systems (Intelligent, Collaborative, Rapid, Simultaneous, Flexible, Agile). Design, Modeling, Analysis, Reconfiguration of these Systems on the basis of the new company concepts are deeply studied.

We expect this work to be of special usefulness for researches in Manufacturing Systems and, in general, to all the Manufacturing Engineers.

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