

## Editorial Introduction

This special issue of the Brazilian Journal of Operations and Production Management presents some of the best papers of the ICPR Americas 2006.

The third edition of the American International Conference on Production Research (ICPR) was held in Curitiba, Brazil, from July 30th thru August 2nd, 2006, and was organized by the Brazilian Association of Production Engineering (ABEPRO), and the Industrial & Systems Engineering Graduate Program (PPGEPS) of the Pontifical Catholic University of Paraná (PUCPR). It was an official Conference of the International Foundation for Production Research (IFPR).

There were about 200 papers submitted from Brazil, Argentina, Canada, Chile, Colombia, Costa Rica, England, France, Germany, Japan, Mexico, Portugal, Russia, Turkey and United States.

A double-blind review process selected approximately 100 papers for oral presentations (allocated in 5 Technical sessions) and 30 papers as posters. Among them, best ones were selected and the authors were invited to submit a more robust article. Then, these papers were double-blind reviewed and some of those that achieved the higher marks were selected to be part of this issue.

### **In this Issue**

The first paper, by Eduardo R. Loures, Marco Buseti and Eduardo Portela (Pontifical Catholic University of Parana, Brazil, Brazil), deals with control-monitoring architectures for flexible manufacturing systems (FMS) based on Petri nets with objects (PNO), generating a framework based on a modular and hierarchic model structured in CMM modules. The second paper, by Adiel Teixeira de Almeida Filho, Fernando M. Campello de Souza and Adiel Teixeira de Almeida (Federal University of Pernambuco, Brazil, Brazil), presents a model based on multi criteria decision analysis that is a decision model that allows the implementation of the manufacturing strategy by the production function. The main issue in the paper is the aggregate planning. The following paper, by Luiz Bueno da Silva, Anand Subramanian, Fernanda Diniz de Sá and Francisco Soares Másculo (Federal University of Paraíba, Brazil), presents nonlinear models applied to studies in the ergonomics area, particularly the effect of the several variables (thermal perception, noise perception, age, and time of service) on the working ability. The sample was constituted of 60 public bus drivers. In the forth paper, by Jose F. Zamora (University of Costa Rica, Costa Rica), Raymundo Q. Forradellas (National University of Cuyo, Argentina) and Mauricio Camargo (National Polytechnic Institute of Lorraine,

France), the authors present forecasting tools as an option to predict the product distribution and manufacturing needs and as a way to counterbalance the different negotiating force among actors. The last paper, by Dario Ikuo Miyake, Renato de Lima Sanctis and Felipe Salomão Banci (University of São Paulo, Brazil), presents an in-depth longitudinal case study of a consumer electric products manufacturer in Brazil that embarked on a program to migrate from the utilization of conveyor lines to the work-cell based assembly system in one of its plants.

This issue finalizes the presentation of the ICPR Americas 06 best papers. We expect to have brought relevant issues as well as innovative approaches in the research of production/industrial engineering and operations management communities.

Once again, we would like to thank ABEPRO Executive Board and the BJOPM Editorial Board for this opportunity.

This issue closes with ABEPRO's executive and ABEPRO's Editorial Board (NEA).

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