

## **FINAL CALL FOR PAPERS**

*International Journal of Production Economics*

### **SPECIAL ISSUE**

**“Computational Intelligence in Production and Logistics Systems (CIPLS)”**

**Extended Deadline: February 15, 2012**

#### **Motivation**

In connection with the *2011 IEEE Workshop on Computational Intelligence in Production and Logistics Systems (CIPLS 2011)*, which was held at the *IEEE Symposium Series on Computational Intelligence* in Paris this April, we would like to announce a call for papers for a special issue on this theme in the *International Journal of Production Economics (IJPE)*.

#### **Introduction**

The management of production and logistics systems in today's fierce competition environment is a difficult task and has become progressively complex. Major changes in products, processes, technologies, and societies bring along remarkable challenges and increasing market demands. Modelling and optimisation of the complex problems arising in production and logistics systems is of paramount importance in surviving and achieving competitive gains in productivity and quality.

Within this context, *CIPLS* aims to address issues related to the design, planning, control, and continuous improvement of production and logistics systems using computational intelligence. In this special issue, we solicit original, high quality papers presenting substantial results on the development and implementation of novel approaches based on exact, heuristic, and/or meta-heuristic techniques. This includes local search methods (e.g., tabu search, variable neighborhood search, large neighborhood search, scatter search, etc.), evolutionary algorithms (e.g., genetic algorithms, memetic algorithms, etc.), and other nature inspired optimisation methods (e.g., ant colony optimisation, particle swarm optimisation, neural algorithms, etc.) as well as hybrid techniques and hyper-heuristics. Our intention is to cover the full spectrum of production from aggregate planning to shop-floor execution systems and modelling, planning and control of logistics systems. We would particularly like to encourage the submission of studies incorporating real-world applications.

Recommended topics include, but are not limited to, the following:

- Production planning and control
- Flexible manufacturing systems
- Integrated production system and process design
- Capacity planning
- Lot sizing
- Assembly lines
- Production scheduling
- Inventory control
- Facilities planning and design
- Transport and distribution planning
- Vehicle routing and scheduling
- Multi-modal transport
- Sustainability and green logistics
- Logistics network design
- Decision support systems in production and logistics

### **Manuscript Preparation and Submission**

To prepare their manuscripts, authors are asked to closely follow the *IJPE* “Guide for Authors” at

[http://www.elsevier.com/wps/find/journaldescription.cws\\_home/505647/authorinstructions](http://www.elsevier.com/wps/find/journaldescription.cws_home/505647/authorinstructions).

Authors should submit their papers via the EES <http://ees.elsevier.com/ijpe> and select “Special Issue: CIPLS” when asked to indicate the “Article Type” in the submission process. Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Manuscripts will be refereed according to the standards of *IJPE*.

### **Publication Schedule**

Deadline for submission: **February 15, 2012**

First review due: **May 31, 2012**

Revised manuscript due: **July 31, 2012**

Final manuscript submissions to the Publisher: **October 31, 2012**

### **Special Issue Guest Editors**

Bülent Çatay (Corresponding Guest Editor)

Sabanci University

Tuzla, 34956 Istanbul, Turkey

Tel: +90 216.483.9531

E-mail: [catay@sabanciuniv.edu](mailto:catay@sabanciuniv.edu)

Raymond Chiong

Swinburne University of Technology

50 Melba Avenue, Lilydale, Victoria 3140, Australia

Tel: +61 3 9215 7193

E-mail: [rchiong@swin.edu.au](mailto:rchiong@swin.edu.au)

Patrick Siarry

University of Paris 12

61 Avenue du Général de Gaulle, 94010 Créteil, France

Tel: +33 01.45.17.15.67

E-mail: [siarry@univ-paris12.fr](mailto:siarry@univ-paris12.fr)