

Special Issue on  
**New Modelling on Production Planning and Control**

# CALL FOR PAPERS

In the emerging information technology, the concepts of time, delivery, space, quality, durability, and price become more crucial to the managerial decision-making of a production department. Moreover, competition is taking place in a global environment. Production planning and control department is one of the important departments in all industries. To satisfy customer requirements in the most efficient and effective way, production planning and control address decisions on the acquisition, utilization, and allocation of production resources. Typical decisions include work scheduling, production lot sizes, assignment of regular and overtime, and sequencing of production runs. Volume flexibility of production quantities is a burning issue to regulate and control the production systems to tackle the complexity and competitiveness of business organizations. Material Requirement Planning (MRP), Optimum Production Technology (OPT), and Just-in-Time (JIT) philosophy play important roles in volume flexibility of manufacturing industries. In the context of the manufacturing industries, the quantification of each decision variable is vital to optimize the objectives of the industries. This special issue mainly focuses on the modelling and practical application in the real world of the above mentioned topics.

We encourage researchers as well as practitioners of industrial engineering and management to contribute to this special issue with original and high quality articles addressing new concepts, methods, algorithms, modeling, and applications of the following topics to production planning and control problems, screening recent achievements and trends, and new information for the topic from the theoretical and applied viewpoints.

Potential topics include but are not limited to the following:

- ▶ Integrated models considering joint production/quality/maintenance control
- ▶ Projects scheduling and rescheduling considering optimization of resources
- ▶ Inventory and supply chain modeling with forecasted demand
- ▶ Make-to-order models considering JIT
- ▶ Modeling and control of multiunit production systems
- ▶ Product design
- ▶ Job scheduling
- ▶ Facility location
- ▶ Warehousing
- ▶ Estimation of quantity and costs of production
- ▶ Volume flexibility
- ▶ Capacity planning
- ▶ Line planning
- ▶ Follow-up and execution
- ▶ Machine breakdown
- ▶ Marketing
- ▶ Social responsibility
- ▶ Three Rs (reduce, reuse, and recycling)
- ▶ Minimum quantity lubricant in PPC (production planning and control)
- ▶ Carbon footprint and carbon emission in PPC
- ▶ Disruptions in PPC
- ▶ Unreliable PPC system
- ▶ Supply chain management
- ▶ Big data handling
- ▶ Fuzzy mathematics
- ▶ Control theory

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jmath/operations.research/nmppc/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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