Call for Papers

Special Issue on “Inclusive Manufacturing”

Journal of Intelligent Manufacturing

Special Issue Editors

1. Prof. Baldev Raj (Director, NIAS Bangalore)

2. Prof. Manoj Kumar Tiwari (E-Business Centre of Excellence, Department of ISE, IIT Kharagpur, India) (Corresponding Guest Editor)

3. Prof. Amaresh Chakrabarti (Chairman, Centre for Product Design and Manufacturing, IISc Bangalore)

4. Prof. Rajkumar Roy (Director of Manufacturing, Cranfield University, UK)

Motivation

Studies in inclusive manufacturing aim to develop novel and efficient strategies to integrate latest manufacturing technologies such as IoT, virtual reality, computerized numerical control with sustainable human resource usage by implementing environment friendly technologies in manufacturing. Inclusive manufacturing ensures utilization of human resources lost due to automation in various other service fields by cross training their employees. Inclusive manufacturing also aims to bring together various small and medium sized enterprises (SMEs) such as design, manufacturing, market research and customer evaluation into one combined unit to facilitate product manufacturing and marketing. Environmentally friendly products will be designed using value based cost engineering, advanced automation, community involvement, open source design and responsible innovation. It aims to include technologies at all levels to take responsibility of a product over its life cycle by including professionals from various strata and utilization of sustainable development techniques. This journal has the rich history of publishing articles related to the broad area of smart manufacturing and other domains that cover intelligent devices, algorithms and methodology to support autonomous decision making. The role of manufacturing in affecting the social dimensions of sustainability are explored which expresses the three dimensions such as economy, environment and society. Researcher results in additive manufacturing are also encouraged to submit their articles. Technological developments, scarce resources, rising environmental concerns, rapidly evolving manufacturing practices and significant interlink with heterogeneous disciplines have multiplied the need for inclusive manufacturing to provide sustainable development in the entire world.

The issue is also motivated by rising global environmental concerns and to steer the manufacturing and Logistics research community towards effective human resource management, which includes displacement of human resource due to automation. In addition to this, articles that extend integration of various SMEs for efficient manufacturing and marketing coupled with sustainable use of natural resources form the crux of this special issue. Key areas include value based cost engineering, optimizing product and process concurrently, business model innovation, affordable complex products and developing digital market place for rural and urban economic development. The scope of this issue may be extended to include articles that intend to make a contribution in related fields.
Scope and Topics

The scope of the special issue on “Inclusive Manufacturing” covers the following topics:

- Product, process and service platforms to support inclusive manufacturing
- Design for manufacturing and assembly/disassembly
- Environmental friendly manufacturing operations
- Advanced automation in manufacturing (IoT, virtual reality, hybrid machine tools)
- Community involvement and community based manufacturing.
- Responsible innovation
- Environment friendly manufacturing technologies
- Rural business model innovation
- Additive manufacturing and assembly
- Cyber physical systems and network based Manufacturing
- Cultural diversity and product design
- Energy efficient and clean Manufacturing
- Environment, health and safety issues in manufacturing
- Smart manufacturing.
- Home and Community based manufacturing models
- Use of sustainable and local materials
- Digital marketplace for manufactured products
- Servitisation of manufacturing to improve accessibility and reduce consumption cost

Important dates (Tentative)

Deadline for submission: 23rd September 2017
Review reports: 23rd November 2017
Revised paper submission: 23rd January 2018
Notification of acceptance: 23rd February 2018

Submission procedure

Each manuscript will be refereed for publication by at least two reviewers. The length of the submitted article should be within 6,000 words including tables, references and appendices. Manuscripts must be prepared in the English language and should conform to Journal of Intelligent Manufacturing guidelines which are available at:

http://www.springer.com/business+%26+management/production/journal/10845

Papers should be submitted via https://www.editorialmanager.com/jims/default.aspx
Journal of Intelligent Manufacturing
Editor-in-Chief: Kusiak, A.
ISSN: 0956-5515 (print version)
ISSN: 1572-8145 (electronic version)
Journal no. 10845