

**International Journal of Engineering, Science and Technology (IJEST)**

**Call for Papers**

*Special Issue on:*

**“Intelligent Control and Diagnosis for Dynamic Systems”**

Modern control systems become more complex, sophisticated and safety critical. Therefore, the monitoring, control, optimisation and management of these systems have been recognised as most important issues for these industrial systems, biological engineering systems and social systems, etc. Artificial Intelligence (AI) has found a great deal of applications in dynamic system control and fault diagnosis in recent years. Every aspect in complex system modelling, fault detection and diagnosis has attracted researcher's and practitioner's attentions.

System control, optimisation and fault diagnosis can significantly increase system effectiveness and efficiency, reduce the downtime and maintenance so that increase the productivity of various applications. Artificial Intelligence has played an essential role in these works.

The main objective of this issue is to integrate contributions from researchers, academicians and practitioners from industries and research establishments in the above areas. The topics to be covered include, but are not limited to:

- Adaptive, self-tuning and learning control systems
- Artificial Intelligence and expert systems
- Artificial neural networks in control
- Biological learning control systems
- CAD of control systems
- Continuous control system analysis and design methods
- Distributed/decentralized intelligent control
- Embedded control and monitoring
- Evolutionary computation in control
- Fault detection, supervision and control reconfiguration
- Filtering, smoothing and estimation issues in control
- Fuzzy systems methods for control and FDI
- Hybrid dynamical systems control, pattern discovery
- Intelligent control of networked dynamic systems
- Intelligent control of wireless ad hoc and sensor networks
- Machine learning
- Neural networks, fuzzy logic and genetic algorithms
- Next generation intelligent control architectures and methods
- Optimal control
- Predictive control
- Probabilistic approaches, knowledge-based sensor fusion
- Real-time control
- Robust control
- Software issues for control
- Stability
- State estimation methods in control
- Swarm intelligence, learning and control
- System identification and parameter estimation
- System modelling and simulation
- Automotive applications
- Biological control systems and biomedical applications of control

*Call for Papers: Special Issue on “Intelligent Control and Fault Diagnosis for Dynamic Systems”*

**Submission Guidelines**

Manuscripts should be in English and normally not exceed 7000 words in length (single column, 10 pt running text, double spacing, Times New Roman font). All contributions will be subjected to a blind review process. Manuscripts must be sent electronically to the following email addresses:

mssanga@yahoo.com, YU@LJMU.AC.UK, sa\_oke@yahoo.com

Please note that the subject of the email should read: Special Issue on “**Intelligent Control and Fault Diagnosis for Dynamic Systems**” in a Microsoft Word document (Microsoft Word 97/2000/2003 version) no later than December 31, 2010. The official website of the journal can be found at [www.ijest-ng.com](http://www.ijest-ng.com).

**Important dates**

Deadline for full paper submission:	<b>December 31, 2010</b>
First turn of paper review:	<b>Feb 26, 2011</b>
Second turn of paper review:	<b>March 31, 2011</b>
Final paper submission:	<b>April 30, 2011</b>

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