

### **Editorial Preface**

We would like to present, with great pleasure, a new scholarly journal, Journal of Advanced Research in Engineering Knowledge. Journal of Advanced Research in Engineering Knowledge (AREK) aims to provide cutting-edge research and practices in the engineering and design of technology, a forum for debate and reflection as well as an anchor point for many technology practitioners and academics programs. Scope of the journal includes: Materials Sciences, Mechatronic, Mechanical, Electrical, Electronic, Chemistry, Physics, Environmental, Mathematics and Statistics, Geology, Engineering, Computer Science, Technological Sciences, Sciences Education and Architecture, Mechanics, Applied Sciences and etc.

Journal of Advanced Research in Engineering Knowledge focuses on original high-quality research and so to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their summary of current research in the gamut of engineering.

The scopes of the journal are listed below;

#### **Materials Sciences**

- Mechanical Properties
- Fluid Mechanics
- Materials Composite
- Polymer
- Environmental Science
- Modelling

#### **Mechatronic and Mechanical**

- Analytical and computational modelling
- Structural mechanics
- Behaviour and application of advanced materials
- Impact mechanics and thermodynamics
- Robotics Structures and Applications

- Robot sensors and actuators
- Robot control and Autonomous Vehicles

### **Applied Sciences**

- Mathematics & statistics
- Applied Mechanics
- Energy Conversion System
- Renewable Energy
- Heat Transfer and Exchangers
- Refrigeration and Air Conditioning
- Computational Fluid Dynamics,
- Alternative Energy
- Internal Combustion Engines

### **Engineering & Technology**

- Computer sciences
- Engineering
- Image and Signal Processing
- Education engineering
- Fracture Mechanics and Fatigue
- Machinery Dynamics
- Concurrent Engineering
- Finite element analysis
- Noise and Vibration analysis
- Computer aided engineering design
- Reverse Engineering
- Design Optimization.

### **Electrical and Electronic**

- Circuits System and Automation
- Electrical power engineering
- Power Electronics
- Electrical Machines and Networks
- Transformer

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