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# Editorial

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Speech is one of the natural forms of communication. Different speech sounds can be characterized by set of spectral and temporal properties which depend on the speech features such as speech waveform or speech spectrum. The speech recognition system contains two main tasks- Feature Extraction and Feature Matching. Feature extraction is the process that extracts a small amount of data from the voice signal that can later be used to represent each spoken word. Feature matching involves the actual procedure to identify the actual spoken words by comparing extracted features from set of known database.

A wireless ad hoc sensor network (WSN) is made up of a number of geographically spread apart sensors each with a reasonable amount of signal processing and data networking ability coupled with wireless communication. One of the major challenges wireless sensor networks face today is security. Denial of service (DoS) attack is meant not only for the adversary's attempt to subvert, disrupt, or destroy a network, but also for any event that diminishes a network's capability to provide a service. This journal explores resource depletion attack in a cooperative manner and increasing traffic on the routing layer protocol. The ease of carrying out a NONACK (Noose Noose attack) and the difficulty in its detection makes all examined protocols very susceptible to it. The worst case scenarios can see an upsurge in the network-wide usage by a factor of  $O(N^2)$ ,  $N$  being the number of network nodes.

CMOS technology presents some unsolved problems after shrinking certain limits. Thus for solve these problems new devices developed in place of CMOS in nanoscale era. These problems point to the need for a new kind of fundamental device and architecture, such as quantum-dot cellular automata (QCA).

We take this opportunity to thank all those contributors, reviewers in making this issue a memorable one. Suggestions and feedback from our readers are welcome for the overall improvement of quality of the Journal.

# Preface

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**Dear Researchers,**

We take this opportunity to welcome you all to the second issue of International Journal of Communications & Electronics (KIET - IJCE). This journal will provide a forum for in depth and substantial discussions on the theory, design and implementation of the emerging technologies in Communications, Networking, Microwave and Electronics techniques, thus providing solutions and strategies for business resilience.

It gives us an immense pleasure to have an amalgam of researchers from the fields of Communication Engineering, Electronics, and related technologies. The purpose of the Journal is to provide a platform to foster interdisciplinary communication among the delegates and to support the sharing process of diverse fields in various concepts and principles related to these domains.

Our appreciation also goes to entire team whose dedication and timeless efforts have gone for number of days for the second issue of the Journal.

**Editors**



## Message

I am delighted to note that the Department of Electronics and Communication Engineering, KIET Group of Institutions, Ghaziabad is introducing Volume No 2, Issue No. 2 of International Journal of Communications and Electronics (KIET - IJCE).

I appreciate the efforts on the part of the Editorial Committee in bringing out an issue on Communications, Networking, Microwave and Electronics techniques.

I understand that the papers contributed for publication in the Volume No 2, Issue No. 2 are on almost all the current aspects of Communication Systems, Electronics systems, Microwave Engineering, Signal Processing & Applications, Networking Technologies and several others.

I have great pleasure in congratulating the Editors of this issue of KIET - IJCE for their untiring efforts in bringing out this Volume No 2, Issue No. 2 of KIET-IJCE which will be a valued treasure for all who pursue research in Communications, Networking, Microwave and Electronics Engineering areas.

Let me close with warmest regards.

**Dr. Sraban Mukherjee**  
President  
KIET – IJCE



## Message

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It gives me immense pleasure in writing this foreword for the Volume No 2, Issue No.2 of the KIET International Journal on Communications and Electronics (KIET - IJCE). This journal is targeted towards researchers, professionals, educators and students to share innovative ideas, issues, recent trends and future directions in the fields of Electronics and Communication Engineering.

The Volume No 2, Issue No. 2 of the journal KIET-IJCE includes papers on the theory, design and implementation of the emerging technologies in the field of Communications, Networking, Microwave and Electronics techniques. Furthermore, it will enable the researchers in various domains to foster the exchange of concept, prototypes, research ideas and the results of research work which could contribute to the academic arena and also benefit business and industrial community.

**Dr. Sanjay Sharma**  
Editor – in - chief  
KIET - IJCE

**SECOND VOLUME  
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