

## **STUDENT PROJECT CONTEST - 2008**

The All India IEEE Student Project Contest – 2008, open to all IEEE Student Members residing in India, is organized by the IEEE India AES/Com/LEO Societies Joint Chapter and the IEEE Hyderabad Computer Society Chapter in association with IEEE Hyderabad Section. This Contest is partially supported by the IEEE Aerospace and Electronic Systems Society (IEEE-AESS) under a special grant.

Membership statistics of IEEE show a worldwide student membership of about 74000, with 13000 of these living in India. Programs addressing the IEEE Student Members in India therefore assume importance. Year 2008 is the third year of this Contest.

Technical areas of projects for Student Project Contest - 2006 were restricted to be within the IEEE-AESS fields of interest. Within the framework of IEEE, AESS fields of interest cover the organization, design, development, integration and operation of complex systems for space, air, ocean or ground environments. During 2007, scope of this Contest is widened to include field of interest to IEEE Communications Society also. For 2008, scope of this contest is further widened to add fields of interest to IEEE Computer Society. With a view to encourage engineering talent, it was further specified for purpose of the present Contest that the student project must result in a product, either hardware or software such as a simulation package or tool. Concept, creativity, technical content and presentation have been specifically included among criteria for judgment.

Entries received in response to the Announcement and publicity was screened and eight entries have been short-listed for further selection process. This CD-ROM includes a copy of the Contest Announcement (which was released in September 2007), and the eight selected papers. After a further selection by a Panel of Judges, student authors of four of these entries are invited to present their work and demonstrate the products during the STUDENT CONGRESS organized by IEEE Hyderabad Section during 9-10 August 2008.

The First and Second Prize winning entries (separately for AESS, Communications and Computer areas) are selected by the Panel of Judges after these presentations keeping in view the criteria for quality. With a view to encourage faculty interest in student projects in the fields of interest to the three Societies, the faculty supervisor / advisor of each Prize winning project is presented with a Certificate of Recognition. Further, his/her IEEE membership dues, including membership in relevant IEEE Society for the year 2009, are paid by IEEE India AES / Com / LEO Societies Chapter and IEEE Hyderabad Computer Society Chapter.

First Prize in AESS area:

Vamsi Krishna Vangapalli, Sri Ram Sarma, Lava Kumar Y. and Srihari  
"Vehicle Positioning and Navigation System Using GPS and GSM".  
Vignana Bharati Institute of Technology, Hyderabad

Second Prize in AESS area - not awarded.

Certificate of Merit in Computer area:

J. Veeramani & B. Vijay Anand,

"Design, Simulation and Hardware Implementation of Unified Power Flow Controller"  
Sri Muthukumaran Institute of Technology, Chennai

Based on increasing interest and quality improvement over the years, earlier in 2007, Hyderabad Section Computer Society Chapter joined us as co-sponsor to add one more area (viz., Computer) to the Contest. For 2009, now Hyderabad Section Power & Energy Society Chapter and Hyderabad Section MTT Chapter are joining as co-sponsors to add Electrical Power Engineering and Microwave Theory and Techniques as additional areas for the scope of the Contest. May I remind you that **AESS has been the pioneer in starting this Contest in 2005.**

IEEE is at the forefront in enhancing quality engineering education. In this direction, the purpose of the present Contest is to promote and recognize high quality engineering student projects at both under-graduate and post-graduate levels.

Dr. V. Prasad Kodali  
Chair, Student Project Contest Program

## Proposed Seminar during January 2009

### **“Building of ICT Infrastructure/modernization for Faster and Efficient Growth of Air Services- Opportunities and Challenges”**

"Civil Aviation worldwide is experiencing many rapidly changing situations. In some countries, increasing fuel and operational costs have resulted in rationalization and reduction in number of flights. Internationally, mergers have taken place between major airlines to optimize resources. Even after accounting for these steps, global air passenger traffic grew at about 7.4 per-cent during 2007. During the same year, the passenger traffic growth rate has been 22 per-cent in India, about three times the global growth rate. Five primarily domestic airports in India have developed into major international airports during the past one to two years, with two of them at Hyderabad and Bengaluru acquiring world-class Airbus 380 compatible brand new airports with private participation. Terminal and aeronautical facilities at four existing major metro airports in India (at Mumbai, Delhi, Chennai and Kolkatta) are currently being vastly expanded to handle increased passenger and air traffic load.

The emerging picture in the Indian civil aviation sector has ramifications for aeronautical navigation and communication facilities, as well as for airport terminal facilities and infrastructure. This also calls for close interaction and coordination with countries in the south Asia and middle-east, especially to ensure and enhance air safety. With these considerations in mind, the Airports Authority of India is co-sponsoring a two-day seminar in association with the Aerospace and Electronics Systems Society Chapter of the world's largest technical society, the Institute of Electrical and Electronics Engineers. The Seminar will provide a forum for discussion of the rapidly changing scenario in India and the adjacent countries, and will also review the contemporary developments in these sectors in Europe and North America."

AESS inputs are required for :

To identify the key personalities for discussion on creating a single point agency to meet all the requirement of Asia Pacific Region in the area of avionics similar to FAA (Federal Aviation Administration in US) and EC (European Commission in EC.)

#### BUDGET

##### Funds Requirement from AESS

Student Project Contest 2009	US \$ 5000
Proposed Seminar January 2009	US \$ 5000
Total	US \$ 10000