



- SEE International Radar Conference 'RADAR 2009' held in Bordeaux, France, 12-16 October 2009. Very successful, also included meeting of AES Radar Systems Panel
- Presentation of Picard Medal to Dr Philip Woodward, 26 October 2009. Written up for AES website and for AES magazine
- AES Distinguished Lecture by Dr Eli Brooker, 21 April 2010: 'Amazing Breakthroughs in Radar / Phased Arrays'
- International Conference on *Synthetic Aperture Sonar and Synthetic Aperture Radar*, Lerici, Italy, 13/14 September 2010. Organised by Institute of Acoustics (UK) with AES co-sponsorship, financial support from US ONR Global



Hugh Griffiths
AES Chapter Chair, UKRI

The relevant international activities in Italy and Western Europe have been strongly interleaved with those of the Space Systems Panel and they are:

➤ a Workshop on *Data Security in Satellite Applications and Final Results of Intersection Project - Satellite Data Intrinsic Security Faces New Threats and Offers New Opportunity* (organized by IEEE Italy GOLD, the AESS Space Systems Panel, CTIF_Italy, AFCEA Rome Chapter and Telespazio) -Villa Mondragone (University of Roma Tor Vergata, Italy) on October 26, 2009.

➤ **PSTAS 2010**, the 2nd International ICST Conference on *Personal Satellite Services*, took place in Rome, on February 4-6, 2010. This event was co-located with Sat Expo Europe.

➤ **ISABEL 2010**, the 3rd International Symposium on *Applied Sciences in Biomedical and Communication Technologies*, organized by the AESS Space Panel, CTIF Italy, CTIF Denmark, and the IEEE Italy GOLD. Rome on November, 7-10, 2010.



➤ Activities related to the role of Editor of Space Systems of the AES Transactions and for the Systems Magazine.

➤ Activities related to projects, publications and teaching in the space system related topics.



Student Activities:

- A project work, organized by the M. Sc. Course in “Advanced Communication and Navigation Satellite Systems” for the ***High Altitude balloons Competition Program***.

The project work will be fulfilled in about 3-4 months by nearly 20 students divided in 5 teams. Each team will accomplish one of the following six scientific targets:

1. design and develop the communication and navigation platform;
 2. design and develop an SDR GPS receiver working at high altitude ;
 3. design and develop a sensor platform that includes a record of the main scientific parameters to characterize the stratospheric environment;
 4. design and develop a video/picture system to minimize the fluctuation of the platform and to record HD imaging of the near space;
 5. design and develop an energy system to create energy at high altitude with photovoltaic cells and/or small wind turbines.
 6. design and test a system to increase the duration and/or altitude of the mission.
- A ***ten-minutes link radio***, realised from a post in California when the ISS was in the Pacific Ocean, was established in Villa Mondragone on January, 7, 2010 to celebrate the *Centenary year of the Nobel Prize given to Guglielmo Marconi*. Besides his daughter Elettra Marconi, many young students from Monte Porzio Catone participated in the event along with the Education Councillor Massimo Pulcini.

International Activities in China

- **The 2nd Asia-Pacific Conference on Synthetic Aperture Radar (APSAR2009)** has been held successfully in Oct. 26-29, 2009 in Xian, China. APSAR 2009 was supported by IEEE AESS.



- **The APSAR 2011** will be held in Seoul, Korea in September 2011. APSAR 2011 needs the Technical Co-sponsorship from AESS

International Activities in China

- Attended the IRS 2009 in Hamburg, Germany and discussed the Radar 2011 in China with Mr. Robert Hill .



- **Radar 2011** is one of the series of International Radar Conference. Radar 2011 will be held in Chengdu, China.



- We are ready to establish the **AESS Xian Chapter** in China before June, 2010.

International Activities in Israel

- The Israeli AESS Chapter has been involved in 2009 in organizing the International *IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems (COMCAS 2009)*.

The Conference Chairman was Shmuel Auster from Elta Systems Ltd.

Within this conference, two radar-related sessions were organized:

Session: 1C3

- Radar and Electronic Systems I
- Chair: Prof. Stanley Rotman, Ben Gurion University of the Negev
- Co-Chair: R W. McMillan, US Army Space and Missile Defense Command

Session: 1C4

- Radar and Electronic Systems II
- Chair: Ruth Rotman, ELTA
- Co-Chair: Yossi Pinhasi, Ariel University Center

- *Idea for discussion*

Start a new journal, “AES Letters” for quick and timely handling of short papers. Such journals already exist in other societies. In recent years the AESS loses radar papers to signal processing journals because of slow publication rates.

Prof. Nadav Levanon

International Activities in India

IEEE AESS STUDENT PROJECT CONTEST 2010 INDIA

- All India Student Project Contest 2010 has already been announced during November 2009. Further publicity was also given during February 2010. Last date for receipt of entries is towards end of May 2010. All India SPC 2010 will be arranged in Hyderabad during August 2010 (second Saturday of August 2010).

IEEE AESS Distinguished Lecture

Prof. George Schmidt is visiting India as per the following schedule:

- Monday 7 June Lecture(s) in Mumbai
- Wed 9 June Lecture(s) in Bangalore
- Thursday 10 June Fly to Chennai around 1700
- Friday 11 June Lecture(s) in Chennai
- Monday 14 June Lecture(s) in Hyderabad
- Thursday 17 June Lecture(s) in Delhi

Dr. Ram Gupta

International Activities in India

Total of 18 entries were received for the Student Project Contest 2009. These were screened by a Panel of Judges Chaired by Professor VU Reddy (IEEE Life Fellow), and four papers were short-listed for oral presentation and demo at the All India Student Project Contest held on 8-9 August 2009.

The winning entries and the area of the papers are as follows:

- First Prize (PES area): "Hybrid Bike with Three Speed Transmission System", by Nagendran R, Arun Kumar, Kartik V, and Charandeep K, Bannari Amman Institute of Technology, Erode.
- Second Prize (PES area): "A New Automatic Solar Powered Baking Machine", by Auradha Kar, Jadhavpur University, Kolkotta.
- First Prize (CS area): "Automatic Surveillance System" by Nikhil Nayak, Sanmay Patil, Neerad Phansalkar & Aditi Lonhare, College of Engineering, Pune.
- Second Prize (CS Area): "Smart Stick" by Niha Nur Sheik, NMAM Institute of Technology, Udipi.

No prize was awarded in the AES area during 2009. You will note that while some of the Prize winning entries are in the AES area, our Panel of Judges felt it is more appropriate to recognize them in other areas, viz., PES or CS areas, since there was more content relevant to that field.

Dr. Ram Gupta