

# Commission A Report for the years 2003-2005

By Q. Balzano, Chair

In the triennium 2003-2005 Commission A has been active in support of the Scientific Committee on Telecommunications (SCT), of the Solar Power Satellite Project and in preparing the sessions of the 2005 General Assembly in New Delhi.

In addition to session KA, session KE was given technical support.

Specific suggestions to the STC regarded the possibility of unexpected interference phenomena due to the proliferation of electronic devices for communication and health maintenance. The support for the SPS program consisted in preparing a sufficiently detailed test program for the large antenna of the SPS.

A substantial effort was dedicated to inviting two top experts in Ultra Wide Band (UWB) Technology to give a general lecture and a paper on UWB signaling at the 2005 GA.

Prof. H. Bertoni ( N.Y. Poly), W. Stark (U.of Michigan), Broderson ( Berkley) and Milstein (USC) were contacted and invited to New Delhi. Not one of these distinguished scientists was available.

Liaisons were maintained with Commission K, by attending the meetings organized by Commission K at the BEMS Symposia of 2004 and 2005.

## Radio Science Bulletin

Two papers are in preparation for RSB

- I. I. Smolyaninov, Q. Balzano, C. Davis “ A Review of Plasmon Polariton Excitation in Doubly Periodic Array of Holes”
- II. K. Foster and Q. Balzano” A New Analytical Method for the Computation of SAR from Coated Wire Antennas immersed in Tissue”.

## Sponsored Scientific Meetings

The following meetings were sponsored by Commission A:

- 1) JINA 2002, Nice, France 12-14 November 2002
- 2) EMC Zurich 2003, Zurich, Switzerland 18-20 February 2003
- 3) Telecom 2003&JFMMA, Marrakech, Morocco 15-17 October 2003
- 4) WARS04 (Workshop on Application of Radio Science) Conference 2004, Hobart, Tasmania, Australia, 18-20 February 2004
- 5) International NIR Workshop and Symposium, ICNIR, URSI(K)/ WHO Symposium, Seville, Spain, 20-24 May 2004
- 6) EMC Wroclaw 2004, Wroclaw, Poland, 29 June- 1 July 2004
- 7) AP-RASC 04: 2004 Asia-Pacific Radio Conference, Beijing, China, 20-23 August 2004
- 8) Radar 2004, Toulouse, France, 19-21 February 2005
- 9) EMC Zurich, 2005, Zurich, Switzerland 15-17 February 2005

- 10) VI International Symposium on Electromagnetic Compatibility and Electromagnetic Ecology, St. Petersburg, Russia, 21-24 June, 2005
- 11) International Workshop on Electromagnetic Fields at the Workplace, Warsaw, Poland, 5-7 September 2005.

### **Budget**

One third of the budget was expended in the support of meeting and symposia. The rest was kept in reserve to fund the attendance of two speakers on UWB at the GA 2005 in New Delhi.