



**Report on the Business Meetings of  
Commission D  
during the  
XXXth URSI General Assembly and Scientific  
Symposium  
Istanbul, Turkey, August 13-20, 2011**

**Chair: Prof. Franz KÄERTNER**

**Vice Chair: Prof. Smail TEDJINI**

Commission D Business meetings were held by Prof. Franz KÄERTNER as the Chair and Prof. Smail TEDJINI as Vice-Chair, on the following two days (already scheduled in the general program of GASS :

**Meeting 1:** Monday, August 15th, 17:20-18:40

**Meeting 2:** Wednesday, August 17th, 17:20-18:20

For each meeting, there are 15 to 20 participants and many points regarding the 2011 GASS and the future 2014 GASS have been discussed. In particular the following issues were discussed and decided upon.

**1- Triennial Activity for 2008 – 20011 and program of 2011 GASS.**

1. One remarkable and very encouraging aspect in the huge evolution in the number of contributed papers for commission D during the 2011 GASS. Indeed, total number of the papers was 128 communications, which represents an increase of 70% when compared to 2008 GASS of Chicago. Some of the papers of commission D was transferred to the sessions of other commissions.
2. The emergence of Nanotechnology in the domain of RFID has changed sensor technology. Increasingly collaboration with other commissions, active in this area, becomes important. The tutorial of commission was focused on that topic and was entitled “Highly Integrated/Multilayers Packaging for RF and Wireless Applications, Paper Based RFID’s. It is important to notice that the multidisciplinary content of RFID technology and its numerous applications fits the reference terms of many URSI commissions, in particular those of commission D. This characteristic will lead to several joint sessions for the next GASS as it has been discussed for the program of the future 2014 GASS.
3. Commission D has supported several new areas of research related to the Nanomaterial, Metamaterial and Plasmonics, and thus, a few issues have emerged. The URSI community working in this area is very large and has different approaches for different applications, but still too dispersed. Commission D needs a concerted effort to have a common action plan together with the other commissions and scientific organizations active in this area.
4. Millimeter and THz wave application is a research area in full development.

5. Traditional topics on Photonics and Microwave are exploiting new concepts by integrating some of the advances in integration and nanotechnologies.
6. Green technologies for sustainable development are gaining in interest and should interest the community of commission D
7. There are discussions on the formation and contribution to a Working Group (WG) on “**RFID Technologies and Privacy of Data** “. Commission D should propose the formation of this WG and invite the other commissions to contribute to the publication of white paper.
8. There is no change in the reference terms of the commission, but green technologies should be considered in the future.

The following conferences were supported by Commission D during the triennium 2008-2011 :

- EMC 2009 VIII International Symposium and Exhibition on Electromagnetic Compatibility and Electromagnetic Ecology, St Petersburg, Russia, June ´ 2009
- META'10, 2nd International Conference on Metamaterials, Photonic Crystals and Plasmonics, 22-25 February, 2010, Cairo, Egypt.
- ISSSE 2010, International Symposium on Signals, Systems and Electronics, Sep 16 -19, 2010, Nanjing, China.
- ICEAA 10, International Conference on Electromagnetics in Advanced Applications, September 20-24, 2010, Sydney, Australia.
- AP-RASC 2010 Asia-Pacific Radio Science Conference, September 22-26, 2010, Toyama, Japan.
- APMC 2010 Asia-Pacific Microwave Conference, December 7-10, 2010, Yokohama, Japan.

## 2. New Chair and Vice Chair for 2011-2014

- Election of the new Vice-Chair

1. Prof. Hong Guo,  
Peking University, Beijing, China
2. Prof. Günter Steinmeyer,  
Max-Born Institute, Berlin, Germany

*Voting was held for the incoming Commission D Vice-Chair 2011 – 2014.*

The successful candidate was: Prof. Günter Steinmeyer

## 3. Appointment of Commission D Editor for Review of Radio Science

*URSI Publication*

Commission D Editor for RSB will be, Pierre Noel Favennec

## 4. Scientific Program of Next General Assembly

The tentative topics of interest to Commission D for the General Assembly 2014 are :

- RFID technology and applications,
- Lasers,
- Free Electron Lasers,
- Quantum Information Processing,
- Microwave Photonics,
- Nonlinear Optics and Guided Wave Devices,
- Micro and Nanophotonics,
- Carbon Based Nanoelectronics,
- Hyperspectral Sensing and LIDAR,
- Multiphysics Modelling in Radio Frequency Nanoelectronics,
- Plasmonics,

- Metamaterial Applications,
- Signal Processing Antennas,
- Enabling Technology for Millimeter and THz wave Applications,

It has been approved that joint sessions should be encouraged. The previous topics are listed as initial proposal, but the final list of sessions will be defined later.