Mikrotalasna revija Decembar 2010.





<u>IEEE MTT Society</u> Serbia and Montenegro Chapter

## REPORT ON THE MAIN CHAPTER ACTIVITIES FROM SEPTEMBER 1, 2009 TO AUGUST 31, 2010

Report given by Dr. Zlatica Marinković, Chapter Secretary, at IEEE MTT-S Region 8 Chapter Chairs' Meeting, held in Paris, France, in September 2010

In the period from September 1, 2009 to August 31, 2010, as in the previous years, the members of IEEE MTT-S Chapter of Serbia and Montenegro were very active. The main activities were related to:

- participation in the organizing of international and national scientific conferences,
- organization of technical meetings where invited lectures were given,
- building curricula from the microwave fields in the scope of under- and post- graduate studies,
- preparation, publishing and presentations of two issues of the Microwave Review journal, a publication of the MTT-S Chapter of Serbia and Montenegro and the national Society for Microwave Technique and Technologies.



The main conference organized by Chapter members in this period is 9th IEEE Conference on Telecommunication in Modern Satellite, Cable and Broadcasting Services - TELSIKS 2009, held at the Faculty of Electronic Engineering, University of Niš, Serbia, on October 7 - 9, 2009 (

http://www.telsiks.org.rs ). The Conference was organized jointly by the Faculty of Electronic Engineering Niš and the national Society for MTT, with technical co-sponsorships of IEEE MTT-Society, IEEE AP-Society and IEEE Region 8. It was organized under auspices of Serbian Academy of Science and Art (SASA), Serbian Ministry of Science and Technological Development and Serbian Ministry of Telecommunications and Information Society. The Conference was organized in cooperation with Academy of Engineering Science of Serbia, Serbia and Montenegro IEEE Section, IEEE Communications Chapter, National Society for Telecommunications, IEEE MTT-S Chapter and Society for ETRAN.

The main part of the Conference program included presentations of the scientific papers, some of which were invited papers, written by the renowned scientists from all over the world. The papers covered a wide range of topics: RF and microwave techniques, electromagnetic compatibility, antennas and propagation, satellite communications, mobile communications, classical cable and optical communications, multimedia communications, digital signal processing, broadband wireless access, telecommunication networks, modulation and coding, internet technologies, new telecommunication technologies and services.

The revision of the submitted papers was done by an international board of the Conference reviewers and the final selection was done by the Conference Program Committee. Total number of the papers selected for presentation was 124, 19 of which were invited papers. Authors of the papers are scientists from the following countries: Bosnia and Herzegovina, Bulgaria, Canada, Czech Republic, Croatia, Germany, Greece, Italy, Libya, Macedonia, the Netherlands, Romania, Slovenia, Serbia, Ukraine, Spain, United Kingdom and USA. There were 11 regular sessions and 5 poster sessions.

All papers scheduled for presentation were published prior to the Conference. The two-volume proceedings, accompanied by a CD-ROM publication, were distributed to all registered participants. It is important to note that the Conference Proceedings, as an official IEEE publication, will be distributed by the IEEE Conference Publications Program (IEEE CPP). All of the Conference papers will be indexed in the IET INSPEC database.

December, 2010 Microwave Review





TELSIKS 2009 Opening session: (left) Chair of the Conference Prof. B. Milovanović is giving the welcome speech (Right) Prof. A. Marinčić is opening the Conference; Chairmen: Profs. K. Rao, B. Milovanović, S. Tomažić, G. Stoyanov, O. Fratu





Conference Sessions

The MTT-S Chapter organized the following events during the conference:

- October 7, 2009: Plenary lecture "Joint Video Encoding in DVB/ATSC Multi-program Transmission: MPEG-2 vs. H.264/AVC Bitrate Control" given by Prof. K. R. Rao, University of Arlington (USA). Attended by 107 people.



Prof. B. Milovanović with the plenary speaker Prof. K. Rao

- October 7, 2009: Workshop "*Trends in Multimedia Communications*". The lecturers were Prof. Kamisetty R. Rao, University of Texas at Arlington, USA, and Prof. Zoran Bojković, University of Belgrade, Serbia. Attended by 35 people.

Mikrotalasna revija Decembar 2010.

- October 7, 2009: Round table "Strategy of Scientific and Technological Development in Republic of Serbia 2009-2014". There were present scientists, university professors, representatives of the institutes as well as representatives of interested companies (around 50 people).

- October 8, 2009: Round table "Accreditation in Higher Education Results and Forthcoming Activities". Besides the representatives of the Serbian Faculties, there were also members of the Commission for Accreditation and Quality Assessment as well as representatives of the National Council for Higher Education (56 people present).
- October 8, 2009: Presentation of broadcasting of experimental digital television program organized in cooperation with the national telecommunication company "Telekom Srbija", as well as three television companies, one of which has national coverage. Attended by around 80 people.

This conference continued the success of the series of previous TELSIKS Conferences, providing a good atmosphere for academic discussions, exchange of experiences and networking of the conference participants.



Detail from the meeting with the invited authors



Sightseeing – The fortress of Niš



Some of the Chapter members participated in organization XLV International Scientific Conference on Information, Communication and Energy Systems and Technologies ICEST 2010, held in Ohrid, Macedonia in June 2010 (http://icestconf.org/). The Chapter chair, Prof. Dr. Bratislav Milovanović, is the co-chair of this years' ICEST conference. The MTT-S Chapter members were organizers of sessions related to Microwave technique and Antennas and propagation.



Some members of the Chapter helped organizing and participated at the national conference on telecommunications TELFOR'09 (session "Applied electromagnetics and electronics"), which was held in Belgrade, in November 2009 (http://www.telfor.org.rs).



The Chapter supported the organization of the 54th national conference ETRAN 2010, held in Donji Milenovac, in June 2010. Within the ETRAN Conference, "Microwave and sub-millimeter technique" mini-conference took place containing three very successfully organized sessions:

"Microwave Passive Devices", "Microwave Electronics" and "Antennas, propagation of EM waves and microwave Measurements", (http://etran.etf.rs/).



MTT-S Chapter participated in organization of the second student conference "IEEESTEC Student project conference" (http://www.eestec.org.yu/ieeestec/) held on November 26, 2009 in Niš. The Conference was organized by IEEE Student Branch Niš, EESTEC LC Niš and the Faculty of electronic engineering in Niš in co-operation with IEEE Serbia and Montenegro

Section, IEEE ED/SSC Chapter and IEEE MTT-S Chapter. It was a chance to encourage undergraduate students to enter the world of scientific work. The event was very well attended, around 90 people were present.

December, 2010 Microwave Review

In addition to the mentioned events, there are two more meetings organized in this period:

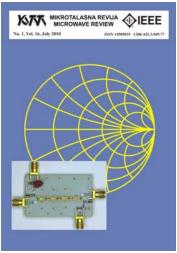
- On April 20, 2010 at the Faculty of Electronic Engineering in Niš there was a technical meeting when Dr. Branka Jokanović, Institute for Physics Belgrade, gave a lecture "Metamaterials in microwawes and photonics". There were 38 people present, including students of the final years.

- On May 14, 2010 at the Faculty of Technical Sciences in Novi Sad two lectures were given:
  - o "Design of Tunable and Reconfigurable LTCC Microwave Devices" given by Prof. Dr. Irina Vendik, St.-Petersburg Electrotechnical University "LETI" (ETU), Dept. Microelectronics and Radio Engineering, St.Petersburg, Russia
  - o "Ferroelectrics and Their Application to Microwave Phase Shifter Design" by Prof. Dr. Orest Vendik, St.-Petersburg Electrotechnical University "LETI" (ETU), Department of Physical Electronics and Technology, St.Petersburg, Russia
- The annual meeting of members of the IEEE MTT-S Chapter and national Society for MTT was held on June 10, 2010. 28 people were present at the meeting.

Two issues of the Microwave Review journal, a publication of MTT-S Chapter of Serbia and Montenegro and national Society for Microwave Technique and Technologies have been published in this period. One was published in December 2009 (Vol.15, No.2) and the other in July 2010 (Vol.16, No.1). Microwave Review is available in electronic version on the web site: <a href="www.mwr.medianis.net">www.mwr.medianis.net</a>. It should be noted that the journal has been included into INSPEC database since November 2008.



Microwave review Vol. 15, No 2



Microwave review Vol. 16, No.1

The next year the main activity for the Chapter will be organization of the jubilee 10<sup>th</sup> TELSIKS Conference which will be held October 5 - 8, 2011. It will be our pleasure if the members of other MTT-S Chapter submit their papers for the Conference. In that way can meet and exchange ideas and spend nice time in Niš. Also, we are going to continue all other professional and educational activities.

Report prepared by: Prof. Dr. Bratislav Milovanović, Chapter Chair Dr. Zlatica Marinković, Chapter Secretary