

Editor's Note

It is my great pleasure to present the second issue of Volume 16 of Microwave Review, a journal of the Serbian Society for Microwave, Technique, Technologies and Systems and of the IEEE MTT-S Chapter of Serbia and Montenegro.

In this issue, there are seven scientific papers from the fields of microwaves, electromagnetics and telecommunications. The first two papers consider today's very actual topic – metamaterials. The first paper has been written by: N. Dončov, B. Milovanović and T. Asenov from Faculty of Electronic Engineering Niš, Serbia, and J. Paul from the University of Nothingham, UK. The paper presents a three-dimensional (3D) model of electromagnetic left-handed metamaterials based on the Transmission Line Matrix (TLM) method based on Z-transforms, extended to account for dispersive LH MTM properties in the time-domain. The authors of the second paper dealing with the metamaterial, M. Mitrović and B. Jokanović from the Institute of physics, Belgrade, Serbia, have investigated the field tunnelling through the narrow waveguide channel formed by reducing the height of a rectangular waveguide. The role of material losses is systematically examined as an important practical issue limiting the maximum achievable tunnelling transmission level.

The next two papers contain research results related to microwave antennas. The reaserch team with the Institute of Technology, Banaras Hindu University, India, R. Kumar Gangwar, S. P. Singh, and D. Kumar, has proposed a wideband dual segment cylindrical dielectric resonator antenna terminated in a bio-medium for 5 GHz WLAN/WiMAX band. The authors of the second paper on antennas, M. S. Nishamol, V. P. Sarin, D. Tony, C. K. Aanandan, and P. Mohanan, K. Vasudevan, are with Cochin University of Science and Technology, India. They present a novel compact dual frequency microstrip antenna with frequency and polarization tunability.

The fifth paper in this issue is devoted to microwave filters. S. Jovanović form the IMTEL Komunikacije, Belgrade, Serbia, has given a summary of several bandpass filters all consisting of resonators coupled only by capacitive coupling. This paper is followed by a work of O.Pronić-Rančić, Z. Marinković and V. Marković, who are with Faculty of Electronic Engineering, Niš, Serbia. The paper describes a novel efficient procedure for noise modelling of microwave FETs versus temperature based on the wave approach in noise modeling.

The last research paper in this issue, whose authors are B. Todorović, RT-RK, Novi Sad, Serbia, and D. Perić, IMTEL-Komunikacije, Belgrade, Serbia, is devoted to communication systems. In this paper two structures of rake-like receiver for improvement of DS-SS binary PPM UAV control signal reception at low signal-to-noise ratios are proposed and analyzed.

At the end of this issue, there are the report on the IEEE MTT-S Chapter of Serbia & Montenegro activities in the period from September 1, 2009 to August 31, 2010, and calls for papers for two conferences: XLVI International Scientific Conference on Information, Communication and Energy Systems and Technologies - ICEST 2011, and 11th international, IEEE co-sponsored conference TELSIKS 2011.

I would like to thank to all authors of the papers published in this issue and to kindly invite prospective authors to submit their manuscripts for publishing in the forthcoming issues of this journal.

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