



Editor's Note

It is a great pleasure to present the first issue of Volume 16 of Microwave Review, a journal of the serbian National Society for Microwave Theory and Technique and of the IEEE MTT-S Chapter of Serbia and Montenegro. We are proud that our journal has been categorized officially by the Scientific Council for Electronics and Communications of the Ministry of Science and Technological Development of Serbia, as the leading scientific journal of the national importance, which is the highest level of classification of scientific journals published in Serbia.

This issue brings original papers with very interesting topics in areas of microwave technique, applied electromagnetics and telecommunications. In the first paper, the authors Johannes A. Russer and Peter Russer from the Institute for Nanoelectronics of Technical University of Munich, Germany, and Yury Kuznetsov from Moscow Aviation Institute, Russia, discuss discrete-time network and state equation methods and present examples of their application to computational electromagnetics.

The second paper by Adam Abramowicz from the Institute of Electronic Systems of the Warsaw University of Technology, Poland, highlights some aspects of modelling of wide band combline and interdigital filters. New explanation of bandwidth increase as well as the design procedure are presented in that paper.

Electromagnetic interference in modern communication systems is one of very important topics today. The third paper in this issue written by a group of researchers from Synergy Microwave Corp. NJ, USA (Ulrich L. Rohde, Ajay K. Poddar et al.) offers a novel crystal oscillator circuit using mode coupling and phase-injection techniques for improving the electromagnetic interference, drive-level, and start-up dynamics. Researchers from Synergy Microwave Corp. are also authors of the fourth paper that focuses on the design of linear and wideband power amplifiers, which is a challenge in communication system design. In that paper, the authors explore the existing design practices and propose novel design methods to develop linear, efficient, high power and wide band amplifiers.

The topic of the fifth paper presented in this issue, by Edén Sorolla and Michael Mattes from Laboratoire d'Electromagnétisme et d'Acoustique (LEMA), EPFL, Lausanne, Switzerland, is related to corona discharge in microwave devices. A comparison of the predicted corona breakdown power threshold obtained by different ionization rate models for an infinite parallel-plate waveguide is given in that paper.

The final paper by Lajos Nagy from the Department of Broadband Infocommunications and Electromagnetic Theory of the Budapest University of Technology and Economics, Hungary focuses on the Indoor Wave Propagation Modeling. The FDTD and ray optical methods are investigated in the article.

Finally, at the end of this issue, there is information on the conferences in whose organization participate members of the National Society for Microwave Theory and Technique and of the IEEE MTT-S Chapter of Serbia and Montenegro. First, there is a report on the XLV International Scientific Conference on Information, Communication and Energy Systems and Technologies - ICEST 2010, held on June 23 - 26 2010, in Ohrid, Macedonia. The report is followed the Call for papers for jubilee 10th international, IEEE co-sponsored conference TELSIKS 2011 that will be held on October 5 - 8, 2011 in Niš, Serbia.

I would like to express my gratitude to all authors who submitted their papers to our journal, as well as to referees who have contributed greatly with their valuable reviews and helpful comments.

Vera Marković

Faculty of Electronic Engineering
University of Niš, Serbia
vera.markovic@elfak.ni.ac.rs