



Editor's Note

It is my pleasure to present a new issue of Microwave Review, whose cover page is devoted to Nikola Tesla, a great inventor of Serbian origin. This year, the world is celebrating the 150th anniversary of Tesla's birth. As in previous editions, this issue brings the papers with original scientific contribution, application oriented papers and surveys of results in some field.

A view on how the next generation global communication network infrastructure could be designed with the aim to support various heterogeneous core and access technologies for broadband and mobile user applications is given in the first paper written by S. L. Kota, USA. He discusses the trends of broadband satellite communication networks to meet the emerging aeronautical and fast train applications, as well as providing ubiquitous global coverage to mobile users. Miniature rectangular coaxial lines with the inner conductor supported by periodic dielectric straps, built by a new sequential micromachining process, are presented in the second paper by D. S. Filipović, Z. B. Popović, M. V. Lukić, and K. Vanhille from USA. A. Caddemi, F. Catalfamo, G. Crupi and N. Donato from Italy are the authors of the next paper whose topic is DC to microwave characterization and modeling of the cryogenic performance of low-noise pseudomorphic HEMTs.

Microstrip structures are the subject of the following four papers. Two of them are focused on microstrip antennas. In the paper by V. R. Gupta and N. Gupta from India, two low profile patch antennas for Wireless LAN 802.11b communication standard are proposed and investigated. The second paper whose subject are microstrip antennas also comes from India, and the authors are N. Chattoraj and J.S. Roy. Therein, the application of Genetic Algorithm (GA) to the optimization of gain of microstrip antennas with and without dielectric superstrate is reported. A method for calculating the coupling coefficients between coupled resonators used in triplet and cascaded triplet filters is proposed in the paper by M. V. Nedelchev and I. G. Iliev from Bulgaria. In the paper by A.R. Georgieva, who is also from Bulgaria, experimental investigation of a left-handed microstrip line is described.

The paper named "Microwave software tools for research and education" could be interesting to a wider audience. The authors D.V. Tošić and M. Potrebić from Serbia highlight the salient features of several software tools for microwave circuit simulation and discuss their relevance and suitability for research tasks and undergraduate teaching process.

Let us return to the celebration of the 150th anniversary of Nikola Tesla's birth. The last paper in this issue, related to Tesla's Wave Propagation Concept, is selected from the papers presented at the 6th International Nikola Tesla Symposium in Belgrade, October 18 – 20, 2006. The authors Z. Blažević, D. Poljak and M. Cvetković from Croatia propose a simple transmission line model for a Tesla coil that includes distributed voltage source along secondary of Tesla transformer. This paper is followed by a short text about our great inventor as well as a report on the Nikola Tesla Symposium given by the chairman A. Marinčić, a member of Serbian Academy of Science and Arts and an excellent connoisseur of Tesla's life and work.

A report on the activities of the Serbian IEEE MTT-S Chapter is given by B. Milovanović, Chapter chairman. A Call for papers for IEEE sponsored 8th International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting services, TELSIXS 2007, can be found in this issue as well.

I would like to thank very much to the authors for contributing to this issue. The prospective authors are kindly invited to send their manuscripts for publishing in our journal.

Vera Marković
Faculty of Electronic Engineering
University of Niš, Serbia
vera@elfak.ni.ac.yu