



Editor-in-Chief: A Message

Dear members and readers,

The second issue in 2018, December issue of the *Microwave Review* journal contains six research papers.

In the paper entitled *Microwave Waveform Generation with High Chirp Rate and Central Frequency using Dual-Parallel Mach-Zehnder Modulator for an Efficient Microwave Beam Steering Network* authors described photonic generation of a linearly chirped microwave waveform (LC-MW) with high chirp rate and central frequency using Dual Parallel Mach-Zehnder Modulator (DP-MZM). The main attraction of this paper lies in the technique called photonic true time delay module based on discrete fiber Bragg grating for efficiently generating and steering the microwave beam in a desired angle. The authors are Nimish Kumar Srivastava, Akash Srivastava, Sanjeev Kumar Raghuvanshi from India.

A Novel Dual Slot Circular Patch Antenna Design for Multi-band Applications is the title of the paper written by group of authors from India: Amiya B. Sahoo, Guru P. Mishra, and Biswa B. Mangaraj. This paper illustrates a novel coaxial line fed circular patch antenna with two different types of open slots is proposed for multi-band applications. The antenna which is circular in shape is originally designed to resonate at 2.4 GHz WLAN band. Different slots are made over the patch, and the slot dimensions, antenna dimensions, feed point location are optimized to design a multi-band antenna. The proposed antenna resonates in seven frequency bands.

The paper *A Compact Dual-Band Antenna Using Hexagonal Complementary Split Ring Resonator* illustrates a novel design of metamaterial inspired structure on miniaturization of microstrip patch antenna. The proposed structure consists of a hexagonal microstrip patch antenna loaded with two hexagonal complementary split ring resonator unit cells etched in the ground plane along with a shortening pin to create dual band antenna at resonant frequencies 3.394 GHz and 4.852 GHz. The authors are Manish Mathew Tirkey and Anjini Kumar Tiwary from India.

The next two papers selected for publication are related to design of different bandpass filters.

The composite right/left handed transmission line (CRLH TL) based novel and highly compact ultra-wideband (UWB) bandpass filter (BPF) is proposed in the paper entitled *A Highly Compact UWB Bandpass Filter using Via-less CRLH TL*, and written by Uday Kumar and Dileep Kumar Upadhyay from India. The single unit-cell CRLH TL is designed using series interdigital capacitor in shunt with the shorted inductive stubs. Due to the use of CPW-fed, the via is not required as signal and ground planes are in same plane. So proposed planar UWB BPF ease the fabrication processes and reduces the costly ground plane processing as compared to the conventional technique of design of CRLH TL unit-cell, where via is used to short circuit the inductive stub.

The paper *Concept of Dual-Band and Multistage Bandpass Filters with Antiparallel Configuration* explores the application of band pass filters with antiparallel configurations for obtaining dual band filters of compact sizes and various characteristics. It also outlines the theoretical analysis of higher-order filters obtained by the cascading of the identical basic filters. The component values of the filter prototypes calculated by these theoretical studies can be scaled to obtain band pass filters with various usable characteristics at arbitrary microwave frequencies suitable for realization in various technologies. This is an extended version of the paper "Concept of Dual-Band Bandpass

Filters with Antiparallel Configuration” presented at 4th International Conference on Electrical, Electronic and Computing Engineering - IcETRAN 2017, held in Kladovo, Serbia. The paper has been awarded as the best paper presented in the Section Microwave Technique, Technologies and Systems. The authors are Siniša Jovanović and Bratislav Milovanović from Serbia.

The last paper selected for publication in this issue is entitled *RF Energy Harvesting Using Mobile Phone Base Station Signals*. It is written by Lucio Scucchia and Ernesto Limiti from Italy. The fundamental goal of energy harvesting systems is to reduce the need for a wired power supply or battery replacements. This work points to gain an understanding of RF Energy Harvesting systems, tuned on the Long Term Evolution bands. To get this goal, an RF-DC conversion circuit was designed, realized, and measured. Measurements were carried out at different frequencies, loads, input power levels and compared to the corresponding simulations.

All involved people in this journal: Editor-in-Chief, Associate Editor and reviewers contribute as volunteers. Selection of submitted papers for publication in journal is a very hard work. There may be a phase of high load where reviewers cannot find time to work on papers, and because of that a processing time make take several months.

I would like to thank all valued anonymous reviewers who were able to engage with this journal in 2018, and to show my appreciation for the time and effort they have spent on evaluating manuscripts submitted to Microwave Review journal. Their role as a reviewer is a very important contribution to the success of the journal.

Warmest thoughts and best wishes for a wonderful Holiday Season and a Happy New 2019!

Dr. Biljana Stošić

University of Niš, Faculty of Electronic Engineering

Aleksandra Medvedeva 14

18000 Niš

SERBIA

E-mail: biljana.stosic@elfak.ni.ac.rs; b.stosicc@gmail.com