



## Editor-in-Chief: Scanning the Issue

Dear members and readers,

The current July issue of the *Microwave Review* journal (Vol. 28, No. 1) contains six research papers. These papers present ongoing research and developments achieved by researchers in different areas and countries.

In the first paper titled *A Compact CP Mode Converter Antenna*, a mode converter antenna (MCA) with a left-handed circular polarization (CP), is designed and simulated at 10 GHz. Due to its power-handling capacity, designed CPMCA is suitable as an MCA of high-power microwave electromagnetic diode. The paper is written by Seyed Jalil Hosseini from Iran.

To improve the life and psychology of patients who must remain under medical supervision, a new wireless body network radio frequency technology called WBAN can be used. There are three types of using printed antennas in WBANs: IN-Body (the antenna is inserted into the human body or implanted under the tissue), ON-Body (the antenna is placed on the body and communicates with another wearable antenna), and OFF-Body (the antenna communicates with a medical base station or another device). The second paper is titled *Design of Optical Gold Printed Antenna in Terahertz Band for ON Body WBAN Applications* and written by authors from Algeria: Bouchra Mouly, Souheyla Ferouani, and Ziani Kerarti Djalal. This paper presents a design and analysis of a gold nano patch circular antenna in Terahertz band for ON-Body WBAN applications using CST software.

Higher frequencies can be used to evolve communications infrastructure to handle an increase in the number of users and the amount of data consumed by each user. To meet this requirement, next-generation communication systems will use V and W band frequencies (40-115) GHz. In the third paper titled *Electromagnetically Coupled Semi-Circular Patch Antenna with Tapered Slotted Ground for V band, W Band and M Band Applications*, an electromagnetically linked semi-circular antenna with tapered slotted ground for broadband mm-wave applications is proposed. By combining a tapered slot structure with parasitically coupled patches, a wide bandwidth is obtained. The authors are Tapan Nahar and Sanyog Rawat from India.

The main purpose of the fourth paper titled *Enhancement of Bandwidth and Gain using Proximity Coupled DGS Structure Patch Antenna for WiMAX / 5G Band Applications* is to present a design of a dual band, proximity coupled feed micro strip patch antenna for 2.4 GHz (WiMax 2.4-2.5 GHz) and 4.7 GHz (5G Band 4.5-4.9 GHz) frequencies. The authors, Ambavaram Pratap Reddy and Pachiyannan Muthusamy from India, have used slot-cutting approach on the top layer and DGS (Defected Ground Structure) on ground layer for bandwidth and gain improvement.

In the fifth paper titled *Filterless Photonic Millimeter Wave Generation and Data Transmission for 5G Indoor Wireless Access*, a simple, cost-effective and reliable full-duplex optical carrier suppressed (OCS) radio over fiber (RoF) system with focus on a photonic generation method of millimeter wave (MMW) enabled by one DP-MZM (dual parallel-Mach Zehnder Modulator) modulator without filtering to realize ubiquitous 5G indoor wireless access is proposed. The proposed system ensures a practical solution to be considered as a compelling candidate for

5G applications to cope with the demands of multi-Gb/s data transmissions in indoor wireless access networks. The paper is written by Belkacem Anes and Borsali Ahmed Riadi from Algeria.

The last sixth paper *Recent Trends of Electromagnetic Pulse Mean for Denied Vehicular Access Application or Vehicle Immobilization* reviews and provides insights into current trends in the methods used by researchers and companies to develop and invent the denied vehicular access application. There are three types of electromagnetic pulses (EMPs) sources that may be used to stop vehicles: High Altitude Electromagnetic Pulse (HEMP), Ultra-Wideband (UWB), and High Power Microwave (HPM). The current trends in system development are reviewed from three perspectives, namely company-government cooperation, current commercial products, and pattern invention. The development and invention strategies discussed can be used by law enforcement to stop cars involved in criminal activity. Development in resolving problems using conventional methods can help reduce the risk of injury to law enforcement and the general public as well as the criminals involved. The authors are Fandi Hamid, Azli Yahya, Kok Yeow You, Tian Swee Tan, and Man Seng Sim are from Malaysia.

Report of the 57th edition of ICEST conference, under the name, *International Scientific Conference on Information, Communication and Energy Systems and Technology* is given by Conference Chairmen, Prof. Dr. Mitko Kostov. The Conference was held on 16-18 June 2022, at Ohrid, North Macedonia.

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 even a year.

I would like to acknowledge the reviewers for their efforts and time that they gave to the assessment of submitted manuscripts, which enabled the authors to disseminate their work at the highest possible quality. Without the dedication of reviewers, it would be impossible to manage an efficient peer review process!

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