

**ICICC-2020**  
**International Conference on Innovative Computing and  
Communication**  
Organized by Shaheed Sukhdev College of Business Studies, New  
Delhi, India On 21-23<sup>rd</sup> Feb 2020.

\*\*\*\*\* **CALL FOR PAPERS** \*\*\*\*\*

**SPECIAL SESSION ON**

**Application of Metamaterials in Antennas at high frequencies including THz (AMATHz)**

**SESSION ORGANIZER:**

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**SESSION DESCRIPTION:**

Application of metamaterials is a novel approach adumbrating the physics of artificial materials in the field of planar antennas. Since the birth of the negative index metamaterials field, there have been many efforts to extend the frequency of operation of such materials from the microwaves to the optical regime, targeting mainly telecommunications and imaging-related applications. These efforts though encounter serious challenges, stemming mainly from the non-perfect conductor behavior of the metal (which is the basic constituent of today's metamaterials) in the optical regime and the high losses involved, as well as from the current limitations in the fabrication capabilities which make the fabrication of submicron and nanoscale structures difficult. The world is moving towards miniaturization competing with the handheld miniaturized modern devices using antennas. The objective of the special session on "Application of Metamaterials in Antennas at high frequencies including THz" is to review the efforts to face the above mentioned challenges and to highlight the recent progress in the field of optical metamaterials and its application in planar antennas. Novel phenomena, structures, fabrication techniques and capabilities, as well as newly discovered possibilities of optical metamaterials will be also discussed. This special session is open for submission of high quality research contributions from academia and professionals. Original research papers, practical applications, case studies and state of the art reviews will be accepted. We anticipate that the special session will open new entrance for further research and technology improvements in this important area.

**RECOMMENDED TOPICS:**

Topics to be discussed in this special session include (but are not limited to) the following:

- Antenna and absorber applications of metamaterials
- RF and microwave metamaterials: design, properties, applications
- Millimeter wave/THz metamaterials and applications
- Optical metamaterials and their applications
- Miniaturization of planar antennas using metamaterials
- Broadening of bandwidth of planar antenna using metamaterials
- High frequency substrate limitations for antenna design
- Parameter extraction of metamaterials
- Physics of metamaterials in antennas

**SUBMISSION PROCEDURE:**

Researchers and practitioners are invited to submit papers for this special theme session “Application of Metamaterials in Antennas at high frequencies including THz” **on or before 1<sup>st</sup> December 2019** . All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE’S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at [http://icicc-conf.com/paper\\_submission.html](http://icicc-conf.com/paper_submission.html). All submitted papers will be reviewed on a double-blind, peer review basis.

**NOTE:** While submitting paper in this special session, please specify “Application of Metamaterials in Antennas at high frequencies including THz” at the top (above paper title) of the first page of your paper.

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