

Vol. 16 No. 2 (Quarterly)

Hyderabad, May 2024

52  
52

# The IUP Journal of **Telecommunications**

24/10/24  
SP



**IUP Publications**  
(A Division of The ICFAI Society)  
[www.iupindia.in](http://www.iupindia.in)



# The IUP Journal of Telecommunications

Vol. 16 No. 2

May 2024

## Contents

### Focus

5

#### Enhancing 6G Coverage: A Comparative Study of SINR Optimization in Urban and Suburban Environments

7

*Chigozirim Ajaegbu, Kanu U Richmond, Ruth Amanze and Seun Ebiesuwa*

#### An IoT-Based Pressure Sensor Mechanism for Human-Elephant Conflict Mitigation

25

*Melvin Aji and Renju John*

#### Novel Design of a Wideband Millimeter Wave Antenna with X-Shaped Extended Patch Corners and Dual L-Type Slots for Wearable Applications

36

*Ambresh P A, Jagadeesha S D and Amit Birwal*

#### Enhancing Radial Distribution Network Performance Through Network Reconfiguration and Capacitor Placement: A Comparative Study

46

*Samson Oladayo Ayanlade, Abdulrasaq Jimoh, Abdullahi Aremu,  
Abdulsamad Bolakale Jimoh, Fatina Mosunmola Aremu  
and Adedire Ayodeji Babatunde*

