

Session Title: [TG3] RF and Microwave for Medical Applications

Session Date: December 4 (Thu.), 2025

Session Time: 13:20-15:00
Session Room: Room G (303)

Session Chair(s): Fu-Kang Wang (National Sun Yat-sen University, Taiwan)

Youngwook Kim (Sogang University, Korea)

[TG3-1] [Invited] 13:20-13:40

## Integration of RF MEMS and CMOS RFIC for Infrared Sensing

Huei Wang and Pei-Hsiang Wang (National Taiwan University, Taiwan); Zhixing Lin (University of California, Davis, USA); Yuen-Sum Ng (National Taiwan University, Taiwan); Melisa Gulseren and Matthew Benson (University of California, Davis, USA); Yunshan Wang, Jun-Han Lin, Chun-Wei Hsu, Sheng-Fu Zhuang, Xin-Hao Huang, Sheng-Chun Chen and Sheng-Wei Shih (National Taiwan University, Taiwan); Qun Jane Gu (Georgia Institute of Technology, USA); Juan Sebastián Gomez-Diaz (University of California, Davis, USA)

[TG3-2] [Invited] 13:40-14:00

Evolution of Human Exposure Research in Response to Changes in Radiofrequency Service

Jung Ick Moon (Electronics and Telecommunications Research Institute, Korea (South))

[TG3-3] 14:00-14:20

In Vivo Signal Attenuation of Ingestible Electronics: Propagation Across Frequency Bands and pH Levels

Ziyao Zhou and Hen-Wei Huang (Nanyang Technological University, Singapore)

[TG3-4] 14:20-14:40

## Application of mmWave FMCW Radar to Measure Thickness of Materials and 3D Imaging

Edrick Baijukya and EunMi Choi (Ulsan National Institute of Science and Technology (UNIST), Korea (South))

[TG3-5] 14:40-15:00

## A Low-Profile Circumgyrated Shaped GCPW Patch Antenna for Wireless Medical Telemetry Services

Nayab Gogosh (COMSATS University Islamabad, Pakistan); Sohail Khalid (University of Management and Technology, Pakistan); Musa Hussain (Griffith University, Queensland, Australia); Adnan Iftikhar and Muhammad Farhan Shafique (COMSATS Institute of Information Technology, Pakistan); Syed Muzahir Abbas (Macquarie University, Australia)