



## [WeA1] Small Antennas and RF Sensors

<b>Date / Time</b>	Oct. 24 (Wed.), 2018 / 13:00-14:40
<b>Place</b>	Room A (Grand Ballroom 1)
<b>Session Chairs</b>	You-Chung Chung (Daegu University, Korea) Rangsan Wongsan (Suranaree University of Technology, Thailand)

### WeA1-1

13:00-13:20

#### TM<sub>02</sub> Quarter Mode Substrate-Integrated Waveguide Resonator for Dual Sensing of Chemicals

Ahmed Salim and Sungjoon Lim  
*Chung-Ang University, Korea*

### WeA1-2

13:20-13:40

#### Two-Element Compact Antenna Arrays with Four-Branch Diversity Using Directional Couplers and Phase Shifters

Kengo Nishimoto, Yasuhiro Nishioka, and Naofumi Yoneda  
*Mitsubishi Electric Corporation, Japan*

### WeA1-3

13:40-14:00

#### Dual-Beam Steering Antenna Using Switchable Small Patches on PCB Based Square Patch

Uaychai Yatongchai, Piyaphorn Meesawad, and Rangsan Wongsan  
*Suranaree University of Technology, Thailand*

### WeA1-4

14:00-14:20

#### Dual-Band Patch Antenna for Communication and Moisture Measurement of Coffee Bean

Hwan-Sul Chang and You-Chung Chung  
*Daegu University, Korea*

### WeA1-5

14:20-14:40

#### Design of Electrically Small and Thin Huygens Source Antenna

Su-Hyeon Lee, Sonapreetha Mohan Radha, Geonyeong Shin, and Ick-Jae Yoon  
*Chungnam National University, Korea*