

# Technical Program of APMET2016

Venue: Nagasaki University, Nagasaki, Japan

Room: Lecture Room 109 (1F in General Laboratory, Bunkyo-Campus)

Organized by: IEEE Antennas and Propagation Society (AP-S), Fukuoka Chapter  
Co-Organized by: IEICE Kyushu Section  
Nagasaki University  
Assisting Foundation: Murata Science Foundation

## Opening Remark

October 21, 2016 (Friday), 08:50–09:00

## Session 1 (Chair: *Vakhtang Jandieri*)

October 21, 2016 (Friday), 09:00–10:45

- 09:00–09:35 Advanced Planar Rectenna Technology .....  
.....*Ichihiko Toyoda and Eisuke Nishiyama (Saga University, Japan)*
- 09:35–10:10 Dielectric Resonator Antenna with Filtering Response .....  
.....*Yongmei Pan and Pengfei Hu (South China University of Technology, China)*
- 10:10–10:45 Numerical Examination on Transmission Properties of FBG with GPU Support  
*Angger Abdul Razak and Mitsuhiro Yokota (University of Miyazaki, Japan)*

## Session 2 (Chair: *Takeshi Fukusako*)

October 21, 2016 (Friday), 11:00–12:45

- 11:00–11:35 Scattering Properties of Transmission — Resonant Cavities in a Thick Con-  
ducting Screen .... *Young-Ki Cho (Kyungpook National University, Korea)*
- 11:35–12:10 Study on Spectral-Domain Approach Based on Recursive Transition-Matrix  
Algorithm for Electromagnetic Scattering from Circular Cylinder Arrays ....  
.....*Koki Watanabe (Fukuoka Institute of Technology, Japan)*
- 12:10–12:45 A Printed Inverted-F Antenna for Wideband Operation .....  
.....*Takafumi Fujimoto (Nagasaki University, Japan)*

## Session 3 (Chair: *Zhiqi Meng*)

October 21, 2016 (Friday), 13:45–15:30

- 13:45–14:20 Collocation and Expansion Methods in the Numerical Treatment of Singular  
Integral Equations for Light Scattering from a Noble Metal Strip .....  
.....*Akira Matsushima and Yusuke Naori (Kumamoto University, Japan)*
- 14:20–14:55 Double Balanced Multiplier Integrated Polarization Agile Microstrip Antenna  
... *Eisuke Nishiyama, Takahiro Ino, and Ichihiko Toyoda (Saga University, Japan)*

- 14:55–15:30 Impedance Chart for Strongly Coupled Transmission Lines .....  
 .. *Dooseok Choi, Wonbin Hong, and Wee Sang Park (Pohang University of  
 Science and Technology, Korea)*

**Session 4 (Chair: Sangwook Nam)**

October 21, 2016 (Friday), 15:45–17:30

- 15:45–16:20 Successive Estimation Technique in Microwave Tomography for Concrete Di-  
 agnosis ..... *Zhiqi Meng (Fukuoka University, Japan)*
- 16:20–16:55 Rigorous Analysis of Electromagnetic Scattering by Periodic Structures of Plas-  
 monic Nanowires ..... *Vakhtang Jandieri (University of Duisburg-Essen,  
 Germany) and Kiyotoshi Yasumoto (Kyushu University, Japan)*
- 16:55–17:30 Bi-directional and Low-Profile Antennas .... *Takeshi Fukusako (Kumamoto  
 University, Japan), Kittima Lertsakwimarn (Rambhai Barni Rajabhat Univer-  
 sity, Thailand), and Yuki Ogata (Kumamoto University, Japan)*

**Evening Session (Buffet Dinner)**

October 21, 2016 (Friday), 18:00–20:00

Place: COOP Cafeteria in Nagasaki University

**Session 5 (Chair: Eisuke Nishiyama)**

October 22, 2016 (Saturday), 09:00–10:45

- 09:00–09:35 Numerical Analysis of Electromagnetic Pulse Wave Propagation in Nonlinear  
 Dielectric Medium by Constrained Interpolation Profile (CIP) Method .....  
 ..... *Hiroshi Maeda (Fukuoka Institute of Technology, Japan)*
- 09:35–10:10 Nature-Inspired Microstrip Antennas For High-Directivity: Fractals and Ge-  
 netics ..... *Jaume Anguera (Fractus, Spain  
 and Universitat Ramon LLull, Spain), Jeevani Jayasinghe (Wayamba Univer-  
 sity of Sri Lanka, Sri Lanka), Disala Udawawala (University of Peradeniya, Sri  
 Lanka), Changhyeong Lee, Dajung Han, Heejoon Park, and Sungtek Kahng  
 (Incheon National University, Korea)*
- 10:10–10:45 CMOS Class-E Power Amplifier Module for 5 GHz Application .....  
 ..... *Haruichi Kanaya (Kyushu University, Japan)*

**Session 6 (Chair: Hung-chun Chang)**

October 22, 2016 (Saturday), 11:00–12:45

- 11:00–11:35 Microstrip Line Fed Inverted L Antenna Printed on Dielectric Substrate .....  
 ..... *Mitsuo Taguchi (Nagasaki University, Japan)*

- 11:35–12:10 Determination of Impedance Parameters among Antennas near Objects .....  
 ..... *Yoon Goo Kim (Hanwha Thales, Korea) and Sangwook Nam (Seoul National University, Korea)*
- 12:10–12:45 Multiple One-Dimensional FDTD Method for Edge/Boadside Coupled Transmission Lines ... *Eng Leong Tan and Zaifeng Yang (Nanyang Technological University, Singapore)*

**Session 7 (Chair: Hiroshi Maeda)**

October 22, 2016 (Saturday), 13:45–15:30

- 13:45–14:20 On Parametric Representation of UWD Radar Signatures .....  
 ..... *Masahiko Nishimoto (Kumamoto University, Japan)*
- 14:20–14:55 Circuit Applications of Patch Elements .....  
 ..... *Shaoyong Zheng (Sun Yat-sen University, China)*
- 14:55–15:30 Electromagnetic Characteristics of Plasmonic Waveguides with a Dielectric Substrate .. *Hung-chun Chang and Hsuan-Hao Liu, and Hsiang-Peng Chen (National Taiwan University, Taiwan)*

**Closing Remark**

October 22, 2016 (Saturday), 15:30–15:40