

Technical Program of APMET2008

Opening Remark

October 24, 2008 (Friday), 08:50–09:00

Session 1 (Chair: *H. J. Eom*)

October 24, 2008 (Friday), 09:00–10:40

- 09:00–09:25 DRTM Analysis of Back Scattering from Target over Rough Surface
..... **K. Uchida**, *J. Honda, H. Fujii, M. Nakagawa (Fukuoka Institute of Technology, Japan), and K. Y. Yoon (Keimyung University, Korea)*
- 09:25–09:50 Theoretical Analysis of Bit Error Rate of Satellite Communications in Ka-Band through Atmospheric Turbulence
..... **T. Hanada**, *K. Fujisaki (Kyushu University, Japan), and M. Tateiba (Ariake National Colleges of Technology, Japan)*
- 09:50–10:15 Characterization of Parallel Plate Structures and Their Resonance Reduction by EBG-Formation
..... **S. Kahng** (*University of Incheon, Korea*) and **J. P. Kim** (*KARI in Daejon, Korea*)
- 10:15–10:40 Phase Characteristics of Periodic Metal Strips on Dielectric Layer in Parallel Plate Waveguide
..... **J. R. Cho** and **D. C. Park** (*Chungnam National University*)

Session 2 (Chair: *B. Gupta*)

October 24, 2008 (Friday), 11:00–12:15

- 11:00–11:25 Directivity of Radiation from a Localized Source Coupled to Electromagnetic Crystals
..... **V. Jandieri** (*Kumamoto University, Japan*), **K. Yasumoto** (*Kyushu University, Japan*), and **B. Gupta** (*Jadavpur University, India*)
- 11:25–11:50 Radiation Characteristics of Microstrip Patch Antenna with DNG Material Substrate **A. Kusunoki** (*Oita University, Japan*)
- 11:50–12:15 Two Element Phased Dipole Antenna on EBG Ground Plane — Part 2 — ..
..... **M. Taguchi** and **D. Iwanaka** (*Nagasaki University, Japan*)

Session 3 (Chair: *M. Taguchi*)

October 24, 2008 (Friday), 13:30–15:10

- 13:30-13:55 Applications of Soft Computing in Antenna Research at Jadavpur University .. **B. Gupta**, *S. Chakraborty, P. Mukherjee, S. Biswas, and I. Bhattacharyya (Jadavpur University, India)*
- 13:55-14:20 Stacked Rectangular Microstrip Antenna with a Shorting Plate and a Helical Pin for Triple Band Operation in ITS
..... **T. Fujimoto** and **K. Iwanaga** (*Nagasaki University, Japan*)

- 14:20-14:45 Broadband Circularly Polarized Aperture Antennas Using L-Shaped Probe **T. Fukusako** (*Kumamoto University, Japan*)
- 14:45-15:10 Latest EMC Technologies Focused on EM Wave Absorbers in Korea **D. I. Kim** and **S. H. Park** (*Korea Maritime University, Korea*)

Session 4 (Chair: K. Uchida)

October 24, 2008 (Friday), 15:30–17:10

- 15:30-15:55 Scattering from a Conducting Cylinder Surrounded by a Phase-Changing Screen **Z. Meng** (*Fukuoka University, Japan*), **M. Tateiba** (*Ariake National College of Technology, Japan*), and **K. Haruta** (*NEC Corporation, Japan*)
- 15:55-16:20 Features for Landmine Discrimination with Ground Penetrating Radar **M. Nishimoto**, **T. Tanaka**, **Y. Kimura**, and **V. Jandieri** (*Kumamoto University, Japan*)
- 16:20-16:45 Simplified Monitoring Technique for Seasonal Wetland Water Area Change Using Quad Polarimetric SAR Data **R. Sato**, **Y. Yamaguchi**, and **H. Yamada** (*Niigata University, Japan*)
- 16:45-17:10 Information Retrieval from ALOS PALSAR and Airborne PI-SAR Images **Y. Q. Jin** (*Fudan University, China*)

Evening Session (Forum Banquet)

October 24, 2008 (Friday), 17:30–19:30

Session 5 (Chair: S. Ohnuki)

October 25, 2008 (Saturday), 09:00–10:40

- 09:00-09:25 Mode-Matching Formulation for Scattering from Multiple Slant Strips **H. J. Eom**, **J. S. Ock**, and **J. Y. Park** (*Korea Advanced Institute of Science and Technology, Korea*)
- 09:25-09:50 Analysis of Stop Band Characteristics by Multilayered Dielectric Gratings **Y. Okuno**, **A. Matsushima**, and **T. Suyama** (*Kumamoto University, Japan*)
- 09:50-10:15 Extraction of Effective Permittivity and Permeability of Periodic Metamaterial Cells **D. H. Lee** (*Pohang University of Science and Technology, Korea*), **T. T. T. Quynh** (*Vietnam National University in Hanoi, Vietnam*), and **W. S. Park** (*Pohang University of Science and Technology, Korea*)
- 10:15-10:40 Multilevel Green's Function Interpolation Scheme for Large Scale Electromagnetic Simulations **Y. Shi** (*City University of Hong Kong, Xidian University, China*) and **C. H. Chan** (*City University of Hong Kong, China*)

Session 6 (Chair: *D. C. Park*)
October 25, 2008 (Saturday), 11:00–11:50

- 11:00-11:25 Two-Dimensional Scattering from a Periodic Array of Dielectric Cylinders ...
..... **M. Yokota and M. Sesay** (*University of Miyazaki, Japan*)
- 11:25-11:50 Electromagnetic Scattering from Imperfectly Periodic Structures
..... **K. Watanabe** (*Fukuoka Institute of Technology, Japan*)

Session 7 (Chair: *S. Kahng*)
October 25, 2008 (Saturday), 13:30–15:10

- 13:30-13:55 S-Parameter Measurement of Photonic Crystal Waveguide and Cavities by
Scaled Model for Microwave
..... **H. Maeda** (*Fukuoka Institute of Technology, Japan*)
- 13:55-14:20 Rigorous Analysis of Wide-Band Directional Coupler Using -Shape Dielectric
Waveguide .. **S. Xu and M. Huang** (*University of Science and Technology of
China, China*)
- 14:20-14:45 Computer Simulation of 3-Dimensional Waveguide by Method of Moment ...
..... **M. Tanaka and K. Tanaka** (*Gifu University, Japan*)
- 14:45-15:10 Mode Characteristics of Triangle-Shaped Groove Plasmonic Waveguides
... **C. C. Chung, B. Y. Lin, and H. C. Chang** (*National Taiwan University,
Taiwan*)

Session 8 (Chair: *K. Watanabe*)
October 25, 2008 (Saturday), 15:30–16:45

- 15:30-15:55 Filament Model for Computing Impedances of Conducting Wires and Trans-
mission Lines
..... **A. Matsushima and M. Matsuki** (*Kumamoto University, Japan*)
- 15:55-16:20 Analysis of Electromagnetic Scattering from Polygonal Cylinders
..... **S. Ohnuki, R. Ohsawa, and T. Mochizuki** (*Nihon University, Japan*)
- 16:20-16:45 Semi-Analytical Approach for a Specific Microstructured Fiber Formed by Lay-
ered Cylindrical Arrays of Circular Rods
..... **K. Yasumoto** (*Kyushu University, Japan*)

Closing Remark
October 25, 2008 (Saturday), 16:45–16:50