Technical Session	Technical Session Organizer
2.7 Microwave Plasma Interaction	Peter Duelis (peter.u.duselis@raytheon.com)

Session TU 2.6: Microwave Plasma Interaction

Tuesday, May 23, 2017 from 16:00-18:00, Wildwood 15

Session Chair: Peter Duselis, Raytheon

16:00 TU 2.6-1 IONOSPHERIC MODIFICATION TESTS OF ARTIFICAL IONIZATION AND WAVE GENERATION
P. A. Bernhardt, B. Y. Rock, N. Pereira
Plasma Physics Division, Naval Research Laboratory, Washingon, DC, United States

16:15 TU 2.6-2 (invited) MICROWAVE INTERACTIONS WITH INTENSE LASER PRODUCED AIR-PLASMAS
B. Y. Rock[1], M. Helle[1], J. Palastro[1], J. Penano[1], R. Fischer[1], S. Melis[2]
[1]*Plasma Physics Division, The U.S. Naval Research Laboratory, Washington, DC, United States*
[2]*Physics Department, Georgetown University, Washington, DC, United States*

16:45 TU 2.6-3 STUDIES ON THE PLASMA-ADDED INTENSIFICATION OF GIGAHERTZ RADIO FREQUENCY SIGNALS
F. Kong[1], Q. Nie[1], Y. Sun[1], Z. Zhang[1], X. Wang[2], B. Jiang[1]
[1]*School of Electrical Engineering and Automation, Harbin Insititute of Technology, Harbin, China*
[2]*Physics Department, Harbin Insititute of Technology, Harbin, China*

17:00 TU 2.6-4 SYNTHETIZATION OF SIGNALS BY THE TRANSMISSION AND SUPERPOSITION OF BIPOLAR IMPULSES IN FREE SPACE
Z. Shaw, W. Feilner, J. C. Dickens, A. A. Neuber
Center for Pulsed Power and Power Electronics, Texas Tech University, Lubbock, TX, United States

17:15 TU 2.6-5 MICROWAVE ABSORPTION IN WARM STEALTH PLASMA
M. S. Bawaaneh[1], Y. -C. Ghim[2], A. Al-Khateeb[1]
[1]*Dept. of Physics, Yarmouk University, Irbid, Jordan*
[2]*Dept. of Nuclear Engineering, KAIST, Daejeon, Korea*

17:30 TU 2.6-6 HIGH-POWER MICROWAVE SWITCHING UTILIZING LOW-TEMPERATURE GAS DISCHARGE TUBE
A. Semnani[1], S. O. Macheret[2], D. Peroulis[1]
[1]*School of Electrical and Computer Engineering, Purdue University, West Lafayette, IN, United States*
[2]*School of Aeronautics and Astronautics, Purdue University, West Lafayette, IN, United States*

17:45 TU 2.6-7 A REVIEW OF TURBULENCE PHENOMENA IN MICROWAVE ELECTRONICS (THEORETICAL APPROACHES AND RESULTS OF EXPERIMENTS)
D. I. Trubetskov, Y. A. Kalinin, A. V. Starodubov
Department of Physics of nonlinear systems, Saratov State University, Saratov, Russian Federation

Session WE 1.6: Microwave and Plasma Interactions, Vacuum Microelectronics and THz Devices and Slow Wave Devices

Wednesday, May 24, 2017 10:00-11:30, Wildwood 15

Session Chair: Rebecca Seviour, Huddersfield University

10:00 WE 1.6-1 RESEARCH PROGRESS ON LINEAR AVALANCHE MULTIPLICATION GAAS TERAHERTZ EMITTER
S. Wei, L. Hong, W. Ling
Applied Physics Department, Xi'an Uniecersity of Technology, Xi'an Shaanxi, China

10:15 WE 1.6-2 EFFECTS OF THZ TRANSMISSION ON THE NARROW GAP DC GLOW DISCHARGE PLASMAS
N. Alasgarzade[1], H. Altan[1], D. Mansuroglu[1,2], A. B. Sahin[3], I. U. Uzun-Kaymak[1]
[1]*Physics Department, Middle East Technical University, Ankara, Turkey*
[2]*Canakkale Onsekiz Mart University, Canakkale, Turkey*
[3]*Ankara Yildirim Beyazit University, Ankara, Turkey*

10:30 WE 1.6-3 NEXT GENERATION IONOSPHERIC HEATER ARRAY
B. Esser, J. C. Dickens, J. J. Mankowski, A. A. Neuber
Center for Pulsed Power and Power Electronics, Texas Tech University, Lubbock, TX, United States

10:45 WE 1.6-4 STUDYING PERMITTIVITY AND ELECTRIC FIELD FOR PLASMA GENERATION BY DIELECTRIC RESONATOR ARRAYS
S. Dennison, J. Hopwood, A. Chapman
Electrical and Computer Engineering, Tufts University, Medford, MA, United States

11:00 WE 1.6-5 DESIGN OF OVERSIZED TWTS WITH PHOTONIC BAND-GAP STRUCTURES
G. Rosenzweig, J. C. Stephens, M. A. Shapiro, R. J. Temkin
Plasma Science and Fusion Center, Massachusetts Institute of Technology, Cambridge, MA, United States

11:15 WE 1.6-6 A 140 GHZ GYRO-AMPLIFIER USING A DIELECTRIC-LOADED, SEVER-LESS CONFOCAL WAVEGUIDE
A. Soane, M. A. Shapiro, R. J. Temkin
MIT, Cambridge, MA, United States