IEEE International Microwave Symposium

IMS 2012 Montreal

Workshop

"Emerging Technology of Terahertz Imaging Systems, Devices, and Algorithms"

Organized by Professor Magda El-Shenawee, University of Arkansas
Professor Aly Fathy, University of Tennessee

Friday June 22, 2012 from 8:00am to 5:00pm

Recent applications of terahertz imaging include non-destructive evaluation, security screening, inspection of IC devices and packaging, detection of bio-threat, and cancer detection and assessment. This workshop is related to Terahertz Technology and Applications, Biological Effects and Medical Applications, and RF Nanotechnology. It will address recent research progress in terahertz systems, passive and active devices, sources, and imaging algorithms.

Dwight L. Woolard and James O. Jensen
U.S. Army Research Office, RTP, NC, USA 27709-2211 and U.S. Army Edgewood Chemical Biological Center, Edgewood, MD, USA 21010-5424, US ARMY
"Novel Man-Engineered Bio-Nano-Materials for THz/IR-Based Sensing & Medical Applications"

Goutam Chattopadhyay
NASA-Jet Propulsion Laboratory, California Institute of Technology, M/S 168-314
4800 Oak Grove Drive, Pasadena, CA 91109-8099
"Technology, capabilities, and performance of low power THz sources"

Katsuhiro Ajito
NTT Microsystem Integration Labs., NTT Corp., 3-1, Morinosato-Wakamiya, Atsugi, Kanagawa, 2430198, JAPAN
"Terahertz Chemical Imaging of Crystal Polymorphism for Pharmaceutical Applications"

Qing Hu
MIT
"High-Performance THz quantum cascade lasers and applications"

Wojciech Knap, Dominique Coquilat, Frederic Teppe and Nina Dyakonova
Université Montpellier - CNRS, Place. E. Bataillon 34950 Montpellier, France
"Terahertz Detection by Nanometer Field Effect Transistors: Physics and First Imaging Applications"

Safieddin Safavi-Naeini
University of Waterloo, Canada
"Si-based millimeter-wave/THz integrated technologies"

Imran Mehdi and Peter Siegle
Jet Propulsion Laboratory, Pasadena, CA
"THz Imaging Radar: Technology development for multi-pixel multi-color architectures"

Andrew Gallant and Martyn Chamberlain
Microsystems Technology, School Of Engineering, Durham University, Durham, UK
"Plasmonics for imaging and spectroscopy between radio and light"

Magda El-Shenawee
University of Arkansas
"Inverse Scattering Algorithms for Assessing Breast Tumor Margins using Terahertz Waves"

Kubilay Sertel
Ohio State University
"T-ray Vision: Focal Plane Array Sensors for Real-time THz Imaging"

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We hope to see you in Montreal

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