2016 IEEE MTT-S Latin America Microwave Conference (LAMC 2016)
Puerto Vallarta, Mexico, Dec. 12-14, 2016

Special Sessions

SS-5: (IEEE SIGHT/HAC Session) Enabling Information and Communications Technologies (ICT) for Humanitarian Aid (We-2)

Day: Tuesday, December 13; Room: Violeta/Tulipan; Time: 8:50–10:50

Organizers:

Tushar Sharma (iRadio Lab, University of Calgary) and
José E. Rayas-Sánchez (ITESO – The Jesuit University of Guadalajara)

Abstract:
Technology is enabling people increasingly being at the heart of humanitarian aid. Although the number of natural disasters and human conflicts continues to rise worldwide, access to communication technologies is increasing significantly faster. To build resilience and improve survivability in humanitarian crisis, the ongoing technological revolution may provide our greatest hope and opportunity. The IEEE Microwave Theory and Techniques Society (MTTS) and Antennas and Propagation Society (APS) recognize the roles they have outside their professional lives. In particular, MTTS/APS Special Interest Group in Humanitarian Technology (SIGHT) focuses on motivating high school students, young engineers, and professionals to apply low-cost innovative RF technologies for disaster readiness and humanitarian needs. To align with the IEEE Humanitarian Activities Committee (HAC) vision, in this special session we introduce several humanitarian initiatives involving wireless RF technologies with impactful local changes. Given the social and economic configuration of Latin America, this region offers a great opportunity for SIGHT/HAC projects, particularly those involving RF and microwave technologies, with a very high potential for significant positive impact, including areas such as disaster management, health care, low-cost wireless solutions, internet of space, emergency ad-hoc networks, agriculture, food, energy, security, etc.

Time	ID	Paper#	Title / Authors / Affiliations
8:50 to 9:00	We-2-1	-	**Opening Remarks and Introduction to MTTS APS SIGHT** Eric Mokole IEEE Antennas and Propagation Society
9:00 to 9:20	We-2-2	142	**An Agile and Accurate Microwave System for Tracking Elderly People Occupancy at Home** G. Paolini, M. Del Prete, F. Berra, D. Masotti, A. Costanzo University of Bologna, Bologna, Italy
9:20 to 9:50	We-2-3	-	**ICT Solutions for Agricultural Challenges in the Caribbean of Nicaragua** Mario Alemán[1] and Marvin R. Arias[2] [1]IEEE Humanitarian Activities Committee (HAC), [2]National University of Engineering, Managua, Nicaragua
9:50 to 10:10	We-2-4	183	**Improving the interaction of Down syndrome students through the use of RFID technology** J. L. Jadán-Guerrero[1], L. A. Guerrero[2], T. Sharma[3] [1]Universidad Tecnológica Indoamérica, Quito, Ecuador, [2]Universidad de Costa Rica, San Pedro de Montesdeoca, Costa Rica, [3]University of Calgary, Calgary, Canada
10:10 to 10:30	We-2-5	-	**Launching a Successful Career by Starting with Amateur Radio** James C. Rautio President & CEO of Sonnet Software
10:30 to 10:50	We-2-6	-	**Wireless infrastructure for connecting the last billion** Ibrahim Khalil NXP Semiconductors, Phoenix, AZ, USA