

# **Connected Future Summit at IMS 2022: Program and Speakers**

**Tuesday June 21, 2022**

**Denver Convention Center**

**Welcome Address – Upkar Dhaliwal (8:00 AM – 8:15 AM)**

## **Session 1: The Connected Future**

**Keynote – Smart Cities and Our Connected Future (8:15 AM – 9:00 AM)**



**Dessa Bokides**

**Chief Operating and Financial Officer, NEOM Tech & Digital Company**

For more than three decades Dessa Bokides has forged a formidable career with some of the most recognized organizations in the financial and technology sectors. As Chief Operating and Financial Officer at NEOM Tech & Digital Co., she is responsible for setting the strategic financial and operational direction of the company and ensuring that it has the people and technology in place to create lasting value.

Created to power the world's first cognitive ecosystem, NEOM Tech & Digital Company is developing and implementing the foundational infrastructure as well as a network of AI enabled technological solutions to seamlessly connect the physical and digital worlds. NEOM, it's parent, is a planned giga-project in Saudi Arabia incorporating cutting edge, sustainable and advanced technologies to re-imagine and create the city of the future.

Before joining NEOM Tech & Digital Co., Bokides served as the COO and CFO of Galvanize, a technology learning company. Her work lay the foundation for its sale to K-12, a public company, for \$165 million.

Throughout her career, Bokides has fulfilled several executive level financial and operational leadership roles for banking giants, including Goldman Sachs and Deutsche Bank. She has also been a C-suite executive for Fortune 500 companies, private equity-backed and startup firms. They include Global Corporate Treasurer for GMAC and Chairperson for GMAC Bank (now Ally Financial) during the financial crisis, CFO of the global logistics and real estate firm Prologis and Corporate Treasurer of the international e-commerce and business services company, Pitney Bowes.

Bokides received an MBA from Columbia University and a BA in Anthropology from Colorado College. She serves on the Board of PBS12 in Denver and is a founder of the Hidden Brain Drain Task Force, a coalition of companies committed to global talent innovation and issues affecting women and minorities.

## Connected Transportation (9:00 AM – 9:30 AM)



**Joyti Sharma**

**Senior Manager - Network Planning in the Technology, Architecture and Planning team at Verizon Wireless**

Dr. Jyoti Sharma is responsible for defining architecture and strategy for Verizon's Network, Enterprise & Consumer products and services. Jyoti has over 20 years of industry experience in technology and telecommunication roles including: Wireless Systems engineering, System performance, and new technology introduction. Currently, she's focused on defining Technology Strategy for Emerging Technologies including Thin Client and Vehicle-to-Everything (V2X) and represents Verizon on the 5G Automotive Association (5GAA) Board.

Jyoti is leading a cross functional team to demonstrate V2X Use cases over 5G ad MEC leveraging other products and services with partners across V2X ecosystem, Prior to her current role at Verizon, Jyoti worked at Nokia, Alcatel-Lucent and Lucent in the Wireless R&D Organization defining base band algorithms, running simulations and writing requirements for 3G/4G/5G Wireless Networks and contributing to the 3GPP standards.

Jyoti is a Senior Member of IEEE and currently serves as the Chair of Women In Engineering at the IEEE North Jersey Section. She has worked as an Adjunct Professor at the Fairleigh Dickinson University and the DeVry University. Jyoti earned a Ph.D. in Electrical Engineering from the Indian Institute of Technology, Delhi, India, a Master's in Telecommunications from the Asian Institute of Technology, Bangkok, Thailand and a Bachelor's in Electronics & Communications Engineering from the Delhi Institute of Technology, Delhi, India

## Unmanned Aerial Vehicles (9:30 AM – 10:00 AM)



**Professor Peter Burke**

**University of California, Irvine**

- Department of Electrical Engineering and Computer Science
- Department of Biomedical Engineering
- Department of Chemical Engineering and Materials Science

### **“Unmanned Aerial Systems: Who owns the airspace?”**

The future will bring us autonomous flying taxis, unpiloted and human-occupied vehicles. This will create a major buzz in society, and leads to the question of who owns and who controls the airspace? Today there are five times more UAV pilots than manned aircraft pilots in the USA, according to the FAA. But in order for this to become a reality,

microwave and communications engineers must be at the forefront of this technology. The drone industry is nearing a point of inflection that will require microwave and RF-based solutions to enable command, control, identification, integration with manned aircraft into the national airspace, and remote radar detection technologies of potential threats. Further developments of drones in RF are being developed for flying permanent or temporary (e.g. during natural disasters) 4G and 5G hotspots by several startups and subsidiaries of large marque tech. companies. The issues involve stakeholders and technologies from multiple disciplines of engineering and society, including ASTM, IEEE ComSoc, MTT-S, and other IEEE Societies. This talk covers recent state of the art, challenges, and opportunities in this growing field, and will drive the audience to appreciate this amazing of manned and unmanned aircraft integration.

**Peter J. Burke** received the Ph.D. degree in physics from Yale University, New Haven, CT, USA, in 1998. From 1998 to 2001, he was a Sherman Fairchild Postdoctoral Scholar in physics with the California Institute of Technology, Pasadena, CA, USA. Since 2001, he has been a Faculty Member with the Department of Electrical Engineering and Computer Science, University of California at Irvine, Irvine, CA, USA. His current research interests include EECS, BME, chemical and biomolecular engineering, materials science and engineering, and chemical and materials physics, and drones. He is has a part 107 FAA certificate and is a Fellow of the IEEE.

## Session 2: Spectrum, Standards and Innovation

### Fireside Chat – “Non-Terrestrial Networks: Cellular in space and High-Altitude Platforms for coverage” (10:15 AM – 11:15 AM)

Host: Francesco Carobolante, IoTissimo, LLC



#### **Francesco Grilli, Vice President, Product Management Qualcomm Technologies, Inc.**

Francesco Grilli is vice president of product management at Qualcomm Technologies, Inc. where he is responsible for the roadmap planning of Satellite Communication and Location technologies.

From 2011 through 2021 he was responsible for the Modem feature planning for all Qualcomm cellular based Modem products. From 2008 through 2011 Francesco was part of the Strategic IP Department at Qualcomm. From 1999 through 2008 Francesco represented Qualcomm at 3GPP meetings and participated to the development of the UMTS and the LTE standards. He served as RAN2 Vice-Chairman for four years. From 1998, when he joined Qualcomm, to 1999, Francesco contributed to the development of IS-801 — the first position-location standard for cellular systems.



#### **Lizy Paul - Chair National Spectrum Consortium, 5G.MIL Program Director Lockheed Martin**

Lizy Paul is the Elected Chair of the National Spectrum Consortium. Lizy is also the Director of 5G.MIL™ Programs for Lockheed Martin Corporation. Prior to her current position with Lockheed Martin, she was the Director of Technical Strategy for the Defense Communications Solutions at Collins Aerospace, a Raytheon Company. Paul has a MSEE from Johns Hopkins University and an MBA from University of Iowa. She holds 16 patents in RF Communications technologies. She has held Engineering leadership and research positions at Motorola, Ericsson and Hughes Network Systems.



#### **Carmel Ortiz - Vice President, Systems Innovation, Intelsat**

Carmel Ortiz has more than 30 years of experience in the telecommunications, satellite, and digital media industries. In her current role as Vice President of Systems Innovation at Intelsat, Carmel is responsible for the ideation, design, and development of large breakthrough technology initiatives that will reshape Intelsat's offerings. Prior to joining Intelsat, Carmel was the Vice President/Chief Systems Engineer of OneWeb, where she was responsible for the overall system engineering, design, and performance of the low-earth orbit (LEO) broadband communication system.

**Spectrum MHz to THz (11:15 AM – 12:00 PM)**

**“Spectrum policy, availability, and usage UHF to THz”**

**Speaker TBD**

# Lunchtime Panel Session w/RFIC – “Race to the Next G -- Ride the mmWave or Wave Goodbye!” (12:10 PM – 1:20 PM)

**Moderators:** Francois Rivet (Bordeaux Institute of Technology) and Aida Vera Lopez (Intel)

## Panelists:

- Khurram Muhammad, Samsung Research America
- Shariar Shahramian, Nokia-Bell Labs
- Emilio Calvanese, CEA-France
- John Strange, MediaTek Inc.
- Omar Bakr, Tarana Wireless
- Mike Noonan, MixComm
- Reza Arefi, Intel (spectrum and regulatory strategies, and standards)



Khurram Muhammad



Shariar Shahramian



Emilio Calvanese



John Strange



Omar Bakr



Mike Noonan



Reza Arefi

**Abstract:** Who could have imagined a decade ago that mmWave would be a candidate for wireless communications, namely 5G? With major investments from network operators, system architects and chip makers to make it happen, should we even question mmWave 5G practicality and economics? And if mmWave does dominate 5G, would that mean the road is paved for THz in 6G? This panel will re-examine the technology and economics of 5G millimeter-wave deployment and assess the potential use of THz technologies in next-generation 6G wireless communications. The panelists will include experts from various industry sectors and academia.



## Session 3: Next-Generation Technologies

### 6G Wireless (1:30 PM – 2:00 PM)



#### **Charlie Zhang - Senior Vice President of Samsung Research America**

#### **“Road to the Future of 6G Wireless Connectivity”**

**Abstract:** With the recent history and experience on 5G as our guide, we will share our perspective and shed some light on the state of the art for 5G as well as the initial 6G vision of bringing the next hyper-connected experience to every corner of life. We intend to provide a holistic view from an industry perspective that includes megatrends driving technology evolution towards 6G, new services envisioned and enabled, as well as technical requirements to realize these new services. The expected technical requirement on throughput, architecture and security will likely

be a major step up compared to 5G requirements, and it is therefore critical for the research community to start early and develop technologies to overcome these challenges. While 6G technologies are still in its early days, a few emerging directions are taking shape and gaining momentum in academia and industry alike, including the support of a new spectrum such as Terahertz (THz) band, novel antenna technologies, evolution of duplex technology and network topology, spectrum sharing, AI as a native part of the protocol design, etc.

**Charlie Jianzhong Zhang** is Senior Vice President and head of the Standards and Mobility Innovation Team at Samsung Research America, where he leads research, prototyping, and standards for 5G/6G and future multimedia networks. He is also currently serving as the Chair of the Board with FiRa Consortium, which is dedicated to the development of seamless user experiences using the secured fine ranging and positioning capabilities of interoperable UWB technologies. From 2009 to 2013, he served as the Vice Chair of the 3GPP RAN1 working group and led development of LTE and LTE-Advanced technologies such as 3D channel modeling, UL-MIMO, CoMP, Carrier Aggregation for TD-LTE. He received his Ph.D. degree from the University of Wisconsin, Madison. Dr. Zhang is a Fellow of IEEE.

## Next Gen Wireless Telecommunications (2:00 PM – 2:30 PM)



**Anand Shah - Verizon Wireless Director, Global Network and Technology**

### **“The NextG Alliance”**

**Anand Shah** is an innovative, forward-thinking leader who thrives on solving the most complex business problems in today’s data-rich and tech-heavy environment. He manages a diversified portfolio of consumer and enterprise innovations including 5G, IoT, Multi-Access Edge Compute, Cloud, Private Networks, and Security Products. Anand has been with Verizon for 10+ years

and rotated through many technology and leadership roles. He serves as the essential catalyst for developing and driving technology plans across the business.



## Reconfigurable Electronics, Materials and Systems (2:30 PM – 3:00 PM)



**Prof. Dr. Holger Maune**

**Chair of Microwave and Communication Engineering, Otto von Guericke University Magdeburg – “Reconfigurables for a Smart Society”**

**Abstract:** Reconfigurable systems will facilitate a “smart society,” in which our communications systems will sense, track, and adapt in real time a massive number of communication nodes, both fixed and mobile. Enhanced and new hardware concepts and innovative technologies for smart user devices, terminals and base stations are crucial for the deployment of these new platforms and services, allowing applications such as serving multiple users with a fixed antenna configuration and keeping antenna beams aligned at all times in the case of mobile users.

This talk gives an overview of reconfigurability in the RF frontend to realize smart systems that can adapt to the requirements set by future communication systems, either ground or satellite based. Different approaches for array antennas, reconfigurable intelligent surfaces (RIS) and technologies for their respective implementation will be discussed. Technologies such as semiconductor, micromechanics (MEMS), and functional materials such as liquid crystals (LC) will also be highlighted

**Holger Maune** received the Dipl.-Ing., Dr.-Ing., and the Habilitation (venia legend) degrees in communications engineering from the Technische Universität Darmstadt, Darmstadt, Germany, in 2006, 2011, and 2020, respectively. Since 2021, he has been Full Professor of electrical engineering and holds the Chair of Microwave and Communication Engineering at the University of Magdeburg, Magdeburg, Germany. His research interests include reconfigurable smart radio frequency (RF) systems based on electronically tunable microwave components such as phase shifters, adaptive matching networks, tunable filters, duplexer, and multiband antennas. Their integration into system components such as adaptively matched power amplifiers, reconfigurable RF frontends or fully integrated electronically beam-steering transceiver antenna arrays is in the focus of the work. The tunable microwave components are based on novel approaches and innovative functional materials and technologies such as ferroelectric (BST) thin- and thick films and microwave liquid crystals (LC). Beyond novel concepts and system design, his main interest is on modeling and precise high-frequency characterization. Moreover, dedicated functional tests such as intermodulation and harmonic distortion are of major interest for system integration.

## **Session 4 – Telepresence and 6G Challenges**

**Telepresence and Robotics (3:20 PM – 4:00 PM)**

**Speaker TBD**

## Panel Session: “Will flexibility and digital bottlenecks break 6G?” (4:00 – 5:00 PM)

**Moderator: Arnaldo Oliveira, University of Aveiro, Aveiro Portugal**

### Panelists:

- **Aarno Pärssinen**, Professor, Research Area Lead in 6G Flagship, Centre for Wireless Communications, University of Oulu
- **Charlie Jianzhong Zhang**, Senior Vice President of Samsung Research America
- **Christian Fager**, Head of Microwave Electronics Laboratory, Department of Microtechnology and Nanoscience, Chalmers University of Technology
- **Raghu M. Rao, Director**, Wired and Wireless Group at AMD Xilinx
- **Timothy O'Shea**, CTO, DeepSig, Research Assistant Professor at Virginia Tech



Aarno Pärssinen



Charlie Zhang



Christian Fager



Raghu M. Rao



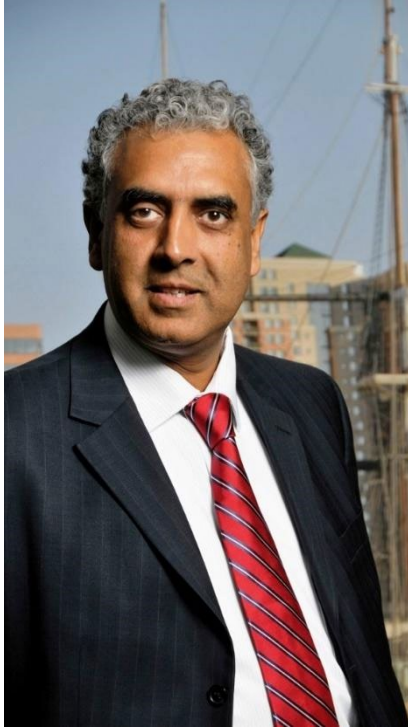
Tim O'Shea

**Abstract:** Use cases envisioned for 6G and their associated performance metrics will require new approaches and technologies to achieve the needed efficiency and flexibility. The ever-increasing bandwidths, bit rates and network densification necessitate higher degrees of digitization and, more recently, the adoption of AI/ML techniques to cope with the complexity and adaptability. Besides the important advantages of digitization in terms of flexibility and integration, several efficiency and performance bottlenecks still remain, leading to the question: "Should we do more in the RF/analog domain due to digital performance bottlenecks?"

This panel will join experts from industry and academia to discuss various challenges in the development of 6G systems. It will focus on the open issues and opportunities towards 6G, mostly from the digital point of view. Topics to be discussed include digital signal processing challenges; architectures for ultra-reliable and low-latency communications; efficiency, linearization, autonomy and sustainability aspects; as well as analog and digital signal processing tradeoffs, in particular for ultra-wideband signals.

# Connected Future Summit Organizing Committee

Connected Future Summit General Chair, Session Chair,



**Upkar Dhaliwal**

**Future Wireless Technologies**

<https://www.linkedin.com/in/upkar/>

**Upkar Dhaliwal** C.Eng. MIET, SMIEEE, MSc UCL, General Chair 5G Summit San Diego 2019, [IEEE TTM 2018](#) Local Arrangements, [IEEE San Diego Section](#) Senior Past. Chair, [IEEE COM-SOC Region 6 NA Board Past](#) Member, [IEEE IOT-J](#) Steering ExCOM, [SDN-I](#), [5G-I](#), CEO [Future Wireless Technologies](#), Biz Dev: [Cognition Systems](#), [Phluido](#), [AgShift](#), [Big Data Federation](#), [Assured Wireless](#)

Upkar Dhaliwal is a Parallel Entrepreneur and Wireless Technology subject matter expert on Mobility, He has hands on wireless and internet experience undertaking Application, Intellectual Property, Business Development and Technical advisor support on Present and Future Wireless Technologies and its product development for startups, OEMs, private equity and with most of Market Leaders.

A Professional Chartered Engineer of [Engineering Council UK](#), He is a Senior Wireless & RF System Architect Executive, an industry expert serving on numerous industrial/technical/policy bodies with US National Policy influences and technical societies with specialized knowledge and technical leadership for many Start up, Internet Giants and the investment community. He has worked at BBC, Marconi, Thorn-EMI Electronics, Samsung, Qualcomm, STMicroelectronics until taking up more innovative roles.

At present, working on beyond 4G charting towards 5G in terms of UxV, Cognitive Radios, Distributed Mesh Sensor Radios and beyond LTE-Advance into the World of Big Data and Internet of Things IoT that will drive the next generation of Internet. Volunteering in many IEEE roles.

He grew up in West London England and studied for Bachelors & Masters Degrees in Engineering, Leeds and University College London Universities respectively, leading to early career experiences & contributions in device modeling, circuit design and subsystem developments where he led worldwide engineering teams in some World Class Firsts. Some new Firsts are still being implemented in MANET connected devices, Hybrid Cloud Services and Predictive Insight Big Data.



**Francesco Carobolante, Principal, IoTissimo® LLC**

Francesco Carobolante is Principal at IoTissimo, where he helps global organizations and young companies develop technology and business strategies to compete in today's fast-changing high-tech world. His 10-years' experience as Vice President Engineering at Qualcomm, combined with many years in senior leadership roles for major semiconductor firms and start-ups, enabled him to develop leading edge products for Mobile, Computing, Audio and Communication.

Creator of many industry "firsts" and recipient of Best of Innovation Award Honoree at 2015 Consumer Electronic Show, Carobolante is a renowned innovator and market development leader with extensive track record in

establishing strategic technology partnerships across multiple industry sectors.

He authored over 90 US patents, and has been invited keynote speaker and expert panelist at several premier international conferences. He also serves on the Board of technology startups and volunteers his time by providing mentoring to technology incubators and universities.

He received Master of Science in Electrical Engineering (MSEE) degrees from both University of Padova, Italy and UCLA, California.



**Nuno Borges Carvalho, University of Aveiro, Portugal**

Nuno Borges Carvalho is a Full Professor and Senior Research Scientist with the Institute of Telecommunications, University of Aveiro, Portugal and an IEEE Fellow. His main research interests include software-defined radio front-ends, wireless power transmission, nonlinear distortion analysis in microwave/wireless circuits and systems, and measurement of nonlinear phenomena. He has been involved in the design of dedicated radios and systems for newly emerging wireless technologies. He has coauthored four books and has been a reviewer and author of over 400 papers in magazines and conferences. He is the Editor in Chief of the Cambridge Wireless Power Transfer Journal, an associate editor of

the IEEE Microwave Magazine, former associate editor of the IEEE Transactions on Microwave Theory and Techniques and IET Microwaves Antennas and Propagation Journal and is the co-inventor of six patents. He is a Distinguished Lecturer for the RFID-Council and was a Distinguished Microwave Lecturer for the IEEE Microwave Theory and Techniques Society. In 2022 he is the IEEE-MTT President-Elect.





**Debabani Choudhury, Intel**

Debabani Choudhury is with Intel Labs, the research division of Intel Corporation, USA, where she directs the R&D on platform integration and various RF/mmWave/sub-THz technologies/ architectures for the next-generation communication and sensing applications. She was with the NASA Jet Propulsion Laboratory (JPL), working on terahertz (THz) devices and components for space-based heterodyne receiver applications. At Hughes Research Laboratories, HRL Labs and Millitech Corporation, she developed various RF/mm-wave/terahertz (THz) technologies for space, defense, government, and automotive applications. Debabani holds a PhD in Electrical Engineering. She has a broad range of expertise in RF, mmWave, and THz devices, circuits, antennas, arrays, system, packaging, heterogeneous integration, EM and various platform integration technologies. Debabani Choudhury was elected as IEEE Fellow in 2011, has more than 40 patents/patent applications and numerous publications. She received several NASA Recognition awards for her work on heterodyne-receivers, devices, local oscillators, multipliers, guided structures/IC modules developed for space and defense applications. She also received multiple Intel Gordon Moore awards for research excellence at Intel Labs. She is a recipient of the IEEE Journal of Solid State Circuits (JSSC) 2019 Best Paper Award.

**Aida L Vera Lopez, Intel**





**Arnaldo S.R. Oliveira, University of Aveiro, Portugal**

Arnaldo S. R. Oliveira received the B.Sc. and M.Sc. degrees in electronics and telecommunications, and in 2007 the Ph.D. degree in electrical engineering from the University of Aveiro, Aveiro, Portugal. He is currently a Researcher with the Telecommunications Institute, University of Aveiro. Since 2001, he has been teaching computer architecture, digital systems design, programming languages, and embedded systems with the University of Aveiro, where he is currently an Assistant Professor. He participates in several national and European funded research projects. He is the author or coauthor of more than 100 journal and international conference papers. His research interests include reconfigurable digital systems, software defined radio, and next generation radio access networks.



**Kate A. Remley, NIST**

Kate A. Remley is the Leader of the Metrology for Wireless Systems Project in the Communications Technology Laboratory at the National Institute of Standards and Technology in Boulder, CO. Her research activities include development of calibrated measurements for microwave and millimeter-wave wireless devices and standardized over-the-air test methods for the wireless industry. Dr. Remley is a Fellow of the IEEE and was the recipient of the Department of Commerce Bronze and Silver Medals, an ARFTG Best Paper Award, the NIST Schlichter Award, and is a member of the Oregon State University Academy of Distinguished Engineers. She was the Chair of the MTT-11 Technical Committee on Microwave Measurements (2008-2010), the Editor-in-Chief of IEEE Microwave Magazine (2009-2011), and Chair of the MTT Fellow Evaluating Committee (2017-2018). She was a Distinguished Lecturer for the IEEE Electromagnetic Compatibility Society (2016-2017) and is the Co-Technical Program Chair for IMS2022.



### **Chonggang Wang, InterDigital Communications**

Dr. Chonggang Wang is a Principal Engineer at InterDigital Communications. He has 20+ years of experience in the fields of wireless communications, networking, and computing, including research, development, and standardization. His current research interests include 6G cellular systems, blockchain and distributed ledger technologies, decentralized and pervasive intelligence, cybersecurity, and quantum internet. He participates in industry standardization activities with ETSI, IETF/IRTF, oneM2M, IEEE, and 3GPP. He is the founding Editor-in-Chief of IEEE Internet of Things Journal and is currently the Editor-in-Chief of IEEE Network - The Magazine of Global Internetworking. He is a Fellow of the IEEE for his contributions to internet of things enabling technologies.



### **Hung-Yu Wei, National Taiwan University**

Hung-Yu Wei is a Professor in Department of Electrical Engineering and Graduate Institute of Communications Engineering, National Taiwan University. Currently, he serves as Associate Chair in Department of Electrical Engineering. He received the B.S. degree in electrical engineering from National Taiwan University in 1999. He received the M.S. and the Ph.D. degree in electrical engineering from Columbia University in 2001 and 2005 respectively. He was a summer intern at Telcordia Applied Research in 2000 and 2001. He was with NEC Labs America from 2003 to 2005. He joined Department of Electrical Engineering at the National Taiwan University in July 2005. His research interests include wireless networks, IoT, fog/edge computing, and game theoretical models for communications networks. He has been actively participating in NGMN, IEEE 802.16, 3GPP, IEEE P1934, and IEEE P1935 standardization. He serves as Vice Chair of IEEE P1934 Working Group to standardize fog computing and networking architecture. He serves as Secretary for IEEE Fog/Edge Industry Community. He was the Chair of IEEE VTS Taipei Chapter during 2016-2017. He serves as Associate Editor for IEEE Systems Journal and IEEE Internet of Things Magazine. He is currently the Chair of IEEE P1935 working group for edge/fog management and orchestration standard.



**Dylan Williams, NIST**

Dylan F. Williams joined the Electromagnetic Fields Division of the National Institute of Standards and Technology in 1989 where he develops electrical waveform and microwave metrology. He has published over 140 technical papers and is a Fellow of the IEEE. He is the recipient of the Department of Commerce Bronze and Silver Medals, the Astin Measurement Science Award, two Electrical Engineering Laboratory's Outstanding Paper Awards, three Automatic RF Techniques Group (ARFTG) Best Paper Awards, the ARFTG Automated Measurements Technology Award, the IEEE Morris E. Leeds Award, the European Microwave Prize and the 2013 IEEE Joseph F. Keithley Award.

Dylan also served as Editor of the IEEE Transactions on Microwave Theory and Techniques from 2006 to 2010, as the Executive Editor of the IEEE Transactions on Terahertz Science and Technology, and as the 2017 President of the IEEE Microwave Theory and Techniques Society. He is the Co-Technical Program Chair for IMS2022.