

STRESSWORKSHOP CONFERENCE:

SHORT BIO:

John Dallesasse (IEEE Fellow) is the Gregory E. Stillman Professor in Electrical and Computer Engineering in the Grainger College of Engineering at the University of Illinois at Urbana-Champaign (UIUC), where he's been since 2012. He also has over 20 years of industry experience in technology development and executive management, having led technically diverse and geographically distributed engineering teams. His engineering team at Molex/Emcore was the first to successfully commercialize 10GBASE-LX4 optical transceivers at scale, enabling early high-speed optical networking over legacy multimode fiber. Prior to joining the faculty at UIUC he was the Chief Technology Officer, Vice President, and co-founder of Skorpis Technologies where he was responsible for developing innovative methods for heterogeneous integration of compound semiconductors with silicon for silicon photonic applications. His technical contributions include, with Nick Holonyak, Jr., the discovery of III-V Oxidation, which has become an enabling process technology for the fabrication of Vertical-Cavity Surface-Emitting Lasers (VCSELs) for optical networking, 3D imaging, and LIDAR applications – a multi-billion-dollar industry. His research group at UIUC works on novel methods for heterogeneous integration using epitaxial transfer which have been applied to the fabrication of VCSELs and other photonic devices on silicon, on laser mode control methods which have been used to generate record single-mode powers in conventional VCSEL structures, and on mid-IR emitters using quantum transition structures within a transistor structure (the transistor-injected quantum cascade laser or TI-QCL). His group at Illinois has demonstrated the highest single-mode power in a conventional VCSEL structure using novel mode-control methods. John has over 150 publications and conference presentations, and 54 issued patents. He serves or has served as the Chair of the Steering Committee for the IEEE Journal of Lightwave Technology, the Chair of the Steering Committee for the IEEE Transactions on Semiconductor Manufacturing, as the Vice President of Technical Committees for IEEE-EDS, as the Vice President of Strategic Directions for IEEE-EDS, as a member of the Board of Governors for IEEE-EDS, as the Editor-in-Chief for the IEEE Journal of Quantum Electronics, and is currently the President-Elect of the IEEE Electron Devices Society. In addition to being a Fellow of the IEEE he is also a Fellow of Optica.