

The Use of Process Simulation Tools for the Development of Compound Semiconductor Devices and Integrated Circuits

C.H. Fields

Agilent Technologies
1400 Fountaingrove Parkway
Santa Rosa, CA 95403
Phone: (707)-577-5005
email: Charles.fields@agilent.com

Charles H. Fields (S'89-M'97-SM'02) received a B.S. in Electrical and Computer Engineering from the University of California at Irvine in 1992, and an M.S. and Ph.D. in Electrical Engineering and Computer Science in 1993 and 1997, respectively, from the University of California at Berkeley. His doctoral dissertation involved the development of an *in-situ* tool for characterizing optical lithography wafer stepper systems. Dr. Fields was a Senior Project Manager at HRL Laboratories, L.L.C. in Malibu, CA from 1997-2011 and was the HRL Trusted Foundry Program Manager. He was part of a team working on InP HBT devices and circuits in an attempt to increase circuit speed, performance, and yield. His current research work involves photolithography for advanced III-V devices and circuits, process simulation, and high frequency device characterization and modeling. Dr. Fields is currently employed as an R&D Engineer at Agilent Technologies in Santa Rosa, CA where he is part of the integration team working on a variety of compound semiconductor technologies. He holds 6 US patents, 27 Trade Secrets, and has authored or co-authored over 70 publications and presentations in the areas of advanced lithography, process simulation, and processing of compound semiconductor devices and circuits.

Dr. Fields is a senior member of the IEEE and member of SPIE

