

## John D. Cressler – Biographical Sketch

Schlumberger Chair Professor  
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**John D. Cressler** received his B.S. from Georgia Tech in 1984, and his Ph.D. from Columbia University in 1990. From 1984 to 1992, he was on the research staff at the IBM Thomas J. Watson Research Center, and from 1992 to 2002 he served on the faculty at Auburn University. In 2002, he joined the faculty at Georgia Tech, and is currently Schlumberger Chair Professor of Electronics in the School of Electrical and Computer Engineering.

The basic thrust of Cressler's research is to develop novel micro/nanoelectronic devices, circuits and systems for next-generation applications within the global electronics infrastructure. He and his team attempt to break the business-as-usual mold in this field and re-imagine the way electronics in the 21<sup>st</sup> century can and should be practiced. His research interests include: Si-based (SiGe/strained-Si) heterostructure devices and technology, mixed-signal (analog, digital, RF-sub-mmW) circuits built from these devices, radiation effects, cryogenic electronics, device-to-circuit interactions, noise and reliability physics, device-level simulation, and compact circuit modeling. He and his students have published over 600 scientific papers in this field and he has graduated 45 Ph.D. students during his academic career. He was elected Fellow of the Institute of Electrical and Electronics Engineers (IEEE) in 2001 for his research contributions, and was awarded the 2010 *Class of 1940 W. Howard Ector Outstanding Teacher Award* (Georgia Tech's top teaching award), the 2011 *IEEE Leon Kirchmayer Graduate Teaching Award* (the IEEE's top graduate teaching award), and the *Class of 1934 Distinguished Professor Award* (the highest honor Georgia Tech bestows on its faculty).

Cressler's books include: *Silicon-Germanium Heterojunction Bipolar Transistors*, *Reinventing Teenagers: the Gentle Art of Instilling Character in Our Young People*, *Silicon Heterostructure Handbook*, *Silicon Earth: Introduction to the Microelectronics and Nanotechnology Revolution*, *Extreme Environment Electronics*, and the historical novels *Emeralds of the Alhambra* and *Shadows in the Shining City*, love stories set in medieval Muslim Spain.

