



Graduate Seminar (EEL 6936)
Department of Electrical Engineering
http://ee.eng.usf.edu/Grad_Seminar

Dr. Kenneth H. Church

Founder, Sciperio Inc
Friday, November 22th, 2013, 12:55-1:55 p.m.
Chemistry Building, Room 111 (CHE 111)

A Technical Entrepreneur's View of 3D Printing

Abstract

This talk will cover the hype and the potential of 3D printing. 3D printing is now almost a \$2B per year industry and it is expected to grow to more than \$5B in the next few years. What would it take to make this a \$500B year industry? New materials, standards and implanting electronic features in the 3D printing process could make this a standard process for defense, medical, and consumer electronic, thus pushing the potential to more than a trillion dollars per year. Digital manufacturing is well on course to revolutionize the manufacturing industry and here 3D printing has the potential to anchor this, but not until a number of discoveries are made at the university level.

Biography



Dr. Church is the founder of Sciperio Inc., a research company for advanced innovation. Sciperio has worked and developed in a wide range of technical areas including electronics, antennas, tissue engineering, water, and sensors. Funding for these efforts has come from a variety of private and government entities. The technologies and companies that have spun out of Sciperio include nScript (a capital equipment company), VaxDesign (a rapid vaccine test company), and Newton Cyberfacturing (a contract manufacturing company). In addition to working with Sciperio, Dr. Church is also on the board of directors for both nScript and Newton Cyberfacturing. He is also a Trustee for the 1213 Charitable Trust (non-profit organization for disadvantaged children) and he serves as director of commercialization for the W.M. Keck Center for 3D innovation at University of Texas El Paso. His research interests have been

broad and have reached into lasers and the various ways in which they interact with different materials, various water technologies, novel antenna designs and optimization, novel and conformal electronic devices and processes, tissue engineered materials and processes, and direct and 3D printing. Dr. Church has managed numerous R&D projects funded by the Defense Advanced Research Projects Agency (DARPA), the National Science Foundation (NSF), the U.S. Air Force, the U.S. Navy, the U.S. Army, the Department of Justice, Missile Defense Agency (MDA), OCAST, National Institutes of Health (NIH), and various private institutions. Dr. Church earned a BS in both Physics and Electrical Engineering from Oklahoma Christian University of Science and Arts and an M.S. and Ph.D. in Electrical Engineering from Oklahoma State University.