Keynote speaker:

Radu Sporea , Ph.D.
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Presentation:
"**Constructive use of metal-semiconductor contact effects in thin-film transistors** "

Dr. Radu Sporea is a Lecturer in Power Electronics and Semiconductor Devices at the Advanced Technology Institute (ATI), Department of Electrical and Electronic Engineering, University of Surrey. His PhD research in Large Area Electronics (University of Surrey – 2011) focused on new types of electronic devices fabricated using polysilicon, then the state-of-the-art material system for display screens. Since, his research focused on the practical aspects of large-area electronics, specifically on using metal-semiconductor contact effects constructively for increased amplification and power efficiency. In 2010 he was awarded the EPSRC PhD+ (now Postdoctoral Prize) and, in 2011, the Royal Academy of Engineering Research Fellowship, both held at the University of Surrey. In 2014, Dr. Sporea was identified as one of the EPSRC Rising Stars in Engineering.

Dr. Sporea holds one patent on circuit energy efficiency, is the author of over 30 papers published in prestigious journals, and has given over 30 presentations, many invited, at the top international conferences. Dr. Sporea is the Secretary of the UK & Ireland chapter of the Society for Information Display, and serves on the technical committees of several of the best conferences in the area (ESSDERC, ITC, CADTFT), and part of the IEEE Flexible and Printed Electronics Working Group.

On the recently-awarded £950k EPSRC “Next Generation Paper” Grant, Dr. Sporea will be leading the printed electronic design and system integration. An augmented travel book prototype will be specified for pilot-scale production at VTT Finland. Printed sensors will track user gestures and handling of the book, and will allow the book to act as a “remote” control for interfacing with online and multimedia content without complicating the conventional book reading experience.

He is an experienced science communicator with activities in the UK and abroad, having led or contributed to numerous engagement and education activities at science festivals (Cheltenham Sci. Fest.; Pint of Science; BrightClub; British Science Association Award and Lecture for Engineering – 2015), on site (British Council Café Scientifique Hong Kong), on radio (Award-winning contributions to The Academic Minute, USA, 2015), television (BBC Shock and Awe: The Story of Electricity), and online. In 2016, he won the SATRO STEMX Public Sector Organisation Working with Schools Award for hosting Sixth Form summer research placements. He has received the 2017 Faculty Early Career Teaching Excellence Award at Surrey.