

Department of Electrical and Computer Engineering

Seminar Series Title: “Analog Electronics”

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20-24 May 2019

Abstract:

The seminar series will focus in the field of Analog Electronics for chip design and fabrication. The series will be divided into 5 seminars as shown:

Title	Date	Room
Analysis and behavioral modeling of monolithic current-feedback operational amplifiers (CFOA)	20/05/2019 1600-1800	XΩΔ02 - 013
Structures, principles of operation and behavioral modeling of CMOS digital potentiometers	21/05/2019 1600-1800	XΩΔ02 - 012
VHDL-AMS Model Development and Verification for Digitally Programmable Monolithic Instrumentation Amplifiers	22/05/2019 1600-1800	XΩΔ02 - 013
Digitally Programmable All-Pass CFA Filter Based on Follow-the-Leader-Feedback Topology	23/05/2019 1500-1600	XΩΔ02 - 013
High-order digitally programmable CFOA universal filter structures based on state variable approach	24/05/2019 1500-1600	XΩΔ02 - 013

Biography:

Dr. Ivaylo Padiev is an associate professor in the Department of Microelectronics at the Faculty of Electronic Engineering and Technologies, Technical University of Sofia. He obtained his PhD in 2000, in electronic circuits and systems theory, for macro-modeling of monolithic operational amplifiers from the Technical University of Sofia, Bulgaria, Faculty of Electronic Engineering and Technologies, Department of Microelectronics.

His research is related to theoretical analysis and modelling of analog/mixed signal chip design focusing on current-feedback amplifiers, PPLs for single phase grid connected inverters, analysis of programmable circuits using digital potentiometers and voltage-controlled current sources. Furthermore, he worked on the design and stability analysis of current-feedback operational amplifier and VHDL-AMS models for monolithic current conveyor based operational amplifiers.