Nineteenth IEEE International Vacuum Electronics Conference

IVEC 2018

April 24-26, 2018 — Marriott Conference Center

http://ivec2018.org — Monterey, CA 93940

Mini-course on Vacuum Electronics

Dear Colleagues,

We are pleased to announce that we are starting a mini-course on vacuum electronics technology under the auspices of the Nineteenth International Vacuum Electronics Conference (IVEC) that will be held in **Monterey, California** on **April 24-26, 2018**. The mini-course will be held on **April 23, 2018** at the Marriott Conference Center in Monterey where the main conference will also be held. The lectures will focus on the science and technology of vacuum electronics devices of both the slow and fast-wave persuasion. The lectures will cover the introduction to the physics of these devices and methods and techniques for designing various subsystems.

The goal of this mini-course is to provide an opportunity for students and new-entrants in the field to learn from seasoned practitioners of this technology. The lectures are designed to give the participants an understanding of the latest tools and design methodologies in this field. We have a diverse group of world renowned teachers, technologists and engineers covering various aspects of this field. The comprehensive lectures and course notes will be a useful tool for the participants to use in their day-to- day practice of the technology. The preliminary program and the lecturers are listed below in the program. More details will be posted on mini-course website at ivec2018.org/mini-course

Time		
8:00 AM – 8:30 AM	Registration	
	Room #1	Room #2
8:30 AM – 10:15 AM	Introduction to Linear Beam Tubes – Prof. John Booske, University of Wisconsin, Madison	Introduction to Fast-Wave Tubes - Prof Manfred Thumm, Karlsruhe Institute of Technology, Karlsruhe
10:15 AM – 10:30 AM	Coffee Break	
10:30 AM – 12:15 PM	Pierce Guns and Beam Focusing - Dr. Richard True	Cavities, Waveguides and Transmission Lines - Prof. Eunmi Choi, Ulsan National Institute of Technology, Ulsan
12:15 PM – 1:30 PM	Lunch	
1:30 PM – 3:15 PM	Physics of Simulations Tools for Vacuum Electronics Devices – Dr. Simon Cooke, Naval Research Laboratory, Washington, D.C.	Design of Electron Guns and Collectors for gyrotrons - Dr. Stephen Cauffman, Communication and Power Industries, Palo Alto, CA
3:15 PM – 3:30 PM	Coffee Break	
3:30 PM – 5:15 PM	Design of Depressed Collectors for TWTs - Dr. John J. Petillo and Dr. Aaron Jensen, Leidos Corporation	Theory and design of waveguide mode converters - Dr. Dietmar Wagner, Max Planck Institute for Plasma Physics, Garching

This is a pilot mini-course to help us gauge participant interest and hence seats are limited. We can accommodate a total of 40 participants evenly divided between the two parallel sessions. Registration is on a first come first served basis. The above program is not completely finalized and may change depending on availability of some lecturers. The registration fee for the day's mini-course is $100 USD, which is separate from the conference registration fee. Lunch and refreshments will be provided to the participants. We hope to continue and expand the scope of the mini-course in future IVECs based on the success of this pilot program. Any questions about the mini-course can be addressed to the program chair of IVEC 2018.

We hope to see some of you at the mini-course and all of you at IVEC 2018.

Sincerely,