

EEC 234 A, B, C

Physics and Technology of Microwave Vacuum Electron Beam Devices

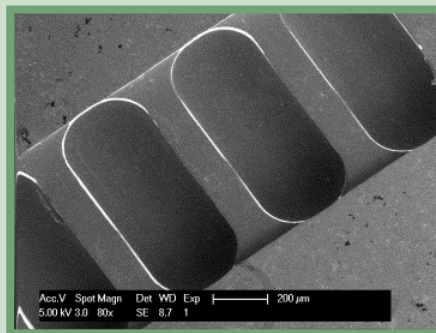
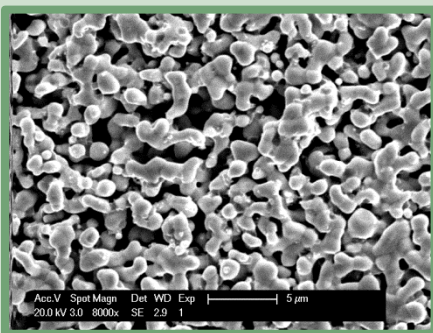
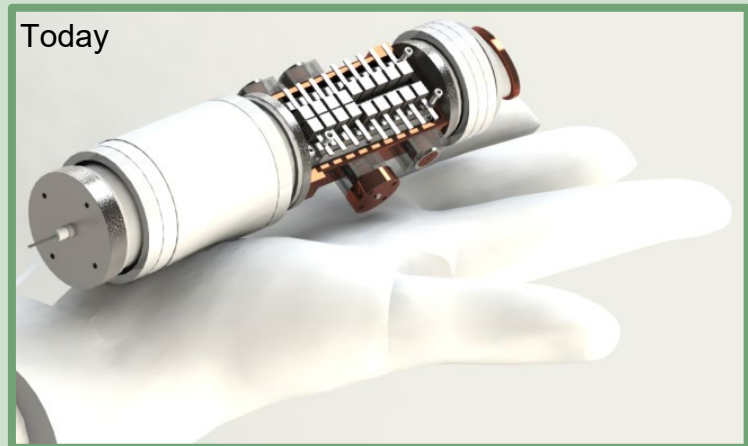
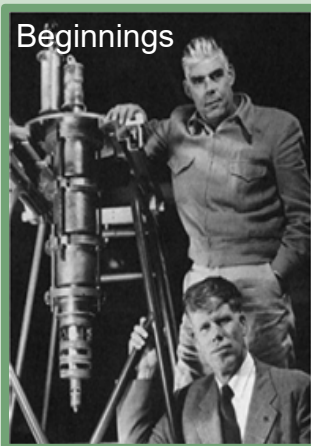
Fall 2020, Winter 2021, Spring 2021

N. C. Luhmann, Jr.

Introduces the discipline of microwave vacuum electronics by examining physics and technology of electron emission, flow and transport, space charge waves, and electromagnetic interaction with electron beams. The physical principles are explained with examples drawn from global applications, such as particle accelerator systems, RF power sources for radar, imaging, and satellite communication systems, thermionic energy conversion, and electric space propulsion with an emphasis on recent advances in materials and manufacturing technologies.

Zoom – Tuesday / Thursday 8:00 – 9:30 am

To register, look for EEC 234A 001 Vacuum Elec Beam Devices, CRN53382



Advances: Nanocomposite Materials, Nano- and Micro- Fabrication, Additive Manufacturing