

Biographical Summary

Kevin L. Jensen is a theoretical physicist whose research concerns emission properties of electron sources, particularly cold cathodes and photocathodes, but also thermal and secondary sources, for vacuum nanoelectronics, space-based applications, high power microwave generation, and particle accelerators and Free Electron Lasers. He has developed a thermal-field-photoemission model that combines all three emission mechanisms in one framework. His models have found application in beam optics codes used to model electron beam devices. Other theoretical models deal with tunneling and transport, geometric modifications to the emission equations, and impact of resonant effects on emission processes. He has written an encyclopedia chapter for Wiley on Field emission, and has authored a book entitled “Electron Emission Physics” (2007, Elsevier) and his most recent textbook “Introduction to the Physics of Electron Emission” is due to appear in 2017 (Wiley).