



IEEE

Cedar Rapids Section

Institute of Electrical and Electronics Engineers

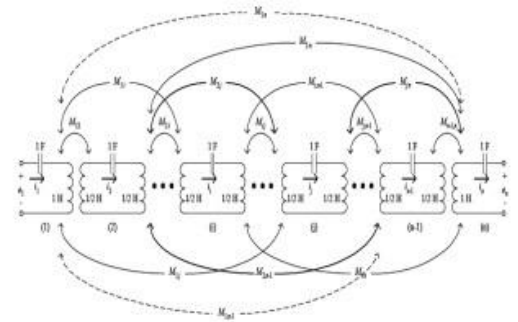
Microwave Theory and Techniques Society Chapter Presents:

Modern Methods for Microwave Filter Synthesis

Monday, September 21, 2015, 5:30 - 7:30 pm

The presentation will focus on the coupling matrix representation of microwave filter electrical networks and the many opportunities for advanced microwave filter design that it opens up.

Although there are a number of commercial software tools available for the design of such filters, they are often applied without proper understanding of the fundamentals involved or awareness of alternative designs better suited to the specifications in hand, resulting in a device which is sub-optimal in terms of electrical and mechanical performance. Younger upcoming designers tend to rely on these packages, largely due to a scarcity of reference works and journal articles on the subject of modern filter network synthesis methods.



These state-of-the-art filter synthesis methods will be presented along with the new possibilities for meeting the very stringent specifications demanded by modern telecommunication, broadcast, radar and scientific/earth observation satellite systems in a style that minimizes mathematics and jargon.

Speaker: Professor Richard Cameron (C.Eng, FIEEE, FIET), BSc Electronics with Telecommunications at the University of Loughborough 1969 subsequently joined the Marconi Space and Defence Company to begin a career devoted to the design and R&D of microwave equipment and systems for spacecraft and associated ground stations.



In 1975 he joined The European Space Research and Technology Establishment (ESTEC), the technical branch of the European Space Agency (ESA) primarily developing software for the design of advanced microwave equipment for space applications.

In 1984 Prof. Cameron joined ComDev of Canada to establish ComDev of Europe (CDE) branch, laying down the design foundations for the production of passive microwave devices and sub-systems for space application, and later for cellular communication systems.

Today Prof. Cameron retains an ad hoc consultant role with CDE after retiring in 2005.

Prof. Cameron has filed 8 patents; authored or co-authored many papers and is co-author of the book entitled, Microwave Filters for Communication Systems - Fundamentals, Design and Applications.

Details: Open to the public, free admission

Q & A period after the presentation

Where: Beems Auditorium A, Cedar Rapids Public Library
450 5th Ave. SE, Cedar Rapids, IA (Free Parking after 6PM)

Reservations: <http://www.ieee-cr-section.org/>
Click on meeting link in upper right corner of page.

