

The **B E E T**

The Bulletin of Electrical & Electronics Engineers of Tucson

IEEE TUCSON SECTION AND JOINT CHAPTER MEETING THE LIFE OF JAMES CLERK MAXWELL

Date: Tuesday, September 20, 2005, 6:00 P.M.
Speaker: Dr. James C. Rautio, IEEE/MTT Distinguished
Microwave Lecturer
Place: Harvill 150 at the U of A

James Clerk Maxwell stands shoulder to shoulder with Newton and Einstein, yet even those of us who have spent decades working with Maxwell's equations are almost totally unfamiliar with his life and times. This presentation, from the viewpoint of a microwave engineer, draws on many sources in providing an understanding of James Maxwell himself. What was Maxwell like as an infant? What was the tragedy at eight years old that profoundly influenced his life? What unique means of transportation did young Maxwell use to escape a cruel tutor? What memorable event occurred on his first day of school? When did he publish his first papers, and what were they about? What did Maxwell have to do with the rings of Saturn? Why did he lose his job as a professor? Why did he have a hard time getting another job? What was his wife like? What is Maxwell's legacy to us? The answers to these questions provide insight into Maxwell the person and add an extra dimension to those four simple equations we have studied ever since.

James C. Rautio received a BSEE from Cornell in 1978, a MS Systems Engineering from University of Pennsylvania in 1982, and a Ph. D. in electrical engineering from Syracuse University in 1986. From 1978 to 1986, he worked for General Electric, first at the Valley Forge Space Division, then at the Syracuse Electronics Laboratory. At this time he developed microwave design and measurement software, and designed microwave circuits on Alumina and on GaAs. From 1986 to 1988, he was a

visiting professor at Syracuse University and at Cornell. In 1988 he went full time with Sonnet Software, a company he had founded in 1983. In 1995, Sonnet was listed on the Inc. 500 list of the fastest growing privately held US companies, the first microwave software company ever to be so listed. Today, Sonnet is the leading vendor of 3-D planar high frequency electromagnetic analysis software. Dr. Rautio was elected a fellow of the IEEE in 2000 and received the IEEE MTT Microwave Application Award in 2001 and is an adjunct professor at Syracuse University.

Conferences Coming to Tucson

The 42nd Annual Applied Reliability Engineering and Management Institute will be held in Tucson on November 15-18, 2005. It provides engineers and managers reliability engineering theory and practice. For course information on either, details, and registration fees, see: <http://www.u.arizona.edu/~dimitri/Seminar.htm>

Feedback and Volunteering

We need to hear from you! We want to know what we can provide to make IEEE a better organization. If you have any ideas for meetings, any activities that promote engineering and the IEEE, let us know! We'd like to hear from you. Also, remember that we run this as a set of volunteers. If you put something into this organization, you can get much more out of it! We need you to help out! Contact us! Help out! Contact us!

New SSC Chapter Forming

There is a new Solid State Circuits Chapter in the Tucson Section! If you are an SSC member, or are just interested in the field, consider becoming active. We're looking for participants and speakers. If you want to do more with the chapter contact Joseph Wu at joewu@ieee.org or at 325-4781.

Senior Membership

Do you want to become a senior member of the IEEE? The IEEE wants to promote qualified candidates to senior membership! If you have 10 years of professional experience of which five years is significant professional performance, you are qualified for a senior member upgrade. Educational experience such as a bachelor's degree in an IEEE-designated field counts 4 years to that number, a master's degree counts 5 years and a doctorate counts 6 years. In order to find out more, point your web browser to www.ieee.org and search for senior membership!

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**Tucson Section Meeting
Tuesday, September 20, 2005
6:00 PM, at the U of A
Harvill 150 (SW of Electrical
and Computer Engineering)**

**(Southwest of Speedway and Mountain – Parking
available Northeast of Speedway and Mountain
after 5 P.M.)**

Refreshments Provided

Just find the link through our website and follow the directions.

Remember

- We're always looking for topics for general meetings, if you have an idea or a speaker in mind let us know!
- Also, check out the website at:

<http://ewh.ieee.org/r6/tucson>

There is an email mailing list for the Tucson Section. If you want email notices, you can put yourself on the list.