



**IEEE**

**Central Texas Section**

**www.ieee.org/CTS**

**Power & Energy Society**

**San Antonio Chapter**

**Date:** Thursday, January 27, 2011

**Time:** 6:00 to 6:30PM Social  
6:30 to 7:00PM Dinner  
7:00 to 8:00PM Speaker Presentation

**Dinner:** \$10 Members  
\$15 Non-members  
\*\*Free for students\*\*  
The price includes drink (iced tea or water), tip and tax.  
Barbeque meal includes brisket, beans and potato salad.

**Cash only please, No checks or credit cards.**

**Location:** Grady's  
6510 San Pedro  
San Antonio, Texas  
210-805-8036

**RSVP:** Please RSVP to Christina Gaydos @ **210-658-7250**, or  
[chris@grubbengineering.com](mailto:chris@grubbengineering.com).  
For more information go to our web site  
<http://ewh.ieee.org/soc/pes/centraltexas/sanantonio/index.html>

**Program:** Failure Analysis of Capacitors

**Speaker:** Stan Silvus

**About the Speaker:**

Education: BA, 1956, Rice University  
BSEE, 1957, Rice University  
MSEE, 1963, Rice University

Stan Silvus started designing electronic circuits and analyzing electronic and electrical components when he was in the seventh grade. During the summers that he was in college and for the first five years after he received his BSEE degree, he worked for Southwestern Industrial Electronics in Houston, Texas, where he designed a variety of electronic instruments.

Stan is a licensed professional engineer in the state of Texas, a life member of the Institute of Electrical and Electronics Engineers (IEEE), and a charter member of the Electronic Device Failure Analysis Society (EDFAS). For several years, he was a member of the Organizing Committee for the International Symposium for Testing and Failure Analysis (ISTFA). For many years, he presented a tutorial on Failure Analysis of Passive Components at ISTFA.

He has also served as a consultant to the Joint Electron Devices Engineering Council (JEDEC) Committee 14.6, which addressed standardization issues in semiconductor-device failure analysis. He has 42 publications, 21 of which deal with component-analysis topics, and 7 patents.

At ISTFA 2006, EDFAS awarded Stan its first-ever Lifetime Achievement Recognition.

### **Summary:**

When an electrical component fails in a critical application (e.g., a nuclear power plant) or in a high-volume commercial product, a key question arises: Was this an isolated event, or are all of the like components on the verge of failure? A detailed failure analysis can usually provide an answer to this question so that appropriate corrective actions may be pursued.

This presentation will briefly address preparations for a failure analysis as well as processes and tools used in failure analysis. Additionally, several examples of failed electrical components, specifically capacitors, and the findings of corresponding failure analyses will be discussed.

### **Directions to Grady's**

