

# What's All This APEC Stuff, Anyway?

**After taking in this year's APEC, Paul Rako gives his reasons why attending trade shows and conferences should be an essential part of any engineer's job.**

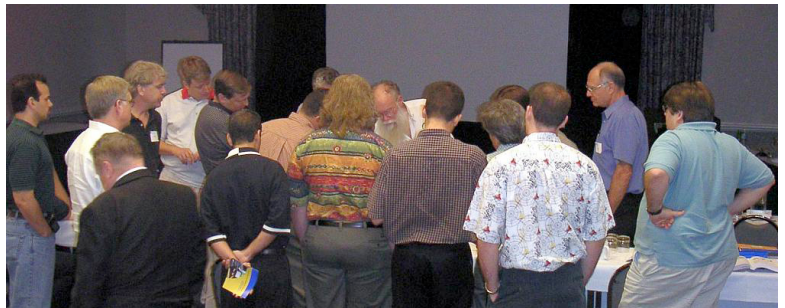
In addition to his articles and app notes, Pease was famous for being the star of the "Analog Seminar Roadshow" (Fig. 1).

National Semiconductor gave presentations all over the U.S. and then all over the world. Sending a half-dozen high-dollar analog engineers across the globe was horrendously expensive. Yet National Semiconductor knew it was vital to reach out to its customers face-to-face. The personal contact helped customers understand National parts. More importantly, it let customers tell National what they wanted and the problems they had. Texas Instruments bought National in 2011 and has continued the direct customer interaction with its TI Tech Days seminars.

One way National tried to extend Pease's reach was by creating a web show for him (Fig. 2). If Pease was still alive, I am sure he would be on the TI Tech Days team. Since Pease had taken me under his wing at National, he was sure I got to present at the Analog Seminar both in the U.S. tour and on the European tour.

Being on the presenter side of the podium gave me a great appreciation for technical conferences. Seminars, conferences, and trade shows are a great way to advance your education, make important industry contacts, and meet dozens of engineers facing the same problems as you.

When I left National Semi to be a tech writer, I started covering several conferences. I went to the IEEE IMS microwave conference. I traveled to Detroit to attend the SAE Convergence conference (Fig 3). It was easy to attend the Hot Chips conference and IEEE ISSCC since they



**1. Bob Pease enthralls a dozen engineers during the 2003 Analog Seminar put on by National Semiconductor (now Texas Instruments).**



**2. Shauna Rae from National Instruments joins Paul Grohe and Bob Pease on the "Analog By Design" show in 2005.**



**3. Freescale brought this concept car to the SAE Convergence show in 2008 to showcase its LIN bus and other automotive microcontrollers.**

were in the Silicon Valley area. One conference I never made was the IEEE APEC power electronics conference. I had heard how great it was from friends and co-workers, but there was always some conflict that prevented me from attending.

So I was delighted when the APEC conference came to my own backyard in Tampa. I went to the 2017 APEC held from March 22-29. I had the greatest time. One treat was meeting Ray Ridley, founder of Ridley Engineering, the test-equipment maker (*Fig. 4*). Ridley's vector-network analyzers let you figure out the gain and phase characteristics of your compensated switching power supply. I went to Ridley's presentation on high-frequency magnetics design.

APEC had other sessions on SiC and GaN transistors. Xingxuan Huang is a doctoral student at the University of Tennessee (*Fig. 5*). His adviser said he should attend the conference to learn about SiC devices as used in 48-V data-center applications. There were also sessions on architecture and topology.

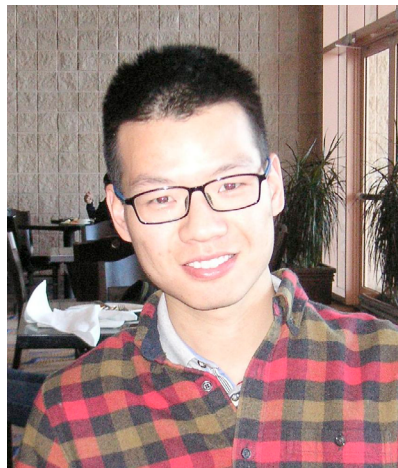
Rose Abramson was at the conference as well (*Fig. 6*). She presented her MIT Master's thesis on a stacked active-bridge dc-dc converter. She is already working at a stealth-mode startup. Huang and Abramson were at the conference because their bosses knew it would be good for their technical development. So don't complain when one of them takes your job because your boss was too cheap to send you to APEC and you have become technically obsolete.

Sure, many times it's not a cheap boss, but you are just too darn busy to make time for a conference. You might think you are critical to the project. Charles DeGaulle noted, "The graveyards are full of indispensable men." The project will go on while you are out of town for a week.

Don't try to work full-time on your job while also at a conference. Leave instructions to not contact you unless the lab is on fire. Immerse yourself in the conference technical and social events (*Fig. 7*). Indeed, the social aspects of a conference can be



**4. Ray Ridley of Ridley Engineering gave a great talk about high-frequency magnetics at the IEEE APEC 2017 conference.**



**5. Xingxuan Huang, a doctoral student at the University of Tennessee, came to APEC 2017 to learn more about SiC transistors.**



**6. Rose Abramson from MIT asks Professor Chun T. Rim a question after his presentation of "Practical Design of Wireless Electric Vehicles: Dynamic & Stationary Charging Technologies."**



**7. The show floor at APEC 2017 was packed. The Texas Instruments booth was a popular destination.**



**8. APEC 2017 offered a tour of the Chihuly Glass works in Saint Petersburg. There is a store and a museum, as well as a working hot shop with glass-blowing demonstrations.**





**9. Another APEC tour took us to the Ybor City cigar district. At Tabanero Cigars, they have a test machine to ensure the air draw through their cigars is consistent and within limits.**

more important than the technical. I once realized how to solve an intractable technical problem by just talking with other engineers about their problems.

The “fun” social events are just as important. Since APEC was in my town this year, I signed up for the two 95-dollar spouse and guest tours. I got to visit Chihuly Glass works in Saint Petersburg (*Fig. 8*), and toured a tiny cigar factory in Ybor City (*Fig. 9*). I also had a boat tour of the Tampa bay. After all, I had the entire conference proceedings on a memory stick. I could read them at home over the coming months. The guided tours of local attractions show me places I can take my California pals when they visit.

An unexpected bonus of attending APEC was when I met



**10 Electronic Design analog editor Maria Guerra (l) and executive director of content Nancy Friedrich (r) were at APEC 2017. Here they review their busy schedule on the way to the next briefing or lecture.**

my boss Nancy Friedrich and co-worker Maria Guerra (*Fig. 10*). I had never met them in person. They had come down from New York and we had a great time in the press briefings and tech sessions.

It’s your job to make time for seminars and conferences. Explain to your boss that it’s non-negotiable. You don’t have to go to every conference. Keep an eye out for those that advance your knowledge while deepening the bench of talented engineers you can call when you need help or advice. Note that the Analog Aficionados party started by Jim Williams and continued by Tim McCune at Linear Systems is still on for 2018. It’s on a Saturday this time, so even Google or Apple engineers should be able to make time for it.