

Interview with Paul Wesling, CPMT Society Vice President of Publications.....

By Debendra Mallik, Associate Newsletter Editor

Editor: Tell us a little about yourself and your family.

Paul Wesling: I grew up in California, and started my high school education when Sputnik was launched – this event led to major improvements and a strong focus on science and technology in our educational system in the USA. My whole career has been in the San Francisco Bay Area, where I always felt there were hundreds of companies at which I could work, so long as I kept myself current and useful. This proved to be true. One of our sons is a civil engineer in Bishop, CA, and the other is a construction manager for large buildings and hotels in Los Angeles. Between them, we now have 6 grandkids. Some of my hobbies are backpacking in the Sierra Mountains, fly-fishing, sailing, playing my guitar, and ham radio (KM6LH and K6BSA).

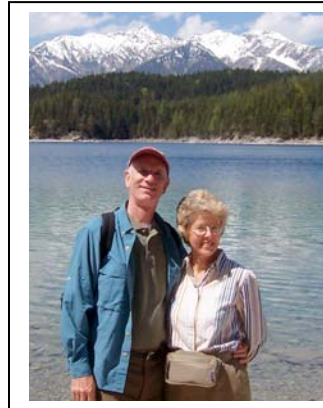
Editor: How did you get involved in our field, and what has your career been like?

Paul Wesling: As is likely true for most engineers involved in packaging and assembly, I was first trained in non-packaging fields, with a BS in Electrical Engineering and an MS in Materials Science, both from Stanford. This turned out to be a good combination, and my interest in “how things work” and how to improve them led me into R&D, reliability, and then manufacturing engineering and system integrity, and I ended up on a multi-chip module project at Tandem Computers. My service there went for 17 years, and I retired a few years ago from Hewlett-Packard (which had acquired Tandem). I like remaining active in the profession, so Gail and I are at several conferences each year. Behind the scenes I enjoy being CPMT’s webmaster and guiding the volunteers who make our publications so successful.

Editor: What do you see as the needs of our members around the world, and in what direction are you taking CPMT in the short and long term?

Paul Wesling: Short-term I’d like to find better ways to communicate to not only our members but to all practitioners in design, materials, reliability and modeling of packaging, and in assembly and manufacturing. It’s difficult for today’s engineer to keep current. Our conferences and professional-development courses provide a chance to meet with peers, learn new approaches and developments, and stretch our knowledge base. For those who can’t attend, we often have summary or profile articles in the CPMT NEWSLETTER, and all the papers are available in the XPLORE on-line database, for download. With today’s search engines, it should be easier to find pertinent information. I also want to begin profiling some of the best journal papers for our members, for their awareness. These papers often cover subjects that will be hitting researchers and practitioners over the next few years, and we need to be aware of these solutions and directions.

Longer-term, I’d like the CPMT Society to direct its primary focus to all practitioners in our fields of interest – not only those who choose to join. Many engineers and academicians have full access to all of our conference and journal papers



Paul and Gail Wesling on a hike in the German Alps while at the SPI Workshop in 2005. Paul represents the CPMT Society and hold Editors’ Meetings at several events each year.

without joining the Society, and they (and their companies) are happy to pay non-member rates at conferences or for Proceedings. We need to expand our services to these people, so that everyone in the profession can share directions and results. The challenge is finding out how to do this. My hope is that we can get most of them onto our ListServ email list and make the PDF version of this NEWSLETTER available to them each quarter. Perhaps we can count on members to encourage co-workers to get on our DList!

Editor: Where could you use help from members?

Paul Wesling: I could use lots of help. For example, if someone has capabilities in software and creating multimedia, I’d like a person or team to help authors convert Conference presentations into streaming audio with GIFs of slides, so that many more engineers can view the conference talks later over the internet (from our CPMT website) and hear what the authors want to tell us. This can get to thousands more people than were able to attend that session at the conference. Perhaps we could convert the introductions of these talks into a series of Pod Casts or RSS feeds, for our technologists.

I want someone to focus on helping us adopt “groupware” that CPMT could use to bring together small communities of practitioners (such as our Technical Committees), on an asynchronous and virtual basis, for counsel and sharing. I’m also looking for knowledgeable specialists who can find and summarize the “most important papers” in their particular specialty over the past 20 or 30 years, and then write a review article profiling them for our journals; this can be a great help to grad students starting project research, to engineers wondering “where to start” with a problem or project, and for authors wanting to add the correct references to their papers. This is the internet equivalent of the “compendium” books of compiled papers that we used to publish occasionally.

I know that it’s hard these days to find extra time to help develop the profession. But we all take advantage of what we develop in common, and I think it’s part of each engineer’s professional responsibility to help in some way – maybe at the local Chapter level, or with a conference, and perhaps by helping me with our Society’s web presence and services, or with our journals.

Editor: What would be your advice for career growth to engineers who are in or entering this field?

Paul Wesling: Ours is a particularly challenging field, since it is so interdisciplinary. An electrical engineer new to our fields needs quick updates in materials, failure modes, thermal modeling, and processing. A mechanical engineer must develop background in signal integrity and interconnects, time-of-flight issues,

and assembly. The materials engineer has similar “blank spots” that need to be filled. And we all need to understand the chemistry and properties of nano-level materials, the impact of MEMS/NEMS, and the integration of photonics, biotechnology and bio-compatible devices. These will be markers for careers in the future.

So the secret to being successful in the CPMT fields is good teamwork. The engineer must develop relationships with those in complementary specialties – this peer networking is critical. Some of this can happen within a university or company, but much can be done through local CPMT Chapters and by participating on Conference program committees. Companies have a hard time understanding that their engineers need to spend a little of their time working with others across the profession in order to stay fresh and keep contributing at a high level.

Editor: What’s a good book you have read recently?

Paul Wesling: Ah, that’s a good question! I’m reading [Making Silicon Valley](#), by Christopher Lecuyer. It has an intriguing hypothesis – that the key development that led to Silicon Valley’s success was when a bunch of Hams (amateur radio operators) weren’t satisfied with available transmitting tubes (back in the ‘30’s) so they developed new manufacturing processes to get around RCA’s patents. This advanced vacuum equipment, processing techniques, and infrastructure allowed Shockley and others to establish the first semiconductor companies here, rather than on the East Coast of the USA, which is what should have happened. Of particular interest to CPMT’ers: our focus on manufacturing technology is more important than we might think. Look for a book review in the near future ...

Editor: Thank you, Paul.