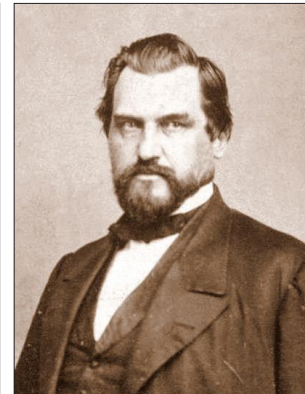


# SEMI-THERM<sup>®</sup> 35

Luncheon Speaker  
Wednesday March 20, 2019

## The Origins of Silicon Valley: Why and How It Happened Here

Presenter: Paul Wesling  
IEEE Life Fellow



*"Someday you will see Palo Alto blooming with nearly all the flowers of the earth and the fruit and shade trees of every zone... In the future we shall can this fruit and send it all over the globe in exchange for wealth..."*

-Leland Stanford

Why did Silicon Valley come into being? The story goes back to local Hams (amateur radio operators) trying to break RCA's tube patents, "angel" investors, the sinking of the Titanic, Fred Terman and Stanford University, local invention of high-power tubes, WW II and radar, William Shockley's mother living in Palo Alto, and the SF Bay Area infrastructure that developed – these factors pretty much determined that the semiconductor and IC industries would be located in the Santa Clara Valley, and that the Valley would remain the world's innovation center as new technologies emerged – computers, then software, mobile, biotech, Big Data, VR, and now autonomous vehicles – and it would become the model for innovation worldwide.

**Paul Wesling**, an IEEE Life Fellow and Distinguished Lecturer, has observed the Valley for decades as an engineer, executive, resident, and educator, and has presented this talk world-wide. In this non-technical presentation, he gives an exciting and colorful history of device technology development and innovation that began in Palo Alto, then spread across the Santa Clara Valley during and following World War II. You'll meet some of the colorful characters – Leonard Fuller, Lee de Forest, Bill Eitel, Charles Litton, Fred Terman, David Packard, Bill Hewlett, Russ Varian and others – who came to define the worldwide electronics industries through their inventions and process development. You'll understand some of the novel management approaches that have become the hallmark of tech startups and high-tech firms, and the kinds of engineers/developers who thrive in this work environment. You'll handle an original Audion tube, invented by Lee de Forest and improved by him in Palo Alto. Paul will end by telling us about some current local organizations that keep alive the spirit of the Hams, the Homebrew Computer Club, and the other entrepreneurial groups where geeks gather to invent the future.