

# Bay Area technology seminar

For testing, analysis and modeling of dynamic response

**Polytec Laser Doppler Vibrometers provide advanced tools for fast measurement and visualization of structural vibration. Siemens Test Software provides complete analysis for modal analysis and FE modeling. We will take you through the process of modeling, structural dynamics testing, modal analysis and model validation using combined capabilities. Applications such as acoustic sound radiation prediction, strain measurements and static topography will also be demonstrated. Experts from Polytec and Siemens will be on hand to answer any of your questions about current and future measurement/analysis needs.**

## Agenda for Wednesday, April 15<sup>th</sup> 2020

08:30 AM Continental breakfast

09:00 AM Welcome and introduction to Polytec/Siemens

09:05 AM "**Structural dynamic measurements and new developments Laser Doppler Vibrometry**" by Eric Lawrence, Polytec

09:30 AM "**Siemens Simcenter Testlab Modal Analysis and Siemens Simcenter 3D FEA Correlation**" by William Flynn, Siemens

10:00 AM "**Laser Vibrometer measurements of acoustic guitar top plates during voicing process**" by Mark Rau, Stanford University

10:30 AM Coffee break

10:45 AM "**Bio-inspired MEMS directional sound sensor**" by Dr. Gamani Karunasiri, Naval Post Graduate School

11:15 AM "**Buzzing Board: Example dynamic testing, analysis and modeling of printed circuit board**" presented jointly by Eric Lawrence, Polytec and William Flynn, Siemens

11:45 AM "**Strain measurements using Multipoint Laser Vibrometer**" by Kilian Shambaugh, Polytec

12:00 PM Lunch

01:00 PM Live example measurements and hands-on demonstrations

- FE modeling using Siemens Simcenter 3D Software
- Structural response measurements using Polytec PSV-500 Scanning Vibrometer
- Extraction of modal parameters by curve fitting using Siemens Simcenter TestLab software
- Durability study using single point measurement of a turbine blade using Polytec VibroFlex and Siemens Simcenter Testlab Data Acquisition System
- Microstructure focus: dynamic and static characterization of MEMS using MSA-600 Micro System Analyzer

**FREE registration**  
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