Department of Engineering Science

Announces 7th lecture of the Engineering Science Lecture Series
Academic Year 2017-2018

This is a series designed to benefit the Sonoma State students and faculty in the School of Science and Technology, high tech and biotech industries and related businesses and community in the North Bay Region.

***

The Lecture Series covers a broad range of topics with focus on recent developments and trends and provides a platform for the exchange of ideas among the audience.

***

Attendance is open to the students, faculty and staff of SSU and other academic institutions, engineers and scientists from industries, members of the business community and members of the community, in general. A parking permit is required to park on campus, and is available for $5.00 at machines in the parking lots. Talks are otherwise free.

**Days & Dates:** 1st & 3rd Thursday of each month

**Venue:** Cerent Engineering Science Complex, Salazar Hall Room #2009A

**Reception:** 4:00 to 4:30 p.m.

**Lecture:** 4:30 to 5:15 p.m.

**Q&A:** 5:15 to 5:30 p.m.

**Acknowledgement**

The ES Lecture Series is supported by the local industry including Keysight Technologies.

---

**“Photovoltaic Microinverter Systems”**

by

Mr. Mark Baldassari, Director of Codes and Standards, Enphase, Petaluma, CA

**Thursday, February 1, 2018**

**Abstract** – Solar Power and Photovoltaic technology is advancing quickly in the industry. Enphase Energy is a leader in developing technologies to meet the market demands. This talk will introduce basic concepts around solar systems. It will address the disadvantages of traditional systems versus the advantages of advanced microinverters from Enphase Energy. Data communications plays a vital role for a modern system. Enphase Energy addresses these challenges with a multi-processor, advanced communication, architecture. Finally, energy storage systems are gaining acceptance in the market. In the near future these systems will be commonplace. Battery chemistry plays a significant role in defining performance, safety and cost. From home sized systems to utility scale.

**Mr. Mark Baldassari** – has over 34 years’ experience in engineering and product development and over 10 years with Enphase Energy, where he holds the position of Director, Codes and Standards. Currently, he actively participates in a number of Codes and Standards development groups both internationally and domestically. Domestically, Mr. Baldassari regularly participates in IEEE 1547 series of standards development with emphasis towards improving the grid integration of PV systems. He is involved with Underwriters Laboratory working on the harmonization of UL and IEC standards and a Standards Technical Panel member for UL 1699B and UL 2703. Mr. Baldassari is an active member of the CalSEIA Codes and Standards and PV Industry Forum. He is very involved with the drafting of the 2020 NEC for articles 690 and chairman for article 705. Mr. Baldassari has bachelor degree in Electrical and Electronic Engineering from California State University Sacramento, USA.

---

**Upcoming Lectures**

<table>
<thead>
<tr>
<th>Date</th>
<th>Title of the Lecture</th>
<th>Guest Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 15</td>
<td>How technology helps save the world's most valuable resource</td>
<td>Mr. Peter Carlson, Chief Technical Officer, HydroPoint Data Systems, CA</td>
</tr>
<tr>
<td>Mar 1</td>
<td>Smart Sensing Systems and Analysis of Exhaled Breath for Detecting Diseases</td>
<td>Dr. Sudhir Shrestha, Assistant Prof., Engineering Science Department, Sonoma State University</td>
</tr>
<tr>
<td>Mar 15</td>
<td>Toward the Next-Generation Neural-Controlled Artificial Limb</td>
<td>Dr. Xiaorong Zhang, Assistant Prof., Computer Engineering, San Francisco State University</td>
</tr>
<tr>
<td>Apr 5</td>
<td>Product Platforms, Firm Processes, and Firm Performance</td>
<td>Dr. Sergio Canavati, Assistant Prof., School of Business and Economics, Sonoma State University</td>
</tr>
<tr>
<td>Apr 19</td>
<td>Why Did Silicon Valley Develop in the San Francisco Bay Area Instead of the East Coast?</td>
<td>Dr. Don Estreich, Adjunct Prof., Engineering Science Department, Sonoma State University</td>
</tr>
</tbody>
</table>