# California Forum on Energy Efficient Manufacturing (CaFEEM) Agenda - October 2015

| 8.45 - 9.15 AM   | Registration and Refreshments   |
|------------------|---|
| 9.15 - 9.30 AM   | Welcome and Opening of Forum  |
| 9.13 - 9.30 AM   | Forum Chairs: Barbara Linke & Paul Harris                                     |
|                  | Torum Chans. Darbara Linke & Faul Harris                                      |
|                  | <b>Paul Dodd</b> , Associate Vice Chancellor, University of California, Davis |
| 9.30 - 10.00 AM  | "Sustainable Manufacturing, Big Data and the Circular Economy"                |
|                  |   |
|                  | David Dornfeld  |
|                  | Professor of Mechanical Engineering   |
|                  | University of California, Berkeley  |
| 10.00 - 10.30 AM | "Intelligent Energy Storage: Changing the Way Energy is                       |
|                  | Distributed and Consumed"   |
|                  |   |
|                  | Ben Kearns  |
|                  | Vice President of Technology  |
|                  | Stem, Inc.  |
| 10.30 - 11.00 AM | Break and Refreshments  |
| 11.00 - 11.30 AM | "Energy Efficiency Initiatives at the California Energy Commission            |
| 11.00 11.50 1101 | in the Agriculture, Water and Industrial Sectors"                             |
|                  | in the rightenture, water and industrial sectors                              |
|                  | Michael Lozano  |
|                  | Senior Mechanical Engineer  |
|                  | California Energy Commission  |
| 11.30 - 12.00 PM | "SRI's Hyper Efficient Humanoid and Applications for High                     |
|                  | Efficiency Manufacturing"   |
|                  |   |
|                  | Alexander Kernbaum  |
|                  | Senior Research Engineer  |
|                  | SRI International   |
| 12.00 - 12.30 PM | "Smart and Sustainable Advanced Manufacturing using                           |
|                  | Mechatronics"   |
|                  | Chinedum Okwudire   |
|                  |   |
|                  | Professor of Mechanical Engineering<br>University of Michigan                 |
|                  |   |

| 12.30 - 2.00 PM | Lunch and Poster viewing  |
|-----------------|---|
| 2.00 - 2.30 PM  | "Green Cycle Factory Supported by Advanced Carbon-based<br>Manufacturing" |
|                 | Dominik Rohrmus   |
|                 | Head of Manufacturing Solutions Research Group                            |
|                 | Siemens AG  |
| 2.30 - 3.00 PM  | "Research Projects on Energy Efficiency in Machine Tools"                 |
|                 | Jan Aurich  |
|                 | Professor of Manufacturing Technology and Production Systems              |
|                 | University of Kaiserslautern  |
| 3.00 - 3.30 PM  | "Delivering Cost Effective and Verified Energy Savings in the             |
|                 | Manufacturing Sector with ISO 50001"                                      |
|                 | Peter Therkelsen  |
|                 | Research Scientist  |
|                 | Lawrence Berkeley National Laboratory                                     |
| 3.30 - 4.00 PM  | Break, Refreshments and Poster Viewing                                    |
| 4.00 - 4.30 PM  | "Challenges in making Factory Cooling Systems Efficient, and              |
|                 | Manufacturing Efficient Cooling Systems"                                  |
|                 | Vinod Narayanan   |
|                 | Professor of Mechanical Engineering                                       |
|                 | University of California, Davis   |
| 4.30 - 5.00 PM  | "System Design is the Key to Compressed Air Efficiency"                   |
|                 | Stove Archon  |
|                 | Steve Arshop<br>Sales Manager   |
|                 | Kaeser Compressors, Inc.  |
| 5.00 - 5.15 PM  | Closing remarks   |
|                 | Forum Chairs  |
| 5.15 - 6.15PM   | Networking & Drinks Reception   |

**Posters** 

## "Data-Driven Energy Prediction in Manufacturing"

Raunak Bhinge, University of California, Berkeley

"Process Feasibility Analysis through Bottom-up Cost and Energy Modeling of Electrically Assisted Machining" Mike Doran, Oregon State University

> "Gallagher Hall: Green From the Ground Up" Paul Fortunato, University of California, Davis

**"Manufacturing Process Characterization: Magnetic Particle Inspection"** Ian Garretson, University of California, Davis

#### **"Energy Efficiency of Ultra-High Speed Spindles"** Paul Harris, University of California, Davis

"Inside the Blank Factory: A Knowledge-based Manufacturing Plan Generator for Advanced Joining and Additive Processes" Harsha Malshe, Oregon State University

> "Impact of Services on the Energy Efficiency of Machine Tools" Gülsüm Mert, University of Kaiserslautern

#### "An Energy Prediction Model for Stereolithography" Hari Nagarajan, Oregon State University

**"Sustainable Manufacturing"** Lukas Prasol, Technical University of Berlin

### "Sustainable Technological Solutions"

Lukas Prasol, Technical University of Berlin

**"Modeling Environmental Impacts in an Injection Molding Process"** Kamyar Raoufi, Oregon State University

"Unit Manufacturing Process Model Composition for Manufacturing Energy Analysis" Matteo Smullin, Oregon State University **Sponsors** 









