



## Unique Insights into Leading-Edge Cleantech Innovations

### 2016 Projects

#### 10:00 CalWave

Wave energy has huge potential to offer more reliable renewable power than solar or wind, but it remains largely untapped. CalWave offers a submerged wave energy converter that can absorb wave energy in any direction and convert it into electricity. It can also survive stormy seas and poses no collision danger. Initial target markets include offshore aquaculture and remote islands.

##### *Founder*

**Marcus Lehmann**, UC Berkeley (Cyclotron Road)

##### *C2M Student Team*

**Robin Ligon**, MBA 2017, Team Lead

**Edoardo Geraci**, MBA 2017

**Kira Noodleman**, MBA 2017

**Warot Wainiya**, MBA 2017

**Gordon Bauer**, PhD Energy & Resources, 2021

**Holly Williams**, PhD Chemistry, 2017

#### 10:30 Matrix Sensors

Matrix Sensors seeks to empower people to monitor gases for health, wellness, and safety more widely than ever before. They have created a gas sensor that is dramatically cheaper, smaller, and uses less power than those with similar sensitivities by developing a novel application for metal-organic frameworks (MOFs). This will enable broader sensor deployment to improve air quality.

##### *Matrix Sensors Team*

**Steve Yamamoto**, CEO

**David Britt**, Director of R&D

**Paul Wilkinson**, Director of Chemistry

##### *C2M Student Team*

**Tenley Ghan**, MBA 2017, Team Lead

**Kamran Moini**, MBA 2017

**Kjiersten Fagnan**, LBNL, PhD Mathematics 2010, MBA 2017

**Hiu Yue Monatrice Lam**, PhD Physical Chemistry, 2017

**Alexandria Yuan**, MPP 2017

## 11:30 Feasible

The battery market is growing at an unprecedented rate (over 300% in the last 8 years), and batteries themselves are becoming more complex. Existing battery quality assurance techniques are not sufficient in this changing world. Feasible offers a revolutionary ultrasound diagnostic tool that enables safer battery manufacturing and improves the performance of critical battery applications.

### *Founders*

**Andrew Hsieh**, Princeton (Cyclotron Road)  
**Barry Van Tassell**, Princeton (Cyclotron Road)  
**Shaurjo Biswas**, Princeton (Cyclotron Road)

### *C2M Student Team*

**Shantanu Mittal**, MBA 2017, Team Lead  
**Christie Howe**, MBA 2017  
**Yasuharu Matsuno**, MBA 2017  
**Daniele Monahan**, PhD Physical Chemistry 2017  
**Matt McPhail**, PhD Electrical Engineering 2020  
**Benjamin Cotts**, PhD Physical Chemistry 2016

## 12:00 Opus 12

Unsustainable amounts of CO<sub>2</sub> are released every year, risking serious changes in the global climate. Opus 12 incorporates novel electrode materials into existing electrochemical reactors to enable the conversion of CO<sub>2</sub> into useful materials. Opus 12's carbon cycle can transform CO<sub>2</sub> into commodity chemicals and carbon-neutral fuels, leading to an overall decrease in greenhouse gas emissions.

### *Founders*

**Nicholas Flanders**, CEO, Stanford MS/MBA  
**Etosha Cave**, Stanford PhD  
**Kendra Kuhl**, Stanford PhD, SLAC Postdoc

### *C2M Student Team*

**Robert Etter**, MBA 2017, Team Lead  
**Alvaro Fresnillo Virseda**, MBA 2017  
**Mark Murphy**, MBA 2017  
**Katie Deeg**, PhD Chemistry 2018  
**Douglas Reed**, PhD Chemistry 2018  
**Ksenia Timachova**, PhD Chemical Engineering 2018

## 1:45 Sepion

Whether in electric vehicles or renewable energy systems, Li-ion batteries have been an enabling technology for a more sustainable economy. Unfortunately, the majority of these batteries include cobalt, an expensive and volatile mineral. Sepion has a polymer membrane that provides high-flux and ion-selective transport to make sustainable Li-ion cells competitive with cobalt-based batteries.

### *Founders*

**Peter Frischmann**, LBL (Cyclotron Road)

**Brett Helms**, LBL (Cyclotron Road)

### *C2M Student Team*

**Cody Little**, MBA 2017, Team Lead

**Scott Anderson**, MBA 2017

**Alla Sorokina**, MBA 2017

**Andrei Zimin**, MBA 2017

**Jonathan Bachman**, PhD Chemical Engineering 2017

**Jim Rossi**, MS Journalism 2017

## **2:15 Synvitrobio**

Biotechnology is already producing over \$150 billion in products per year, and it is forecast to grow to over \$300 billion by 2020. Synvitrobio is focused on enabling the next generation of biological engineering through the use of a “cell free” system that is easy to use, low cost, and can save up to approximately 10-20% of product development lifecycle costs.

### *Founder*

**Zachary Sun**, UCLA/Caltech (Cyclotron Road)

**Richard Murray**, Caltech

**George Church**, Harvard

### *C2M Student Team*

**Valantis Vais**, MBA 2017, Team Lead

**Graeme Close**, MBA 2017

**Ane Fabo**, MBA 2017

**Pedro Navarro**, MBA 2017

**Judy Savitskaya**, PhD Bioengineering 2018

**Lindsey Osimiri**, PhD Bioengineering 2021

## **2:45 Nelumbo**

Nelumbo is a surface modification company that deploys nanomaterials for industrial applications. Nelumbo has developed super-hydrophobic or “ultra water-repellent” materials, which can increase efficiency, reduce maintenance, and improve air quality for the built environment. The coatings are easy to apply, incredibly thin (200x thinner than a human hair), and less expensive than competitors.

### *Founders*

**Liam Berryman**, UC Berkeley

**Lance Brockway**, UC Berkeley

### *C2M Student Team*

**Karl Brenner**, MBA 2017, Team Lead

**Breton Birkhofer**, MBA 2017

**Matthew Hochman**, MBA 2017

**Yifan Li**, PhD Chemistry 2019

**Meghan Hauser**, PhD Physical Chemistry 2017