Enabling Technologies Development
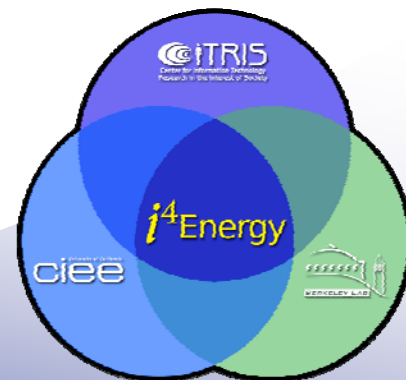
Technical Advisory Committee Meeting

April 21, 2011
UC Berkeley

Gaymond Yee

Project Manager
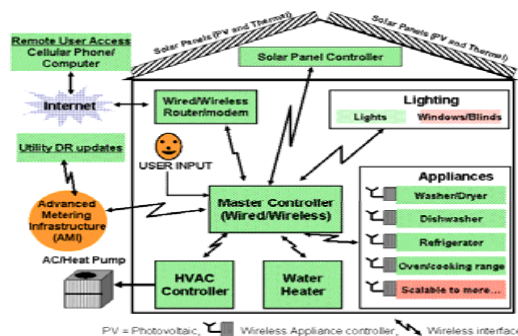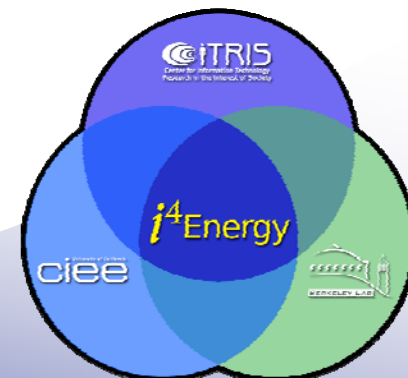California Institute for Energy and Environment

Other ETD Projects

Privacy in the Smart Grid (completed)
(Deirdre Mulligan, UC Berkeley)

Information Displays and Thermal Comfort
(Therese Peffer, CIEE)

Integrated & Cognitive Home EMS
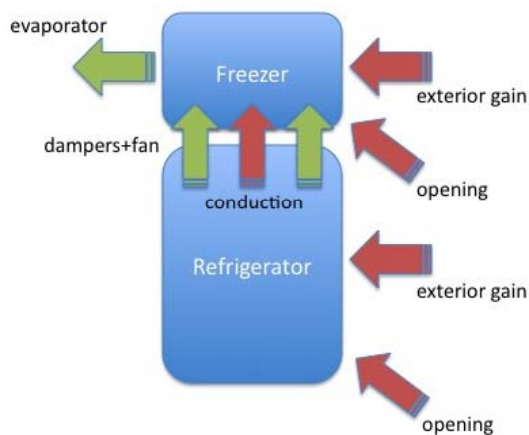(San Diego State University)
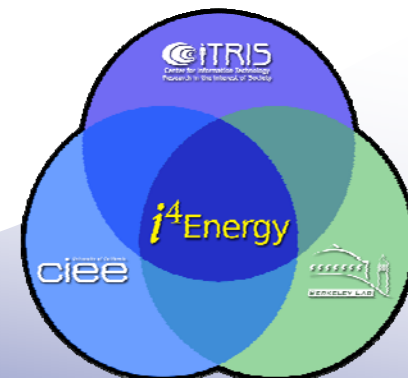
Other ETD Projects

Self-Correcting HVAC Controls
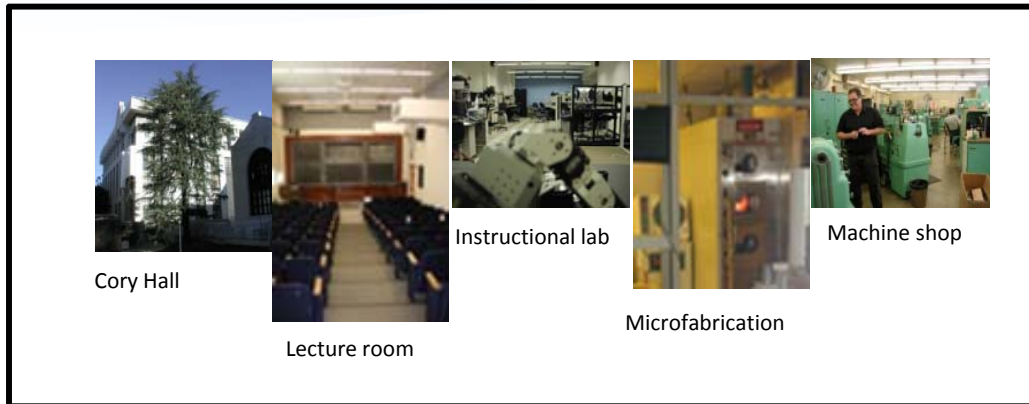(Pacific Northwest National Laboratory)

**Residential Energy Gateway
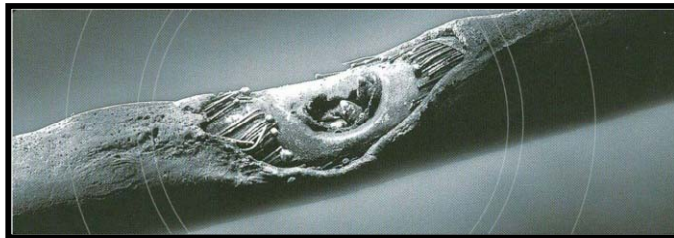Reference Design**
(David Auslander, UC Berkeley)

**Renewable Energy Integration
Modeling**
(Duncan Callaway, UC Berkeley)

Other i^4Energy Projects

Cory Hall

Lecture room

Instructional lab

Microfabrication

Machine shop

Building-to-Grid Information Exchange Testbed (Cory Hall - completed)

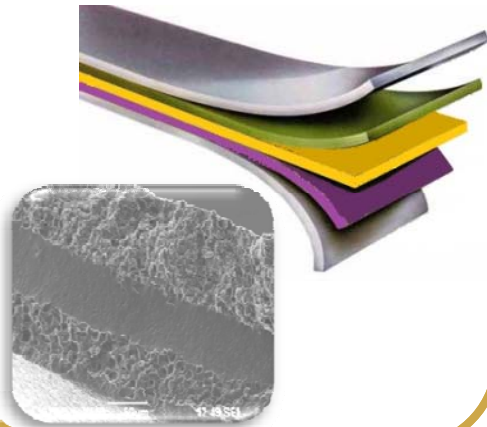**Underground Cable Failure Modeling and Detection**

Distributed Intelligence Automated Demand Response (DOE-ARRA) (Sutardja Dai Hall)
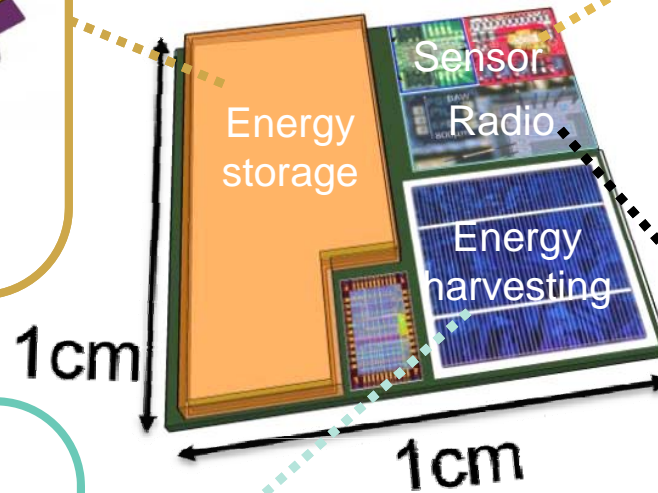
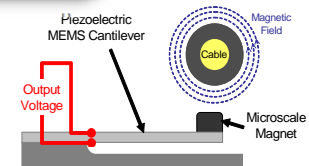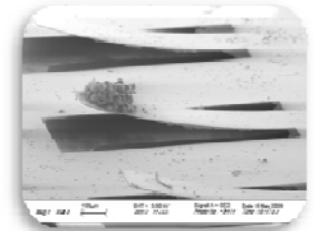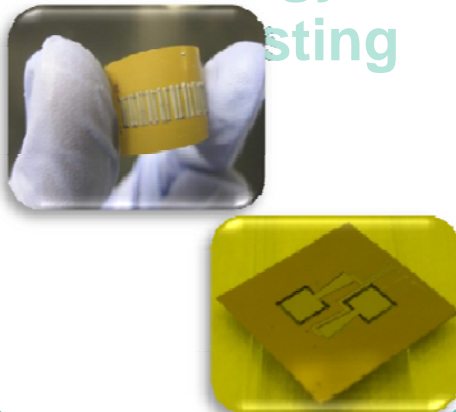**2 new and 1 follow-on PIER Projects (2011)**

Wafer-Scale Integration

Energy Storage

Wireless Sensor Micro-device

MEMS Sensor

Energy storage

Sensor

Radio

Energy harvesting

1cm

1cm

Piezoelectric MEMS Cantilever

Magnetic Field

Cable

Output Voltage

Microscale Magnet

Energy [harve]sting

Radio