

# SLAC-STANFORD UNIVERSITY-NREL (SSUN) ENERGY SUMMER SCHOOL 2009 PROGRAM

Daily Schedule, unless otherwise noted:

8:30-9:00 am	Continental Breakfast
9:00-10:10 am	<b>Session One:</b> 45 minute lecture, followed by 25 minute Q&A
10:40-11:50 am	<b>Session Two:</b> 45 minute lecture, followed by 25 minute Q&A
12:00-2:00 pm	Lunch and Project Work
2:00-3:10 pm	<b>Session Three:</b> 45 minute lecture, followed by 25 minute Q&A
3:40-4:50 pm	<b>Session Four:</b> 45 minute lecture, followed by 25 minute Q&A
5:00 pm	Project Work

## Week 1: Introduction to Global Energy Sources and Uses (Y2E2 Building, Stanford, Classroom 111)

Yang-Yamazaki Environment & Energy Bldg. 473 Via Ortega Stanford CA 94305

Date	Period		Topic	Speaker
<b>Monday</b> August-17	<b>Morning</b>	9:00 -10:10 am	Introduction & Summer School Overview Explanation of Projects / Exergy Flow Analysis	Zhi-Xun Shen Sally Benson
		10:40 -11:50 am	Keynote Speech: Climate Change and Its Implications for Our Energy Future	Chris Field
	<b>Afternoon</b>	2:00 – 3:10 pm	Renewable Energy Resources	Robert McGrath
		3:40 - 4:50 pm		
<b>Evening</b>	6:00 pm	Welcome Dinner	Y2E2 2 <sup>nd</sup> Floor Balcony	
<b>Tuesday</b> August-18	<b>Morning</b>	9:00 – 11:50am	Transportation	Joan Ogden
	<b>Afternoon</b>	2:00 - 4:50 pm	Nuclear Power	Burton Richter
	<b>Evening</b>	7:00 pm	Public Lecture: Climate Change and its Implications for Our Energy Future. Panofsky Auditorium, SLAC	Chris Field
<b>Wednesday</b> August-19	<b>Morning</b>	9:00 –11:50 am	Electric Grid	Kevin Tomsovic
	<b>Afternoon</b>	2:00 - 4:50 pm	Buildings/Energy Efficiency	Martin Fischer
<b>Thursday</b> August-20	<b>Morning</b>	9:00 –11:50 am	Carbon-Based Fuels Carbon Capture and Sequestration	Franklin (Lynn) Orr Sally Benson
	<b>Afternoon</b>	2:00 pm	Summer School Projects	
<b>Friday</b> August-21	<b>Morning</b>	7:15am 7:30am 8:30 am	Early Stanford Guest House pickup to Y2E2 Early Breakfast at Y2E2 Bus leaves (front of Y2E2, on Via Ortega)	<b>Required!</b> Signed Tesla Visitor Agreement, in your GCEP folder.
		9:00 am 11:00 am	Tour: Tesla Motors, San Carlos, CA Tour: Nanosolar, San Jose, CA	JB Straubel, CTO James McNicolis, CFO
			Lunch: Hellyer Park, Cottonwood Picnic Area. Catered.	
	<b>Afternoon</b>	2:00 pm 3:30 pm	Tour: Google, Mountain View, CA Summer School Projects	

**Week 2: Materials Science and Technology for Electric Power Systems (ROB Redwood Rooms, SLAC)**

**SLAC National Accelerator Laboratory 2575 Sand Hill Road Menlo Park, CA 94025**

Date	Period		Topic	Speaker
Monday August-24	Morning	9:00 –11:50 am	Fuel Cells	Fritz Prinz
	Afternoon	2:00 - 4:50 pm	Hydrogen Storage	Wendy Mao
Tuesday August-25	Morning	9:00 –11:50 am	Solar Energy: Photovoltaics	Stacey Bent
	Afternoon	2:00 - 4:50 pm	Solar Energy: Solar Thermal	(Chuck Kutscher)
Wednesday August-26	Morning	9:00 –11:00 am	Tour SLAC	SLAC Staff
		11:00 -1:00 pm	Sequoia Capital Presentation Sustainable Start-Ups: How Entrepreneurs Make a Difference.	Warren Hogarth Mark Dempster
	Afternoon	2:00 - 4:50 pm	Solid State Lighting	Shuji Nakamura
	Evening	7:00 pm	Public Lecture: Light Emitting Diodes (LEDs) --Huge Impact for Saving Energy. Panofsky Auditorium, SLAC	Shuji Nakamura
Thursday August-27	Morning	9:00 –11:50am	Thermionics	Nicholas Melosh
	Afternoon	2:00 - 4:50 pm	Superconductivity and Magnets	George Crabtree
Friday August-28	Morning	9:00 –12:30 pm	Sign Up for Carpools to Dinner	
		12:30-2:30 pm	Project Presentations Project Evaluations	
	Afternoon	2:30 - 4:30 pm 4:30- 5:00 pm	Discussion and Prize Announcements Student Response to School Experience	Sally Benson, Zhi-Xun Shen, Lynn Orr, Richard Sassoon, Stuart Macmillan, John Weyant
		5:30pm	Carpool to Lynn Orr’s Home	
Evening	6:00 pm	Closing Dinner	Hosted by Lynn Orr	