



UNC CHARLOTTE

The WILLIAM STATES LEE COLLEGE of ENGINEERING

## ***Industrial Solutions Laboratory*** **Senior Design**

**SAVE THE DATE!**  
**KICKOFF FOR FALL 2014 PROJECTS**

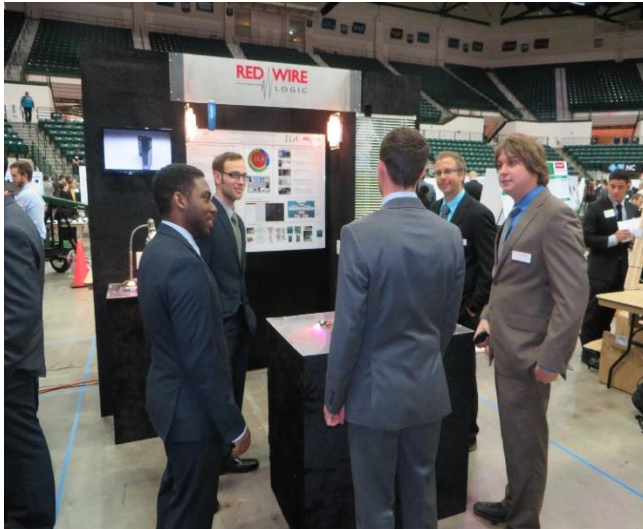
### **Supporter/Project Team Breakfast**

September 5, 2014

7:30 – 11:00 AM

### **Spring Expo – Our Biggest Ever**

At the Spring Expo 71 completed projects were showcased. Awards were based on judging by industrial project supporters, project mentors, and selected faculty. In addition there were 31 posters for projects that have completed their first semester. More than 370 students participated in the Expo. The top three projects, chosen from 9 finalists by a panel of 12 independent judges are highlighted here.



#### ***1<sup>st</sup> Place Bill Heybruck Award***

#### ***Integrated Living Assistant***

The *Integrated Living Assistant* project was supported by NCIIA (National Collegiate Inventors and Innovators Alliance) and UNC Charlotte. The project features an innovative technology that allows remote and autonomous control over household devices, and monitors power consumption in real time by combining artificial intelligence with a progressive home automation system. The team was made up of seniors Joshua Cox, Justin Hinson, Peter O'Connor and Neil Taylor, and faculty

mentors Nan Bousaba and Mehdi Miri.

## **2<sup>nd</sup> Place Award**

### **Wave Energy Conversion**



Supported by ENVENTYS, the wave energy conversion project consisted of design and construction of an ocean platform that uses wave energy to produce and store compressed air that drives a reverse osmosis unit for desalination of sea water. Team members were William Beaver, William Alexander, Brendon Almond, Ivan Gyupchanov, Christian Horn, Christopher Matthews and Donal Sonnet, with Dan Hoch as faculty mentor.

## **3<sup>rd</sup> Place Award**

### **US Launch Initiative**



The USLI (University Student Launch Initiative) was supported by NASA and UNC Charlotte. The team designed and constructed a re-useable dual deployment rocket capable of carrying a payload to an altitude of one mile. Team members were students Jerry Dahlberg, John Cappalletti, Daniel Deese, Dewey Greer, Benjamin Griffiths, Matthew Perry, Daniel Saulnier, Robert Stone and Caleb Watts, and mentor Karen Thorsett-Hill. This team also won the Best Rocket Design trophy at the national Student Launch Competition.

## **THANK YOU TO OUR INDUSTRIAL SUPPORTERS**

A special thank you is extended to the following companies who supported senior design projects in fall 2013 and spring 2014. Without you, this program would not be possible.

AREVA	Duke Energy	MacLean Power Systems
Ascot Technologies	Electrolux	NASA
BK Racing	Eventys	NCIIA
Bosch Rexroth	Energy Production & Infrastructure	RFMD
CB&I	Center (EPIC)	RSC Chemical Solutions
Charlotte Green Initiative (CGI)	EPRI	Schaeffler Group
Charlotte Research Institute	Hayward	Siemens
Concord Terrazzo	Hearing Solution Center	SunTech Medical
Daimler Trucks	Highland Industries	The Light Factory
Dixon Valve and Coupling	Honeywell Scanning and Mobility	Troysgate
Doosan	Husqvarna	USAF Research Lab
	Liberty Hardware	Westinghouse

## **FALL 2014 SENIOR DESIGN**

The deadline for submission of fall 2014 projects is July 1, 2014. The deadline is fast approaching so please submit project ideas to Terry Jordan ([tdjordan@uncc.edu](mailto:tdjordan@uncc.edu)), Director for Industrial Solutions Laboratory in the Lee College of Engineering, as soon as possible. Details of project requirements are available at <http://srdesign.uncc.edu/information-supporters>.

## **2014 SCHEDULE OF EVENTS**

Mark your calendars for the following key events in the upcoming school year.

- July 8                      Deadline for fall 2014 project submissions
- September 5              Kickoff breakfast for fall 2014 industrial supporters, faculty project mentors, and student teams
- December 5                Fall Expo, Student Activity Center, OPEN TO PUBLIC at 11 a.m.
- January 16                 Kickoff breakfast for spring 2015 industrial supporters, faculty project mentors, and student teams
- April 30                     Spring Expo, Student Activity Center, OPEN TO PUBLIC at 11 a.m.

## **CONTACT US**

For information or questions, visit [www.srdesign.uncc.edu](http://www.srdesign.uncc.edu) or contact Terry Jordan at 704-687-5029 or [tdjordan@uncc.edu](mailto:tdjordan@uncc.edu).

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