



### **College of Engineering Students Win Seven Awards at HENAAC – Great Minds in STEM Conference**

**Tampa, Fla. (October 12, 2010)** –College of Engineering students won a total of seven awards during the student technical poster competition at the 22nd Annual HENAAC – Great Minds in STEM conference held at Walt Disney World held October 7-10. Dayna Martinez-Torres, a PhD candidate in the Department of Industrial and Management Systems, placed first in the category Graduate Science/Mathematics with her poster, titled “Non-pharmaceutical interventions (NPI) for the Mitigation of Pandemic Influenza.” Sheila Jean, a senior in the Department of Electrical Engineering, placed first in the category Undergraduate Engineering/Technology with her poster, titled “A Room Temperature Hydrogen Sensor Using Tin Nanoparticles.”

Sponsored by NASA, the intent of the HENAAC – Great Minds in STEM national poster competition is to give students the opportunity to display their research accomplishments and receive recognition for their scholarly investigation or scientific study. Each student abstract and poster was judged by two STEM professionals from academia, industry or government based upon the National Science Foundation’s review criteria (Intellectual Merit and Broader Impact). Student winners receive cash awards ranging from \$400 to \$1,200.

The list of USF student winners, faculty advisors, and titles included:

#### **Undergraduate Engineering/Technology**

1<sup>st</sup> place – Sheila Jean (Electrical Engineering)/REU Mentor: Shekhar Bhansali (Electrical Engineering)  
*A Room Temperature Hydrogen Sensor Using Tin Nanoparticles*

#### **Undergraduate Science/Mathematics**

2<sup>nd</sup> place - Ivonne Rodriguez (Chemical Engineering)/REU Mentor: Jon Antilla (Chemistry)  
*Copper-Catalyzed Cross Coupling Reactions of Amidines as Post-Stroke Therapeutics*

3<sup>rd</sup> place – Mauricio Rojas (Chemical Engineering)/REU Mentor: John Kuhn (Chemical and Biomedical Engineering)  
*Catalytic Conversion of Glycerol over Nickel Supported on AlPO<sub>4</sub> and Si-Al Oxides*

#### **Graduate Engineering/Technology**

2<sup>nd</sup> Place – Al-Aakhir Rogers (Electrical Engineering)/Co-Major Professors: Shekhar Bhansali (Electrical

Engineering); Scott Samson (SRI International, St. Petersburg)

*Evanescent Wave Coupling Using Subwavelength Gratings for Optical MEMS Accelerometer*

3<sup>rd</sup> Place – David Cure (Electrical Engineering)/Major Professor: Tom Weller (Electrical Engineering)

*2.45 GHz Low Profile End-Loaded Dipole Backed by a High Impedance Surface*

### **Graduate Science/Mathematics**

1<sup>st</sup> Place – Dayna Martinez-Torres (Industrial and Management Systems Engineering)/Major Professor:

Tapas Das (Industrial and Management Systems Engineering)

*Non-Pharmaceutical Interventions (NPI) for the Mitigation of Pandemic Influenza*

3<sup>rd</sup> Place – Alexandra Oliveros Villalba (Electrical Engineering)/Major Professor: Steve Sadow

*Cellular Interactions on Epitaxial Graphene on SiC (0001) Substrates*

Annually over 3,000 of the best and brightest students, professionals and high level executives attend the HENAAC – Great Minds in STEM Conference. The event is a national venue for the recruitment, recognition, and retention of top Hispanic STEM talent. This year, the College of Engineering provided support for over 30 undergraduates and graduate students to participate in the three-day event.

Students and alumni attended professional development workshops and networked with leading engineering and science professionals from "FORTUNE 500" corporations, national labs, research universities, and federal funding agencies for internships/co-op and employment opportunities. Undergraduates participated in the HENAAC mentoring program and the College Bowl, a two-day, high energy competition in which teams of students, coached and judged by industry and government representatives focus on developing teamwork and leadership skills. Along with graduate students, they also supported the College of Engineering diversity/outreach mission by serving as student ambassadors during the Career and Graduate School Fair.

Conference Link: [www.henaac.org](http://www.henaac.org)

*The University of South Florida is one of the nation's top 63 public research universities and one of only 25 public research universities nationwide with very high research activity that is designated as community engaged by the Carnegie Foundation for the Advancement of Teaching. USF was awarded \$380.4 million in research contracts and grants in FY 2008/2009. The university offers 232 degree programs at the undergraduate, graduate, specialist and doctoral levels, including the doctor of medicine. The USF System has a \$1.8 billion annual budget, an annual economic impact of \$3.2 billion, and serves more than 47,000 students on institutions/campuses in Tampa, St. Petersburg, Sarasota-Manatee and Lakeland. USF is a member of the Big East Athletic Conference.*

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