

# Department of Engineering Technology

## College of Technology

### University of Houston

#### Newsflash Spring 2007

Below is a brief compilation of recent news bits on faculty, staff, students and other departmental activities.

#### ET Suite Remodeling

Dean Fitzgibbon has approved a proposal to utilize rooms T2 304 and 304A as the new ET suite. This is indeed sweet! We are looking at how to best reorganize the combined space to benefit students, to provide better staff support that improves data & information flow, and to maximize productivity of our growing department. Real estate is really hard to come by, so this is no small feat; and in a big way the proposal success is directly tied to all of faculty and staff efforts. Remodeling may occur as soon as this coming summer.

Many thanks to the Dean's Office for their continued support!

#### Career Fair – Huge Success

The largest Career Fair in recent history was held on Wednesday, March 7 from 10:00 am – 3:00 pm in the University Center Houston Room. 53 participating companies participated and over half were interested in Construction Management majors! The career services website at [tech.uh.edu/College/Career\\_Services/For\\_Students/](http://tech.uh.edu/College/Career_Services/For_Students/) lists the majors each company is recruiting, as well as their website addresses.

#### New Student Pub Venue

The Fall 2006 issue of the TECHNOLOGY INTERFACE, the on-line Journal for the Engineering Technology profession available at: <http://technologyinterface.nmsu.edu/Fall06/> provided 14 fully refereed papers including one Student paper: "STAN - The Smart Trash Car", by Alisha Garrett, Chris Vanderbles, Ricardo Moreno, and Farrokh Attarzadeh . Dr. Farrokh Attarzadeh was the advisor of this student team, and is the (founding) Associate Editor of the Student Paper section of this journal.

#### IEEE Student Branch

In fall 2006, the IEEE Student Branch received the *2005 Student Branch Membership Growth Award for Outstanding Leadership and Results in IEEE Membership Development Activities for Region 5*. Dr. Driss Benhaddou is their Faculty Advisor.

#### Formula Car Returns



Designing, building, testing and ultimately racing a Formula One car in the 2007 Formula SAE (FSAE) Competition has become a project for seventeen students at the College of Technology. Together, they have built a car from the ground up in hopes of winning a national competition that has historically grown to become one of the most anticipated competitions for engineering students across the nation. [Read more!](#) Left: picture at the Houston Auto Show. In March 2007 we learned that the team was selected by Mrs. Pat Adam as the recipient of the 2007 William R. "Bill" Adam Formula SAE® Grant for Rookie Teams.

### **New TSPS Chapter**

The Texas Society of Professional Surveyors (TSPS) Student Chapter has been formally accepted by the TSPS board and registered with the University. Students held their first membership meeting on Monday May 1, 2006 at 4:00 p.m. in Room 116 T1. I want to acknowledge Dr. Hassan Moghaddam, Instructional Professor in ET for his leadership and his efforts in achieving this milestone.

### **New ISA Chapter**

I would like to report the great success of our ISA student chapter 1st general meeting. There were 28 student attendees, 8 of which are graduate students from our college, College of Engineering, and Math and Natural Science. Students elected 6 student officers for the chapter. After these officers go through on-campus training, the ISA student chapter will be a recognized organization in the University of Houston. Already about 10 students plan to join ISA in the near future. Dr. Xiaojing (Jane) Yuan is the faculty advisor.

### **First UH SURF Scholarship**

Mr. Ammar Mansoor a Computer Engineering Technology undergraduate student received a 2007 UH Summer Undergraduate Research Fellowship to conduct undergraduate research for 10 weeks of the summer under the guidance of Dr. Driss Benhaddou. This is our first such fellowship, and we know there will be more in the future.

### **Inaugural ASME Engineering and Technology Banquet**

Presented by Baker Hughes, the banquet held at the UH Hilton on Friday March 30<sup>th</sup> was a complete success! Plaques were given out to several sponsoring company representatives; there were door prizes & a bingo; and as always, the presentation by Prof. John Lienhard as keynote speaker was impeccable. Prof. Linehard is a renowned speaker and writer in the engineering field, also widely known for his "Engines of our Ingenuity" program every morning on NPR. Kudos to the student officers and volunteers who worked very hard to put this banquet together!

### **ASME Wins Second Place**

Douglas Postek, a Mechanical Engineering Technology senior wins Second Place in the Old Guard Oral Presentation Competition at the ASME Great International Southwest and Rocky Mountain District E of North America, Student Professional Development Conference, hosted by the ASME Student Section of UT Pan American, April 13-14, 2007.

### **Biotechnology Fall 06**

The University of Houston's College of Technology was awarded a \$1 million grant from the Texas Workforce Commission to develop an education and training program in Biotechnology. Read more about this program and Dr. Rupa Iyer, Research Associate Professor at [www.tech.uh.edu/College/Calendars\\_and\\_News/Newsletters/fall2006/bridging.html](http://www.tech.uh.edu/College/Calendars_and_News/Newsletters/fall2006/bridging.html). There were 907 proposals submitted; only 100 received awards. The reviews were extremely encouraging; in fact, it was recommended in the panel summary that Rupa's program be used as a model for accreditation. The first courses in the new B.S. degree will be offered in fall 07.

In addition, the project "From Nature to Lab to Production – Infusing Cutting Edge Research into Undergraduate Biotechnology Curriculum" has been awarded by NSF to Dr. Rupa Iyer (PI), and Collaborators Melinda Wales, Texas A&M and Reactive Surfaces, Peter Clarke, Introgen Therapeutics, and Sr. Personnel: Chris Baca. The reviews were extremely encouraging; in fact, it was recommended in the panel summary that Rupa's program be used as a \*model\* for accreditation.

## Digital Healthcare

A mini-symposium on digital healthcare was held in conjunction with HSEMB 2007 at the UH Hilton Hotel on Feb. 9th. More information about the programs of the digital healthcare mini-symposium as well as HSEMB2007 can be found at: <http://www.hsemb.org/hsemb2007/docs2007/Program2007Listing.html> Speakers from various universities and industry professionals got together in a very informative and successful symposium. For more information contact Dr. Xiaojing Yuan <http://www.tech.uh.edu/isgrin/>

CORE [core.tech.uh.edu/](http://core.tech.uh.edu/) made UH news in December 06 hosting FLL for nearly 1,000 participants of elementary and middle school-aged students. Then in March 07, it hosted Botball for nearly 300 students of junior and high schools across Texas. More information at:

<http://www.uh.edu/admin/media/nr/2006/07july/072706robotics.html>

<http://www.uh.edu/admin/media/nr/2006/02feb/022806botballtourny.html>

Volunteers from the University, NASA/JSC, the local Robonauts team, and industry made Botball a successful tournament for all. We got coverage from the Houston Chronicle, Channel 39 and Channel 13. Ms. Karen Cohen is our new Coordinator of CORE activities.

## New NASA Grant Fall 06

The project "Intelligent Sensor Network Testbed for ISHM" has been awarded by NASA Stennis Space Center to Dr. Deniz Gurkan (PI), Dr. Xiaojing Yuan (Co-PI), and Dr. Driss Benhaddou (Co-PI). The total budget is \$493,042. Congratulations to Deniz, Jane and Driss and best wishes for a successful project!

## Fluor Daniel Award for Research Excellence and for Teaching Excellence

It's satisfying to learn that two of our own faculty are recognized at the College level. Dr. Driss Benhaddou has been selected to receive this year's Fluor Daniel Award for Research Excellence. Dr. Shawn Lee was selected to receive this year's Fluor Daniel Award for Teaching Excellence

AT&T Technology Lab <http://www.tech.uh.edu/attlab/>



The UH AT&T Technology Lab, inaugurated on November 14, 2006, is the result of more than two years of collaboration between the University of Houston and Southwestern Bell Communications, Inc (now ATT) in the areas of telecommunications, networks, and education. The Lab serves as an idea and information exchange hub for the educational, industrial, and research community. To achieve its goals, the Lab has been equipped with state-of-the-art networking and communications equipment which include a campus-wide three-node SONET/MPLS and giga-ethernet testbed that connects to four other UH research labs, wireless internet, and high-definition video-conferencing and video-streaming.

## International Recognition

I am delighted to inform you that the International Awards & Recognition Committee of the Society of Manufacturing Engineers has selected Dr. Gary Cheng to receive an Outstanding Young Manufacturing Engineer Award in 2007. Dr. Cheng has just joined the Mechanical Engineering Technology program this fall 2006.

The SME Kuo K. Wang Outstanding Young Manufacturing Engineer Award is conferred in recognition of his significant achievements and leadership in the field of manufacturing engineering as a young engineer. Dr. Cheng is one of 13 recipients who will receive the award in 2007. The 2007 award is named in honor of Dr. Wang for his lifelong contributions to manufacturing and long-time support of SME.

### **Faculty Joint Appointment**

It is a pleasure to let you know that Dr. Gary Cheng, Assistant Professor in ET's Mechanical Engineering Technology program has been extended a joint appointment as Assistant Professor of Industrial Engineering <http://www.egr.uh.edu/ie/people/> He joins Dr. Heidar Malki and Dr. Wajiha Shireen who have joint Professor appointments with the Electrical and Computer Engineering Department. The joint appointment enables our faculty to interact more freely with the Engineering departments especially with the departments' PhD students.

### **Teaching & Research Lab Sites**

I just wanted to express my sincere thanks to the many individuals who have taken an extra step to make ET shine just a bit brighter. The sites below (in no particular order) are some icons of the excellent work that's going on with your students in your labs and classrooms:

[tech.uh.edu/college/labs/ONRL/index.php](http://tech.uh.edu/college/labs/ONRL/index.php) Optical Networking and AT&T Technology Lab

<http://tech.uh.edu/rock/> Optical Circuits

<http://www.tech.uh.edu/isgrin/> Intelligent Sensors

<http://core.tech.uh.edu/> Robotics

<http://cot-vyger.cougarnet.uh.edu/> CLABS Project

The main link to all College labs is at [http://tech.uh.edu/College/College\\_Facilities/Labs/](http://tech.uh.edu/College/College_Facilities/Labs/)

### **Prestigious ONR Young Investigator Award**

Dr. Gary Cheng, Assistant Professor of Engineering Technology and Industrial Engineering, is one of the 34 recipients of the highly prestigious *2007 Office of Naval Research Young Investigator Award*. This is an extremely competitive program and being a recipient is quite an achievement by Gary. Only about 10% of the applicants are selected by the Office of Naval Research based on:

1. past performance, demonstrated by the significance and impact of previous research, publications, professional activities, awards and other recognition
2. a creative proposal, demonstrating the potential for making progress in a listed priority research area
3. a long-term commitment by his/her institution to the applicant and the research.

The title of his proposal is: "Warm Laser Shock Peening: A New Technique for Stabilized Fatigue Life and Stress Corrosion Resistance in Metals". Program details and a list of the 2007 recipients are at

[http://www.onr.navy.mil/sci\\_tech/3t/corporate/yip.asp](http://www.onr.navy.mil/sci_tech/3t/corporate/yip.asp)

### **Best Application Paper**

I'm delighted to share with you that the following article

"Forecasting Skewed Biased Stochastic Ozone Days: Analyses and Solutions", by Kun Zhang, Wei Fan, Xiaojing Yuan, Ian Davidson, and Xiangshang Li. was selected for the "Best Application Paper" award at the 2006 IEEE International Conference on Data Mining <http://www.comp.hkbu.edu.hk/~wii06/icdm/?index=award> The work was supported by a grant from the Environmental Institute of Houston.