

# NEWSLETTER

## OF THE ASEE GULF-SOUTHWEST SECTION

JULY 2003

### Newsletter Editor Corner

Hello members! I want first to introduce myself. My name is Tariq Khraishi. I have recently, as of 3/26/03, been appointed by Terry Chambers, the ASEE GSW 2003 Section Chair to serve as the ASEE GSW Section Newsletter Editor for the 2003 - 2004 term. I am excited about this responsibility and I look forward to serving and interacting with the section members during my term.

This is the first newsletter that I have worked on for our section. I hope that it will be to your liking and at least informative. The way the newsletter is currently structured is to provide contributions from each of the Executive Committee Members or Officers of the Section. There will certainly be reports from the current or incoming Chair of the Section, the Past or outgoing Chair and the Vice Chair or the next calendar year Program Chair. Contributions from other Officers or regular Section members are also welcome.

*Tariq Khraishi, GSW Section Newsletter Editor*



### The Chair's Corner

### The Chair's Corner

The ASEE Gulf Southwest Section's Annual Conference was held March 19-21 at U Texas Arlington (UTA). Highlights of the conference included the opening session presentation by ASEE President-elect Duane Abata, the "State of the Section" address by Section Chair Terry Chambers of UL Lafayette, and the multi-disciplinary design workshop by David Ollis of NC State. Because the conference took place during UTA's spring break, the lack of congestion on the campus resulted in several very personalized tours being enjoyed by the participants, especially the tour and dinner at the Ballpark in Arlington.

The UTA faculty, staff, and students were glad to have a chance to play host to the conference. Forty-nine faculty and 21 student papers were presented, and there was lots of time for interaction among

attendees. Particularly impressive again this year were the student presentations; you'll find their awards recognitions listed elsewhere in this newsletter – the future appears to be in good hands. Technical Program Chair Jim Williams did a superb job of managing the conference papers, which were available on CD at the conference and are now available on the Section web site.

My thanks to all who attended the conference for your participation and interaction. See you next year in Lubbock!

*Lynn Peterson, 2003-4 GSW Section Chair*



The  
Past Chair's  
Corner

## ***State of the Section Report***

By Terry Chambers  
ASEE GSW Past Chair

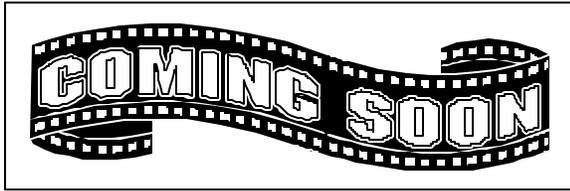
As outgoing Section Chair, and incoming Past Chair, I would like to congratulate Dr. Lynn Peterson and all her colleagues at UT Arlington for hosting a very fine conference this past March. At that meeting, I was pleased to be able to give a State of the Section report, and I would like to summarize that report here. My report was built around the conference theme of “Celebrating Our Successes and Facing Our Challenges.”

We have many successes to celebrate. First of all, we have a very active section, with 766 Professional Members, which is up from 749 in October of 2002. We also have 150 members in other categories, and Campus Representatives working hard to promote Engineering Education at 39 campuses. Our GSW section is in excellent financial shape, which positions us very well to make a positive impact in the promotion of engineering education in the future.

Like engineering educators everywhere, we also face a number of challenges. One ongoing challenge is the exponential growth of technology that is occurring at the same time as a nation-wide push to reduce the number of credit hours in undergraduate engineering programs. Many of these new technologies also present new ethical dilemmas to engineers, and we must find a way to prepare our students to deal with these challenges. Our member universities are also still struggling with the new ABET accreditation standards and with the difficulties inherent in trying to replace an aging faculty, nearly half of which is over the age of 55.

Where do we go from here? Well, I would encourage everyone to visit the conference web site ([www.aseegsw.org](http://www.aseegsw.org)), where the full conference proceedings are available. There, you will find discussions of 1) various ways to use technology to teach technology, 2) accreditation issues, 3) engineering ethics, 4) K-12 engineering education, 5) innovative degree programs, and many other interesting topics. I am very confident in the health and vigor of our ASEE GSW Section, and in our ability to make a positive contribution to the nation in the ways that we address the important issues facing engineering educators today.

## A Word from Program Chair



I would like to share with you below and at the end of the Newsletter some information about the upcoming section meeting:

**American Society for Engineering Education  
Gulf-Southwest 2004 Conference  
March 10-12, 2004  
Texas Tech University, Lubbock, TX**

*“Efficiently Educating 22<sup>nd</sup> Century Engineers”*

The conference begins at 1:00 pm Wednesday March 10, 2004 with a choice of two workshops: “Holistic, Efficient, and Web-Based Advising and Education Tools” or “Engineering a Communication Course for Engineers”. A Reception Dinner at the Texas Tech University Ranching Heritage Center follows on Wednesday evening.

After the five-paper presentation session on starting Thursday morning, the conference will conclude with an award luncheon on Friday. All events will be at the Holiday Inn Hotel and Towers, Lubbock, TX and on the Texas Tech U Campus.

For more information please email [Lloyd.Heinze@ttu.edu](mailto:Lloyd.Heinze@ttu.edu)



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**Find Us on the Internet**

You can find us on-line at the following URL:  
<http://www.asegsw.org/>



**Awards**

**2002-03 ASEE-GSW Awards**

- ***Outstanding Campus Representative Award (Certificate):***  
James Farison, Baylor University
- ***Outstanding Teaching Award (Certificate and \$500):***  
None awarded this year
- ***Outstanding Service Award (Certificate and \$500):***  
David Kauffman, University of New Mexico
- ***Student Paper Awards***
  - **1<sup>st</sup> Place Award (Certificate and \$150):**  
Melanie Hagewood and Ken Van Treuren, "Mapping the Flow Characteristics of the Baylor University Wind Tunnel," Baylor University

○ **2<sup>nd</sup> Place Award (Certificate and \$100):**

Brandon D. Pitt, Tristan J. Tayag and Mendy L. Nelson, "An Algorithm for the Digital Demodulation of an Interferometer," Texas Christian University

○ **3<sup>rd</sup> Place Award (Certificate and \$75):**

Jennifer R. Jewers and Robert R. Bittle, "Flow Visualization of R-134a in a Capillary Tube," Texas Christian University

● ***Best Paper Awards***

○ **1<sup>st</sup> Place Award (Certificate and \$300):**

Ronald E. Barr, Marcus G. Pandey, Anthony Petrosino, Lawrence D. Abraham, Tejas Karande and Bijal Patel "Classroom Testing of Virtual Biomechanics Laboratory (VBL) Learning Modules," University of Texas at Austin (first author)

○ **2<sup>nd</sup> Place Award (Certificate and \$200):**

Richard Bannerot, "It May Be Engineering Design, but is it Design?," University of Houston

○ **3<sup>rd</sup> Place Award (Certificate and \$100):**

William Jordan, Bill Elmore and Stan Napper, "Using Moral Theories to Help Engineers Make Ethical Decisions," Louisiana Tech University



**RESOLUTION**

Let it be resolved that the Gulf-Southwest Section (GSW) of the American Society for Engineering Education (ASEE) expresses its sincere appreciation to the **University of Texas at Arlington** for hosting the 2003 Annual Section Meeting, and in particular, expresses sincere gratitude to:

- i. Program Chair **Dr. Lynn Peterson** for her untiring efforts in organizing the meeting;
- ii. Technical Program Chair **Dr. Jim Williams** for his professional management and review of all the conference papers;
- iii. **Dean Bill Carroll** for his strong support of and ever-presence at the meeting;
- iv. Staff members **Ms. Raynette Taylor, Ms. Margie Kohler, and Mr. Dave Davis** for their friendly and professional administrative and technical contributions to the meeting;

Furthermore, let it be recognized that all attendees, from near and far, enjoyed immensely the friendly camaraderie, the stimulating paper presentations, the delicious meals, and all social activities reflecting local attractions, including the cowboy barber shop quartet, the technical presentation about the Bass Concert Hall,

and the wonderful trip to and meal at The Ballpark.

The GSW Section also expresses its appreciation to ASEE President-Elect **Dr. Duane Abata** for his attendance and fine keynote comments at the meeting.

At last, let this resolution be recorded on the permanent records of the GSW Section and be distributed to appropriate officers of the Society.

Respectfully submitted on March 21, 2003  
ASEE GSW Resolutions Committee  
Dr. Ronald E. Barr, Chair

cc: Dr. Charles Sorber, Interim President  
University of Texas at Arlington

# ASEE Gulf-Southwest Section 2004 Annual Conference

## *"Efficiently Educating 22<sup>nd</sup> Century Engineers"*

March 10 - 12, 2004

Lubbock, Texas

### Call for Papers (updated: 7-3-2004)

You are invited to submit papers for peer review to be presented at the 2004 annual conference of the American Society of Engineering Education, Gulf Southwest Section.

#### Paper Categories:

- Engineering Education for a Changing World
- The Place of Ethics in Engineering Education
- Enhancing the Process of Undergraduate Education
- Multimedia Classrooms of the Future
- Curriculum Innovations/Restructuring
- Students at Risk: How to Facilitate their Engineering Education and Improve their Retention
- Other Relevant Topics

**In addition to the above categories, student technical papers are also encouraged.**

#### MANUSCRIPT GUIDELINES

Authors should submit abstracts electronically to the ASEE GSW Program Chair at: [Lloyd.Heinze@ttu.edu](mailto:Lloyd.Heinze@ttu.edu). Abstracts should contain 250-300 words. The e-mail message accompanying the submission of a student paper abstract should clearly indicate that the principle author is a student, since papers of a purely technical nature will not be accepted from non-students.

See the [Author's Kit](#) for complete paper formatting guidelines.

Authors should include their contact names, mailing addresses, telephone and fax numbers and email addresses on all correspondence.

#### ABSTRACT ONLY SUBMISSIONS

If you would like to participate, but cannot meet the paper submission deadlines, you can present your talk and have only your abstract published in the proceedings. Note that you will still be required to register for the conference and submit an abstract, as described below. When submitting your abstract, please indicate that it is an abstract only submission.

#### HOW TO SUBMIT

Full papers will be accepted on the basis of peer review. Accepted papers will be published in the conference proceedings on a CD. Papers will be accepted only in electronic form (PDF or MS Word format). Final manuscripts should be submitted via email to the ASEE GSW Program Chair at: [Lloyd.Heinze@ttu.edu](mailto:Lloyd.Heinze@ttu.edu)

#### DEADLINES

- Abstracts due: ASAP!
- Complete manuscripts due: February 1, 2004
- Reviews completed and comments to authors: February 15, 2004
- Final papers due: March 1, 2004

#### REGISTRATION REQUIREMENTS

In order to make a presentation and have your paper (or abstract) appear on the proceedings CD, your registration fee must be paid by the March 1st registration deadline.

*More Conference Info At:*

[Conference Home Page](#)

**American Society for Engineering Education  
Gulf-Southwest 2004 Conference  
March 10-12, 2004  
Texas Tech University, Lubbock, TX**

***“Efficiently Educating 22<sup>nd</sup> Century Engineers”***

**ASEE GSW 2004 Conference Agenda**

All events in the Holiday Inn Hotel and Towers unless otherwise noted

**Wednesday, March 10**

- 13:00-17:00 Holistic, Efficient, and Web-Based Advising and Education Tools  
Workshop
- 13:00-17:00 Engineering – Engineering Communications Workshop
- 15:00-18:00 Registration
- 18:30-21:00 Reception Dinner (TTU, Ranching Heritage Center)

**Thursday, March 11**

- 7:00-8:00 Continental Breakfast for participants
- 7:00-8:00 Executive Committee Breakfast and Business Meeting
- 8:15-9:30 Opening Session
- 9:30-10:00 Coffee Break
- 10:00-12:00 Breakout Session 1 (paper presentations in four rooms)
- 12:15-13:15 Luncheon for participants
- 13:30-15:15 Breakout Session 2 (paper presentations in four rooms)
- 15:15-15:45 Coffee Break
- 15:45-17:30 Breakout Session 3 (paper presentations in four rooms)
- 18:00-19:00 Tour of TTU campus (optional – sign up required)
- 18:30-20:30 Dinner for participants

**Friday, March 12**

- 7:00-8:00 Continental Breakfast for participants
- 7:00-8:00 Campus Representatives Breakfast and Business Meeting
- 8:15-10:00 Breakout Session 4 (paper presentations in four rooms)
- 10:00-10:30 Coffee Break
- 10:30-12:15 Breakout Session 5 (paper presentations in four rooms)
- 12:15-13:15 Conference Awards Luncheon for participants

# Workshop

## Holistic, Efficient, and Web-Based Advising and Education Tools

Provided by James Gregory and others

### Includes

- Career and major selection (useful from junior through college and useful as a recruiting tool)
- Learning the importance of sleep management on academic and professional work
- Learning how to optimize academic performance in college from both a student and teacher perspective
- Learning how to detect and deal with learning disabilities
- Use of tools to aid advisors in the
  - Development of long-term plan for course scheduling
  - Academically smart and quick course scheduling process
  - Use of these tools with online registering for classes

### Time

1-5 pm on Wednesday

For further information please contact James Gregory

# Registration Form

ASEE Gulf-Southwest Section 2004 Annual Conference

March 10 – 12, 2004

Lubbock, Texas

**Please provide the following contact information:**

Name \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Street Address: \_\_\_\_\_

Address (cont.): \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Work Phone: \_\_\_\_\_

Home Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

e-mail: \_\_\_\_\_

ASEE member number: \_\_\_\_\_

ASEE expiration date: \_\_\_\_\_

**Circle One Registration Type:**

Faculty registration (ASEE Member) \$250

Faculty registration (Non-ASEE Member) \$280

Student registration \$45

**Circle Late Fee (only if postmarked after March 1)** \$30

**Circle any option you would like to purchase:**

Spouse (or partner) Registration (includes all meal events) \$80

Spouse (or partner) Program (includes tours, but not meals) \$30

Spouse (or partner) Name: \_\_\_\_\_

Wednesday Afternoon Workshop \$30

Wednesday Afternoon Campus Tour Free

**Total of all Circled Items:** \$\_\_\_\_\_

**Please note any special dietary needs, special access needs, or special audio-visual needs in the space below:**

\_\_\_\_\_

**Make checks payable to:** SWPSC

**Mail checks to:**

SWPSC PE213D Texas Tech U

PO Box 43111

Lubbock, TX 74909-3111