

NEWSLETTER

OF THE ASEE GULF-SOUTHWEST SECTION

August 2004

Newsletter Editor Corner

Hello Again! Welcome to another installment of the ASEE Gulf-Southwest (GSW) Section Newsletter. This is the second Newsletter that I have worked on for the Section (the first one was done in July 2003). It is the first though since I was officially selected as the Section's Newsletter Editor at our last annual meeting in Lubbock, Texas.

I want to be the first to say that the Section had another successful year celebrating engineering education. Highlights of success stories are discussed elsewhere in this Newsletter.

Here, I simply want to point out the new changes made to this Newsletter over last year's. Although the letter's format mirrors that of last year, there are two new sections added here: "Member News" and "Awards Info". Read through them as well as the all-NEW information in the rest of the letter and enjoy! As always, contributions from Section members are also welcome for consideration.

Tariq Khraishi, GSW Section Newsletter Editor



The Chair's Corner

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The 2004 ASEE Gulf Southwest Section's Annual conference was held March 10-12 at Lubbock's Downtown Holiday Inn and sponsored by Texas Tech University. Highlights of the conference included the Thursday opening session presentation by Tech's Provost William Marcy and Friday's closing comments by Tech's Dean of the College of Engineering James Smith. The Wednesday afternoon pre-conference workshops were: "Holistic, Efficient, and Web-Based Advising and Education Tools" provided by James Gregory, Associate Dean for Undergraduate Studies TTU College of Engineering, and "Engineering Ethics Workshop Using a New Engineering Ethics Video: Incident at Morales" presented by discussion leader Jimmy H. Smith, Director, National Institute for Engineering Ethics, Texas Tech University. Wednesday evening's wine and

dinner buffet allowed attendees to mingle together in a causal environment. An enchanting cowboy poet, Alvin Davis, was Thursday's post dinner entertainment.

The TTU faculty, staff, and students were glad to have a chance to host the conference. Sixty-two faculty and student papers were presented, and there was a lot 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. The conference proceedings of all the paper presentations were available on CD at the conference and should be available on the Section website as well.

My thanks to all who attended the conference for their participation and interaction! Please plan to attend next year's meeting in Corpus Christi.

Lloyd Heinze, 2004-2005 GSW Section Chair



By Lynn Peterson
ASEE GSW Past Chair

Have you thought about hosting a section meeting? I'd like to take this opportunity to talk with representatives of the colleges in the Gulf-Southwest Section who have *not* recently organized a section meeting. Since UT Arlington hosted the Spring 2003

meeting, I have observed a number of benefits and interesting spin-offs:

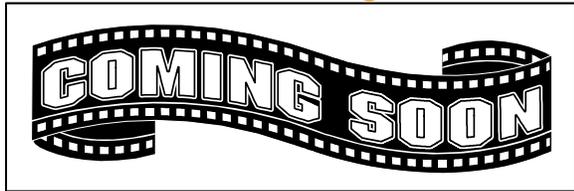
- As could be predicted, a number of our faculty and students with previously only a passing acquaintance with ASEE learned about the organization as a significant forum for the interchange of ideas on engineering education.
- A new faculty member attended the Salt Lake City ASEE conference, as a direct result of the increased visibility of ASEE on our campus. Seeing the national conference through his eyes made me even more excited about the quality of information and interchange that takes place there.
- Plans call for 4 more faculty members from our school to go to the 2005 ASEE Conference in Portland, based on the very positive experience this summer. In other words, a snowball effect beginning with hosting the section meeting.

The quality of the ASEE national organization is a strong selling point to getting involved in ASEE activities, but in people's busy lives they will not necessarily take the time to try out a new organization or conference without some exposure. You might want to provide that opportunity for exposure for your engineering faculty / staff / students by becoming a host for our annual section meeting.

As an aside, it is the Gulf-Southwest Section's tradition to elect the chair of each year's conference as Section Chair for the following year. The 2004 section meeting at Texas Tech was chaired by Lloyd Heinze who was then elected as the 2004-5 Gulf-Southwest Section Chair. As a result of my turn as section chair, I had an excellent opportunity to become more involved in ASEE, which will be a lasting spin-off for me personally.

We currently have the section meetings scheduled through 2008:
2005 – TAMU Corpus Christi
2006 – Southern Univ. and A&M College
2007 – TAMU College Station??
2008 – Univ. of New Mexico Albuquerque
but it is always good to have indications of interest from other colleges. Think about it, and if you feel you might be interested in hosting a section meeting, go ahead and email our section Chair, Lloyd Heinze (Lloyd.Heinze@coe.ttu.edu)

A Word from Program Chair



Upcoming section meeting:
American Society for Engineering Education
Gulf-Southwest 2005 Conference
March 23-25, 2005
Texas A&M University-Corpus Christi,
Corpus Christi, TX 78412

“Achieving Excellence in Engineering Education”

The conference will begin at 1:00 pm on Wednesday March 23, 2005 with two afternoon workshops. The two workshops will run concurrently from 1 pm to 5 pm. A Reception Dinner at the Holiday Inn-Emerald Beach follows at 6:30 pm on Wednesday evening. Paper presentation sessions start on Thursday morning and continue on Friday. The conference will conclude with an award luncheon at noon on Friday. All events will be at the Holiday Inn-Emerald Beach (1102 South Shoreline, Corpus Christi, TX 78401) and on the Texas A&M-Corpus Christi campus.

The organizing committee invites members of the GSW section to submit workshop proposals for review. In particular, workshop proposals that focus on aspects of excellence in engineering education or unique application areas are encouraged. Each workshop should last about four hours. The format and content of each workshop will largely be determined by the presenter.

Workshop proposals should state the goals of the workshop and provide sufficient information to evaluate the quality and importance of the topic. Proposals should be limited to three pages and contain the following information:

- Proposed title of the workshop
- A brief technical description of the workshop, specifying the workshop goals and its focus
- A brief discussion of why and to whom the workshop is of interest
- The names, postal addresses, phone numbers, and email addresses of the proposed workshop organizer(s).

Workshop proposals should be submitted via e-mail. Please send an electronic copy (plain text, word or pdf) as soon as possible but no later than November 5, 2004 to Dr. Satyajit Verma, Workshop Coordinator, Email: satyajit.verma@mail.tamucc.edu. Proposals will be reviewed and prospective organizers will be notified of the decision no later than December 2, 2004.

For more information contact:
Vice-Chair (Program Chair):

Dr. Ray Bachnak
Professor and Coordinator of Engineering Technology
Texas A&M University at Corpus Christi
6300 Ocean Drive, ST 222D
Corpus Christi, Texas 78412
Phone: (361) 825-6025
FAX (361) 825-2795
E-mail: rbachnak@falcon.tamucc.edu

Section Officers

Past Chair:

Lynn Peterson
Associate Dean, College of Engineering
The University of Texas at Arlington
P.O. Box 19019
Arlington, TX 76019
(817) 272-5503 (office)
(817) 272-2548 (FAX)
Email: peterson@uta.edu

Chair:

Lloyd Heinze
Associate Professor of Petroleum
Engineering
213B Petroleum Engineering Building
Texas Tech University
Lubbock, TX 79409-3111
(806) 742-1801 ext 236 (office)
(806) 742-3502 (FAX)
Email: Lloyd.Heinze@ttu.edu

Vice-Chair (Program Chair):

Dr. Ray Bachnak
Professor and Coordinator of Engineering
Technology
Texas A&M University at Corpus Christi
6300 Ocean Drive, ST 222D
Corpus Christi, Texas 78412
Phone: (361) 825-6025
FAX (361) 825-2795
E-mail: rbachnak@falcon.tamucc.edu

Secretary/Treasurer:

Jerry Keska
Department of Industrial Technology
University of Louisiana at Lafayette
PO Drawer 42972
Lafayette, LA 70504-2972
(337) 482-5718 (office)
(337) 482-6661 (FAX)
Email: jkeska@louisiana.edu

Section Campus Rep:

Amir Karimi
Mechanical Engineering Department
The University of Texas at San Antonio
6900 North Loop 1604 West
San Antonio, TX 78249
(210) 458-5514 (office)
(210) 458-5589 (FAX)
Email: akarimi@utsa.edu

Section Newsletter Editor:

Tariq Khraishi
Mechanical Engineering Department
MSC01-1150
The University of New Mexico
Albuquerque, NM 87131
(505) 277-6803 (office)
(505) 277-1571 (FAX)
Email: khraishi@me.unm.edu

Section Awards Committee Chair:

Habib Mohamadian
Mechanical Engineering Dept.
Southern University & A&M College
Baton Rouge, LA 70813
(225) 771-4624 (office)
(225) 771-4877 (FAX)
Email: mohamad@engr.subr.edu

Section Nominating Committee and Resolutions Committee Chair:

Ronald E. Barr
Mechanical Engineering Department
Mail Code C2200
University of Texas at Austin
Austin, Texas 78712
(512) 471-3008 (office)
(512) 471-7683 (FAX)
Email: rbarr@mail.utexas.edu

Section Webmaster:

Terrence L. Chambers
Department of Mechanical Engineering
University of Louisiana at Lafayette
PO Drawer 44170
Lafayette, LA 70504-4170
(337) 482-6731 (office)
(337) 482-1129 (FAX)
Email: tlchambers@louisiana.edu



Find Us on the Internet

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



Awards

2003-04 ASEE-GSW Awards

@ the 2004 ASEE-GSW Section Annual Meeting

- **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):**
J. Paul Giolma, Trinity University
- **Conference Person-Mile Award (Plaque):**
Lamar University
- **Student Paper Awards**
 - **1st Place Award (Certificate and \$150):**
Puneet Bhatia and Terrence L Chambers, "The Use Of The Genetic Algorithm To Solve Large Transshipment-Location Problems," University of Louisiana at Lafayette
 - **2nd Place Award (Certificate and \$100):**
Alison Reed and Kenneth Van Treuren, "Application of a Modified Transient Liquid Crystal Technique for Analysis of Thin Plates of Different Materials," Baylor University
 - **3rd Place Award (Certificate and \$75):**
LaQuasha M. Morgan and Faye Moore "The Texas Eta Chapter of Tau Alpha Pi National Honor Society: Building A Sense of Pride in Engineering Technology," Prairie View A&M University
- **Best Paper Awards**
 - **1st Place Award (Certificate and \$300):**
Roman Taraban, Arne Weigold, Edward E. Anderson, and M. P. Sharma, "Students' Cognitions When Using an Instructional CD For Introductory Thermodynamics," Texas Tech University
 - **2nd Place Award (Certificate and \$200):**
Julian H. Kang and Narendra Nigudkar, "4D Campus Model: Learning Tool for Construction Planning" Texas A&M University
 - **3rd Place Award (Certificate and \$100):**
M. M. Darwish and M. H. Akram, "Transforming Passive Listeners to Active Learners in the Engineering Classrooms," Texas Tech University
- **David G. Johnson, Jessica D. Sanders, and Gregory S. Mowles, "A Golf Ball Launcher: An Engineering Dynamics Project," University of New Mexico**

Awards

Info

The Chair of the Section Awards Committee, Professor Habib Mohamadian, wants to share with Section members information regarding Section awards and nomination procedures below. This information should be kept on file if you anticipate making or getting a nomination.

ASEE Section Outstanding Teaching Award

This award is given by each ASEE section, with support, where possible, from local industry. The award, which focuses on outstanding classroom performance, recognizes teachers of engineering and engineering technology students and serves as an incentive to make further significant contributions to teaching.

The Award: The award consists of a certificate, prepared by ASEE National Headquarters, and an appropriate honorarium, where possible, presented by the local section. Each section shall determine its own level of the honorarium and fund the honorarium from its Banking and Accounting Services System fund. Presentations are made at the section annual meeting with notation in the ASEE Annual Awards Banquet Program.

Qualifications: Candidates may be teachers of any subject included in an ABET/CEAB accredited engineering or engineering technology curriculum. In addition to technical courses, subjects may include the humanities and social studies, mathematics and science.

The teacher, as an individual, must:

1. Possess and be able to communicate a broad and accurate knowledge of the subject area.
2. Possess self-confidence, create a feeling of harmony between self and students and be able to meet difficulties with poise.

3. Possess a sense of proportion, stressing fundamentals and disregarding trivial detail. Give assignments that challenge students, demanding thinking in the completion of assignments.
4. Demonstrate such an intense interest and enthusiasm for the subject area and for the enhancement of learning processes that students are motivated to their fullest capacities.
5. Be available for advising and counseling students before and after graduation.
6. Teach a minimum of two semester or three quarter courses per calendar year.
7. Have considerable endorsement from students, using both regular course evaluations and individual letters of recommendation as evidence.
8. Attend the section annual meeting at which the award is presented; and make a presentation at that meeting (or the following section meeting) to share some element of his/her success as a teacher.
9. Possess a strong record of activity in ASEE or the educational activities of another professional society.

The teacher's contributions to the profession should include at least three of the following:

1. Participation in the development of courses or curricula.
2. Development of teaching equipment or development of a wider application of teaching equipment previously developed.
3. Contribution to the improvement of laboratories or other facilities.
4. Development or authorship of instructional material or a text that enhances the student learning process.
5. Publication of original work, through any medium, that enhances the engineering education process or adds to the literature pertaining to teaching methodologies.
6. Service as a mentor to other teaching faculty or participation in the conduct of seminars and workshops that are focused on helping other teachers improve their classroom effectiveness.

Outstanding Section Campus Representative Award

The Campus Liaison Board of ASEE has initiated this award in order to recognize those ASEE Campus Representatives who have achieved excellence in their roles as the Society's representative on campus. The ASEE Campus Representative acts as a liaison to help determine members' interests and reactions to Society programs and publications, to stimulate interest among the faculty in section and national meetings and to promote individual membership and involvement. This award is bestowed annually upon those ASEE Campus Representatives who have demonstrated staunch support for ASEE on their campuses.

The Award: The award consists of a certificate to the ASEE Campus Representative selected from each section and is presented at the section meeting.

Award Criteria: Nominees must have served ASEE significantly through active participation in the following areas:

1. Recognition of outstanding teaching and research activities on his or her campus by submitting ASEE award nominations and support of the New Engineering Educators program.
2. Encouragement of faculty members to submit articles to ASEE publications.
3. Encouraging faculty members to submit papers for presentation at section and national meetings.
4. Promotion of individual membership in ASEE.
5. Encouragement of faculty attendance at section, division and national ASEE meetings.

Selection Criteria: Each ASEE Campus Representative should submit an annual form to his or her respective Section Campus Representative outlining ASEE activities on his or her campus. The form is found in the Campus Representative Manual. The appropriate Section Campus Representative will select the recipient of the award based on the evidence that indicates consistent and outstanding promotion

of ASEE on campus according to the above award criteria.

Outstanding Zone Campus Representative Award

Each Section Campus Representative will forward to the respective Zone Chair the name of the Section Campus Representative Award recipient together with the appropriate documentation. The Zone Chairs will then select the recipients of the Outstanding Zone Campus Representative Awards.

The Award: The award consists of a plaque to be presented to the ASEE Campus Representative, selected by each Zone Chair, at the ASEE Annual Conference.

Best Paper Awards

The Awards Each year three awards are given to the best engineering education papers published and presented at the annual meeting of the ASEE-Gulf Southwest (GSW) Section. Awards in the amounts of \$300, \$200, and \$100 are given to the first, second and third placed papers, respectively. In addition certificates of recognition are presented to the authors of the selected papers. In the case of co-authors, individual certificates will be presented, but the honorarium will be split among the number of authors. Award presentations are made at the Honors and Awards Luncheon of the ASEE-GSW section.

Qualifications: The paper must be presented by the author(s) at the annual meeting. The paper must be an original paper written specifically for and published in the Proceedings of the ASEE-GSW Section Annual Conference. It is permissible that the paper be of similar content to the papers written by the same author(s) for other conferences.

Selection: The members of the ASEE-GSW Section Awards Committee will make The selection of best papers.

Outstanding Service Award

Purpose: To recognize a member who has demonstrated a long history of service to engineering education and/or the ASEE-GSW section.

The Award: The award consists of a \$500 honorarium and a certificate of recognition. Presentations are made at the section annual meeting with notation in the ASEE Annual Awards Banquet Program.

Qualifications: Any current or past member of GSW section with a distinguished record of service to engineering education and/or the ASEE-GSW section shall be eligible for this award.

Nomination: Any member of the section may nominate candidates for this award by preparing a nomination package that includes an ASEE General Award Nomination Form, candidate's curriculum vitae, and a nomination rationale statement highlighting the service to engineering education and/or the ASEE-GSW section. Supporting letters are recommended to strengthen the nomination but not required.

The selection will be made by the section Awards Committee. The nomination package should be mailed to the ASEE-GSW section Awards Committee Chair.

Member News

 Ronald E. Barr was elected ASEE President-Elect for 2004-2005 in the Spring 2004 ASEE National Elections. Barr is a Professor of Mechanical Engineering and current holder of the Dads' Association Centennial Teaching Fellowship #1 at The University of Texas-Austin, where he has taught since 1978. Barr has served on the ASEE Board of Directors, first as Chair of Zone III (1997-1999), and then as Vice President for Member Affairs (2000-2002). He will assume the ASEE Presidency in June 2005. Professor Barr was also the 1993-94 Chair of the GSW Section of ASEE, and is currently the Chair of the Nominating and Resolutions Committee for the Section.

 Amir Karimi, Professor of Mechanical Engineering at The University of Texas-San Antonio, and current section officer (The Section Campus Rep.), was voted as the ASEE Zone III Chair-Elect in the Spring 2004 national balloting.



RESOLUTION

Let it be resolved that the Gulf-Southwest Section of the American Society for Engineering Education (ASEE) expresses its sincere appreciation to Texas Tech University for hosting the 2004 Annual Section Meeting, and in particular expresses sincere gratitude to:

- i. Program Chair Dr. Lloyd Heinze for his untiring efforts in organizing the meeting program, paper presentations, and associated activities;
- ii. Able assistant Dr. Jim Gregory, for his ever-present support and enlightening workshop presentation; and
- iii. Provost Dr. William Marcy for his keynote address on ethical practices and Dean Jim Smith for his comments at our business luncheon.

Furthermore, let it be recognized that all attendees, from near and far, enjoyed immensely the friendly camaraderie, the

innovative paper presentations and stimulating discussions, the delicious meals, and social activities reflecting the local culture, including the delightfully entertaining “cowboy poet.”

The GSW Section also expresses its appreciation to Dr. John Ballard, ASEE Zone III Chair and our representative on the ASEE Board of Directors, for his attendance and insightful comments at our 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 12, 2004

ASEE GSW Section Resolutions Committee

Dr. Ronald E. Barr, Chair