

NEWSLETTER

OF THE ASEE GULF-SOUTHWEST SECTION

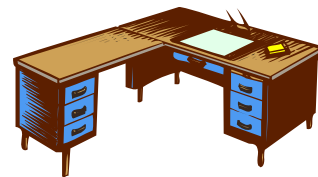
August 2007

Newsletter Editor Corner

Welcome again! Our last Section meeting in South Padre Island was a really good one! The event was very well organized and the papers were nicely grouped in common themed sessions. Do I have to say more about the location! Location, location, location is what a real estate agent would tell you. The same applies to our annual conference. So far it's been held in very nice spots and nice hotels, which makes the overall experience from the conference a positive one. As usual though, the SPI conference had a lot of intriguing paper presentations that the attendees learned from to improve their own teaching methods.

The section is now gearing up for another exciting meeting hosted by the University of New Mexico. The meeting will be held in the fine city of Albuquerque and in one of its top hotels and top areas. We look forward to a successful meeting in 2008! More on this meeting can be found later in this Newsletter.

Tariq Khraishi, Section Newsletter Editor



The Chair's Corner

The Chair's Corner

The 2007 ASEE Gulf Southwest Section's Annual conference, sponsored by University of Texas – Pan American, was held on March 28-30 at the Sheraton Hotel in South Padre Island. The conference included on Wednesday afternoon a workshop entitled: "Writing a More Competitive Research / Educational Development Grant Proposal." conducted by Dr. Vijaya K. A. Gopu, PE, Professor and Chair, Department of Civil and Environmental Engineering, Tulane University and Professor Roger K. Sealks, PE, Professor Emeritus of Civil and Environmental Engineering, Louisiana State University. The theme for the conference was "Building Partnerships in Engineering Education to support and Sustain Innovation". The main program is a blend of full papers, cutting edge works-in-progress and highly interactive, nontraditional

sessions from education. Highlights of the conference included many presentations by Dr. Anna Rodriguez, Senior Vice Provost for Undergraduate studies, UTPA, Dr. Edwin LeMaster, Dean of the College of Science and Engineering at University of Texas – Pan American, a representative for Mr. Robert Pinkerton, Mayor, South Padre Island, and Dr. Ronald Barr, Past president of the American Society for Engineering Education. The year of dialog moderator is Dr. Amir Karimi, Ph. D., PE., Professor of Mechanical Engineering and associate Dean of Undergraduate Studies. The panel members were: Ronald Barr, Walter Buchanan, Arturo Fuentes, Benjamin Kelly, Edwin LeMaster, and Mr. Tom Roberts. Engineering Ethics Panel was conducted at noon on Thursday March 29 entitled “Teaching Old Tricks to New Dogs: Are Three Innovative Models in Ethics Education for Engineering Students?” Dr. Thomas Pearson, Ph. D. was the moderator and the Panel members were: C.E. Harris, Jr., Ph. D., Kirsty Mills, Ph. D., and Stuart D. Yoak, Ph.D. The keynote Speaker for the Friday morning was Dr. Earl H. Dowell, Sc. D. entitled “Globalization, Mature and Not Mature Technologies, and the Role of Education”. The program included 20 sessions with 89 regular papers and 34 student papers, with four concurrent sessions. The conference proceedings were published on a CD-ROM. Attendance at the conference was approximately 150, including students. On behalf of the University of Texas – Pan American administration, faculty, staff, and students, I convey my sincere thanks to all who attended the conference for their participation and contribution. Hope to see many of you at next year's meeting in the University of New Mexico, Albuquerque.
Hashim Mahdi, 2007-2008 Section Chair

A **Word** from Program Chair



Upcoming section meeting:
**The American Society for Engineering Education (ASEE)
2008 Gulf-Southwest (GSW) Annual Conference
March 26-28, 2008
Hosted by the University of New Mexico (UNM)**

“Current and Future Challenges and Opportunities in Engineering Education”

<http://www.unm.edu/~aseegsw>

The University of New Mexico invites your participation in the upcoming 2008 ASEE-GSW Conference being held in the city of Albuquerque, New Mexico, from March 26-28, 2008.

A workshop prior to the conference start is planned for Wednesday. The workshop will help increase the competitiveness of submitted educational proposals for funding. That will be followed by one and a half days (Thursday morning till noon Friday) of exciting conference presentations by faculty, staff, students and others interested in engineering education. Food will be served as part of the registration fee. Best Paper competitions and Awards, and Best Student Paper Awards, will be conducted at the conference. Other awards for teaching, service and the most-traveled award will also be handed out.

The conference solicits a wide scope of topics related to engineering education.

Some of the topics of interest (although certainly not an exclusive list) are:

- Service Learning
- Ethics in Engineering Education
- Teaching and Learning about New Technologies
- The Innovative Use of Technology in the Classroom
- Distance Learning and Education
- Minority and Gender Issues in Engineering
- Engineering Programs Accreditation
- Global Engineering
- Curriculum Innovations
- Student Recruitment and Retention
- Links to K-12 Education
- Other Engineering Education Topics

Come and join us in Albuquerque, Duke City and one of America's top-10 cities, and in New Mexico, the Land of Enchantment, for an invigorating time dealing with engineering education issues and exploring the great Southwest and all what it has to offer!

Important Dates:

Abstracts due: December 14, 2007
Full manuscripts due: January 31, 2008

Check out the conference website for complete information.

For more information contact the Program Chair:

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Find Us on the Internet!

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

This link contains searchable proceedings from past Section meetings.



@ the 2007 ASEE-GSW Section Annual Meeting

Habib P. Mohamadian, Section Awards Committee Chair

- ***Outstanding Campus Representative Award (Certificate):***
Jim Farison, Baylor University
- ***Outstanding Teaching Award (Certificate and \$500):***
Roger V. Gonzalez, LeTourneau University, Texas
- ***Outstanding Service Award (Certificate and \$500):***
None awarded
- ***Conference Person-Mile Award (Plaque):***
Texas A&M University, College Station
- ***Student Paper Awards***
 - **1st Place Award (Certificate and \$150):**
David Erwert; Kenneth Van Treuren; Baylor University; *Flow separation on the Suction Surface of a Pak B low Pressure Turbine Blade*
 - **2nd Place Award (Certificate and \$100):**

David Heffley; Kenneth Van Treuren; Baylor University; *Aerodynamic Characteristics of a NACA 4412 Airfoil*

- **3rd Place Award (Certificate and \$75):**
Justin A. Franz; Steven Cortinas; Chunjiang Qian; University of Texas – San Antonio; *FBIT (Floating Ball Instructional Tool)*
- ***Best Paper Awards***
 - **1st Place Award (Certificate and \$300):**
"Student Learning Through Teaching," by Stephen Crown and Arturo Fuentes; University of Texas Pan American
 - **2nd Place Award (Certificate and \$200):**
"Successful Students: Explaining and Promoting Their Existence," by Flores, Benito; University of Monterrey
 - **3rd Place Award (Certificate and \$100):**
"Addressing Contemporary Issues, life long learning, and the impact of Engineering on Global and Societal Issues in the classrooms," by Kenneth Van Treuren; Baylor University

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 elements 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

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 select the 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.

Section Campus Representative Report

The following is a summary of topics that might be useful to new Campus Representatives (CRs), prospective CRs, and the general membership.

What is a Campus Representative?

Campus Representatives serve as the liaison between ASEE Headquarters and faculty and students on campus. They play a vital role in recruiting new members, informing their colleagues about the ASEE meetings announcements, call for papers, and other ASEE activities. If you are a new CR or interested in becoming one, the ASEE Campus Representative Operating Manual provides useful information. This can be accessed through the following ASEE link: <http://www.asee.org/members/resources/campusRepOperatingManual.cfm>

Do you know if you are a Campus Rep?

To have a complete and accurate CR list on file for communication/information purposes, the following is requested:

- i) Check the following link to see if your college holds an ASEE institutional membership
<http://www.asee.org/members/organizations/oncampus/memberSchoolsBySection.cfm>

- ii) Check the following website to see if you or someone else from your institution is listed as a CR.

<http://www.asee.org/members/organizations/oncampus/campusRepsBySection.cfm#303>

- iii) If any corrections or updates are necessary, please contact your *own* Dean's Office and ask them to contact the ASEE-membership department at membership@asee.org, (202) 331-3521.

Campus Representative Activity Report:

As a Campus Representative you are asked to submit a report each year to provide a summary of ASEE activities at your campus. The completion of this report is very simple. Typically, an electronic Activity Report form is sent to Campus Reps in August or September. If you don't receive the form, you may download this form from the following site:

http://www.asee.org/activities/organizations/campus/documents/CR_ActivityRpt06-07.doc. Most common activities are already listed on the form. You just need to mark those activities already implemented or planned for the future on you campus. The form also includes a section on reporting the Dean's actions. Consulting with the Dean in completing the form might also be very useful in gaining his/her support in conducting ASEE activities at your campus.

The deadline for submission of report is the 31st of October each year. One copy of the report should be sent to your Section Campus Representative and one copy to ASEE's Membership Department.

These reports are used to select the Outstanding Campus Representative for the Section. The reports from the winners of the Outstanding Campus Representatives from each section are given further consideration for the Outstanding Zone Campus Representative Award. The Outstanding Campus Representative Award is presented

at the Annual Section meetings. The Outstanding Zone Campus Representative Award is presented at the Awards Banquet at the ASEE Annual Conference along with the Society's other national awards. Our GSW section winners have done well in the past winning the Outstanding Zone III Campus Representative Award. Dr. Troy F. Henson from The University of Texas-Tyler received both awards in 2005.

Spread the Word: This membership promotional program is designed to encourage Campus Reps to spread the word about ASEE membership on their campuses. "The Deans Program" is designed to assist CRs in recruiting new members. Through this program new members can receive two years of free membership. If the Dean provides funds to cover the first year's membership cost, ASEE will waive the second year's membership fees. Each year during the Campus Representatives receptions at the ASEE Annual Conference awards are presented to the Campus Representatives that recruit the highest number of members and the highest percentage of members in their section.

ASEE-GSW Section Bylaws: The GSW Section Bylaws are posted on-line at our Section's website (<http://www.aseegsw.org/>)

Future ASEE-GSW Section Meetings: The following institutions have volunteered to host future ASEE-GSW meetings: University of New Mexico, Albuquerque (2008), Baylor University, Waco (2009), and McNeese State University, Lake Charles, LA. (2010).



\$Treasurer Report \$

These are the balances of GSW accounts as of 2/28/2007:

BASS Account: \$18,753.89

Operating Account: \$550.00

Awards Account: \$15,540.40

Jerry K. Keska



RESOLUTION

Let it be resolved that the Gulf-Southwest Section of the American Society for Engineering Education (ASEE) expresses its sincere appreciation to the **University of Texas at Pan American** for hosting the 2007 Annual Section Meeting

down here in the beautiful city of South Padre Island. In specific, we express sincere gratitude to:

- i. Conference Chair **Dr. Hashim Mahdi** for his continuous, year-long efforts in organizing the meeting program, guest speakers, accommodations, and associated activities; and to,
- ii. **Dr. Robert Freeman**, the technical papers committee Chair, for arranging all the excellent paper sessions, and to all the members of his paper committee: **Drs. Ben Ghalia, Javier Kypuros, Doug Timmer, Pearl Brazier, Stephen Crown, and Karen Lozano**; and to,
- iii. **Provost Anna Rodriguez** for her fine opening remarks; and to,
- iv. **Dean Ed LeMaster**, for his leadership, support, and ever-presence at the meeting, for his informative remarks at the evening banquet, and for allowing his tie to be sacrificed to demonstrate the leisure atmosphere of our host city; and to
- v. **Ms. Gloria Gilpatrick** for staff support, her fiscal responsibilities and all the other “behind-the-scenes activities,” calling all the shots no doubt, that helped make the conference such a success.

Furthermore, let us thank the *Year of Dialog Panelists* (**Drs. Karimi, Barr, Buchanan, Carriere, Fuentes, Kelley, and LeMaster**) for encouraging us to develop new

thinking about the “Scholarship of Engineering Education;” and to the *Engineering Ethics Panelists* (**Drs. Pearson, Harris, Mills, and Yoak**) for sharing their expertise in engineering ethics education; and to **Drs. Vijaya Gopu and Roger Seals** for their NSF proposal writing workshop; and to **Dr. Earl Dowell** for his inspiring keynote talk on “Globalization and Emerging Technologies;” and of course, to all the authors, moderators, presenters, and audience questioners for being such a integral part of the meeting.

And let us recognize, with fond memories, the performances of the University of Texas at Pan American **Ballet Folklorico** and **Mariachi Band** student groups, a truly highlight show that topped our evening.

Thus, let it be recognized that all attendees, from near and far, enjoyed immensely the friendly collegiality, the intellectually stimulating paper presentations, the proximity to the coastal beach, the hotel hospitality and décor, and the bountiful delicious food and refreshments with a local theme. And in particular, let us dispatch our Section Secretary to seek out and publish the recipes for the curry shrimp and green enchiladas.

Finally, with respect and appreciation to all those involved in this meeting whose names may not have been mentioned here, we acknowledge your contributions also. So, let us decree that this resolution

be recorded on the permanent records of the GSW Section, and be distributed to all good-standing members in our next Section newsletter.

Respectfully Submitted on
March 30, 2007

ASEE GSW Section
Resolutions Committee

Ronald E. Barr

Dr. Ronald E. Barr, Committee Chair