OF THE ASEE GULF-SOUTHWEST SECTION

August 2006



We welcome you to another installment of the ASEE Gulf-Southwest (GSW) Section Newsletter! The section had yet another successful meeting held this year in Baton Rouge, Louisiana. Participants enjoyed the hospitality of the organizers and the setting at which the conference took place. More importantly, the meeting was full 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 Texas-Pan American. The meeting place alone, i.e. Padre Island, should be enticing for participation by the ASEE membership and anyone else interested in engineering education. We look forward to a successful meeting in 2007! More on this meeting can be found later in this Newsletter.

One last piece of news is that the Section is currently working on establishing a new award for junior faculty members to encourage teaching excellence and ASEE involvement.

Tariq Khraishi, Section Newsletter Editor



The 2006 ASEE Gulf Southwest Section's Annual conference, sponsored by Southern University and A&M College-Baton Rouge, was held on March 15-17 at the Sheraton Convention Center Hotel in Baton Rouge. The conference included on Wednesday afternoon a workshop entitled: "Writing a More Efficient Proposal for the Course, Curriculum, Laboratory Improvement NSF Solicitation" conducted by Dr. Bevlee Watford, Program Director, National Science Foundation. The theme for the conference was "Engineering Education in the 21st Century: Pipeline and Workforce". 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. Vijay Gopu, Chair of Civil Engineering at Tulane University, Dr. Habib

Mohamadian, Dean of the College of Engineering at Southern University, Ms. Margaret Ambrose, Executive Vice Chancellor at Southern University Baton Rouge Campus, Mr. Alfred Williams, Chief Administrative Officer of East Baton Rouge Parish Mayor's Office, Dr., Stephanie Adams, Program Manger at the National Science Foundation, Dr. Jost Goettert, Center for Advanced Microstructures and Devices, and Dr. Ron Barr, President of the American Society for Engineering Education. The keynote Speaker for the closing session was Dr. Joseph Savoie, Commissioner of Higher Education Louisiana Board of Regents. The program included 22 sessions with 80 regular papers and 27 student papers, with four concurrent sessions. The conference proceedings were published on a CD-ROM. Attendance at the conference was approximately 127, including students. Pictures from the conference are now posted online at http://www.engr.subr.edu/ASEE/ASEE GS W%2006%20Index.htm. On behalf of the Southern University 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 South Padre Island, Texas, March 28-30, 2007.

Patrick Carriere, 2006-2007 Section Chair

A Word from Program Chair



Upcoming section meeting:
American Society for Engineering
Education
Gulf-Southwest 2007 Conference
March 28-30, 2007
University of Texas-Pan American

Edinburg, TX 78541

"Building Partnerships in Engineering Education to support and Sustain Innovation"

http://www.mece.panam.edu/ASEE-GSW/

The University of Texas-Pan American invites your participation in the upcoming ASEE-GSW 2007 conference being held at the Sheraton SPI Beach Hotel on South Padre Island, Texas, March 28-30, 2007.

The conference will begin at 1:00 pm on Wednesday March 28, 2007 with afternoon workshops from 1 pm to 5 pm. Paper presentation sessions start on Thursday morning and continue on Friday. The conference will conclude with an award luncheon at noon on Friday March 30.

We plan to have three options for presentation style:

Option 1: Standard lecture sessions

Option 2: Student poster sessions

Option 3: Interactive sessions for hands on demonstration of software and hardware. Abstracts are due September 16th, 2006. Please inform and invite your colleagues.

List of Topics (current)

Engineering Ed. for a Changing World Distance Education in Engineering Multimedia Classrooms of the Future Curriculum Innovations/Restructuring Partnerships
Students at Risk
Student Recruitment
Innovative Teaching
Linkages with K-12 Education
Entrepreneurship in Engineering
Service Learning
Ethics in Engineering Education
Breakthrough Technologies
Other Engineering Education Topics

Important Dates

September 16th, 2006: Abstracts are due. October 1st, 2006: Abstract reviews are completed by the committee and all authors are notified.

November 15th, 2006: Complete manuscripts are due.

January 15th, 2007: Reviews of the manuscripts completed and authors notified. February 15th, 2007: Final papers are due and the early registration period begins. March 1st, 2007: Registration deadline.

For more information contact:

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

This link contains the latest info on the 2006 Section meeting/conference in Baton Rouge, Louisiana, as well as all proceedings from past Section meetings.



@ the 2006 ASEE-GSW Section Annual Meeting

Habib P. Mohamadian, Section Awards Committee Chair

- Outstanding Campus
 Representative Award (Certificate):
 Jennifer Scott, University of Texas at
 Tyler
- Outstanding Teaching Award (Certificate and \$500):

Mia Markey, The University of Texas at Austin

• Outstanding Service Award (Certificate and \$500):

Terrence L. Chambers, University of Louisiana-Lafayette

• Conference Person-Mile Award (Plaque):

Texas Tech University

- Student Paper Awards
- o 1st Place Award (Certificate and \$150):

Thota, R.; Dwivedi, S.; University of Louisiana at Lafayette; Enhancement of Undergraduate Curriculum in Design and Manufacturing Courses Through Implementation of Product Realization

o 2nd Place Award (Certificate and \$100):

Corletto, H. I.; Southern University and A & M College; *Josephon Junction Under Microwave Radiation*

- o 3rd Place Award (Certificate and \$75): Hypolite, K.; Johnson, M.; Joubert, T.; Sanford, L.; James, K.; Johnson, L. Q. Stacy, G.; and Ibekwe, S.; Southern University and A & M College; Application of Solar Cells in Ballooning to Reduce Weight in Louisiana Space Consortium's LA-ACES Program
- Best Paper Awards

 1st Place Award (Certificate and \$300):

Chambers, T.; University of Louisiana at Lafayette; *Designing, Building, and Testing a Microcontroller-Based System for Industrial Applications*

 2nd Place Award (Certificate and \$200):

Barr, R. E.; University of Texas at Austin; Current Status of Engineering Education and ASEE

 3rd Place Award (Certificate and \$100):

Kelley, B. S.; Bradley, W. L.; and Brian, T.; Baylor University; *Student-Aimed Appropriate Technology Engineering Projects in Kenya*



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.
- Possess a sense of proportion, stressing fundamentals and disregarding trivial detail. Give assignments that challenge students, demanding thinking in the completion of assignments.
- 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.
- Have considerable endorsement from students, using both regular course evaluations and individual letters of recommendation as evidence.
- 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.
- 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:

- Participation in the development of courses or curricula.
- 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.
- 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:

 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.
- Encouraging faculty members to submit papers for presentation at section and national meetings.
- Promotion of individual membership in ASEE.
- 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.



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
 - $\frac{http://www.asee.org/members/organizatio}{ns/oncampus/memberSchoolsBySection.cf} \\ \underline{m}$
- 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), and Baylor University, Waco (2009).



\$Treasurer Report \$

ASEE/GSW Section March 15, 2006

Baton Rouge, LA

As of 2/28/2005 there was ending BASS Account balance \$16,272.41 and operating account balance \$550. As of 2/28/2006 there was ending BASS Account balance \$18,002.14 plus \$3,600.00 as seed money for Annual Conference in Baton Rouge and operating account balance \$50. Account with TIAA-CREF (as of 12/31/2005) balance \$14,622.57. Net total change: \$4829.73

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 **Southern University and A&M College** for hosting the 2006 Annual Section Meeting, and in particular expresses sincere gratitude to:

- Program Chair **Dr. Patrick Carriere** for his untiring efforts in organizing the meeting program, paper presentations, and associated activities, and;
- ii. Dr. Hamid Majlesein, the technical papers committee chair, for arranging all the excellent paper sessions, and;

- iii. **Dean Habib Mohamadian,** for his leadership support, his ever-presence at the meeting, and for managing the section awards program, and;
- iv. **Dr. Edgar Blevins** for his many introductions and announcements, and for keeping us on schedule, which was a challenging task at times, and;
- v. **Drs. Samuel Ibekwe** and **Manjit Randhawa**, for securing the many fine speakers, session chairs and co-chairs, and conference sponsorships, and;
- vi. Staff support personnel **Sharlenitia Clark, Veronica Bynum**, and **Brandon Williams**, for all there contributions behind the scenes, and;
- vii. All the *legions* of other faculty and staff from Southern University, too numerous to name, and;
- viii. Finally, let us not forget our fine conference photographer, **Mr. Louis Poche**.

Furthermore, let us acknowledge the stimulating keynote technical talks and workshops given by our special guests: Dr. Bevlee Watford of the National Science Foundation, Dr. Vijay Gopu from Tulane University, Dr. Stephanie Adams of the National Science Foundation, Dr. Jost Goettert from the Center for Advanced Nanostructures, and Dr. Joseph Savoie, the Louisiana Commissioner of Higher Education. And of course, let us acknowledge the fine jazz music of the Mike Foster Quartet.

Thus, let it be recognized that all attendees, from near and far, enjoyed immensely the friendly collegiality, the intellectually stimulating paper presentations, the bountiful food and refreshments with a local theme, the hotel hospitality and accommodations, and the close proximity to the casino.

Finally, 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 17, 2006

ASEE GSW Section Resolutions Committee

Ronald E. Ban

Dr. Ronald E. Barr, Committee Chair