

# Mississippi State University

## Student Chapter of American Institute of Chemical Engineers



## 2012-13 Annual Report

# 2012-13 AIChE Outstanding Student Chapter Nomination Form

College/University Name: Mississippi State University

Chapter Advisor's Name(s): Bill B. Elmore

I support this nomination for the AIChE Outstanding Student Chapter Award.



\_\_\_\_\_  
(signature)

- *Number of Chemical Engineering Students by class (indicate "n/a" for freshmen and/or sophomores if they are undeclared at your College/University)*

Freshmen: 61  
Sophomores: 71  
Juniors: 63  
Seniors: 106  
**Total: 301**

**(based on general classification in univ. database at end of Fall 2012 semester)**

## Professional Membership (10 points)

- *AIChE Student Chapter Membership by Class (%)*

Freshmen: (46 members) = 75% of freshman class  
Sophomores: (31 members) = 44% of sophomore class  
Juniors: (33 members) = 52% of junior class  
Seniors: (62 members) = 58% of senior class

Total: 172 members = 57% of ChE majors

- *National AIChE Membership by Class (%)*

Freshmen: (42 members) = 69% of freshman class  
Sophomores: (38 members) = 54% of sophomore class  
Juniors: (24 members) = 38% of junior class  
Seniors: (53 members) = 50% of senior class

Total: 157 national members = 52% of total ChE enrollment = 91% of total local AIChE membership

- *Additional Comments:*

Undergraduate enrollment and paid local membership increased again significantly this year over the past two years (172 local members in 2012-13 compared to 120 in 2011-12 and 77 in 2010-11). The increase in dues receipts (\$1300 for the increase in 52 members over 2011-12) provides a significant boost to our revenues for chapter activities. Dr. Elmore, our AIChE Advisor, began teaching Freshman Seminar last year. Since most AIChE regular meetings are immediately after Freshman Seminar, this provides a great recruiting opportunity for getting freshmen involved in AIChE early in their school experience.

### **AIChE Student Chapter Meetings (30 points)**

- *List Student Chapter meetings with a brief synopsis (i.e., one sentence) of each (indicate which ones are professional guidance meetings and which ones had outside speakers):*

**August 20, 2012. AIChE Leadership Team** meeting (i.e. Advisor, co-Presidents, VPs, Secretary, Treasurer). Planning for semester events.

**August 22, 2012. First AIChE** meeting of the year—hosted by **AIChE** to welcome everyone back to a new school year—134 attended including 3 faculty, 4 graduate students and 2 staff.

**August 28, 2012. AIChE General Officers** meeting (i.e. Leadership Team plus auxiliary officers—Intramural, Service-Learning coordinators, Ambassadors, Cookout captain).

**September 6, 2012.** 19 AIChE students and one CHE faculty member attended the **International Paper** information session for co-op and permanent jobs.

**September 9, 2012. CITGO—a joint AIChE/ASME meeting.** 50 in attendance including 35 AIChE and 15 ASME, and one faculty.

**September 24, 2012. ExxonMobil and AIChE** hosted a meeting for AIChE/ASCE/ASME/IEEE students. 84 students, 4 faculty and 3 graduate students attended. This attendance included 14 ASME, 3 IEEE, and 12 ASCE students.

**September 25, 2012. Albemarle and AIChE** hosted a meeting for chemical engineering co-op and permanent job opportunities. 75 attended including 61 AIChE, 14 from ASCE, 9 ASME, 1 IEEE, three faculty and two graduate students.

**September 25, 2012. Chevron** hosted an information session for AIChE/ASME students. An estimated 20 AIChE students attended for learning about 3 permanent ChE positions and 9 CHE co-op positions.

**September 26, 2012. DOW and AIChE** hosted a regular meeting. 49 students and 3 faculty were present.

**September 27, 2012. Georgia Pacific and AIChE** sponsored a meeting for AIChE/ASME/IEEE members. 68 attended with 47 AIChE, 13 ASME, 4 IEEE, 2 ASCE, and two faculty members.

**October 17, 2012. ERGON Refining and AIChE** hosted an AIChE meeting. 85 attended including 12 ASME members, 3 faculty members and two graduate students.

**October 18, 2012. AIChE conference attendees** meeting. 17 students attending the national AIChE student conference and Advisor met to finalize travel/conference details.

**January 9, 2013. AIChE officers** meeting with Advisor to plan Spring 2013 semester.

**January 16, 2013. AIChE** sponsored a “Welcome Back” meeting for the spring semester. An overview of service activities and events was provided. (78 in attendance including three faculty, two staff and two graduate students).

**January 31, 2013. AIChE** sponsored a regular meeting for Angelia McKnight, our Co-Op office ChE specialist to conduct an interview workshop the week prior to Career Day. 74 students and one faculty member were in attendance.

**February 14, 2013. Shell and AIChE** sponsored a regular meeting with 70 members, three faculty members and seven graduate students (as our guests). The topic for the evening was hydraulic fracturing.

**February 18, 2013.** Twenty-five AIChE members, officers and Advisor met to support the kick-off events for **Engineer’s Week**

**April 1, 2013.** Regular **AIChE** meeting for announcing end-of-semester service projects and AIChE Officers election process. Fifty-seven AIChE students attended plus two faculty, one staff and four graduate students.

**April 1, 2013.** Meeting with 29 AIChE students attending the **Southern Regional conference** in Lexington, KY—met to plan travel and events

- *Average Student Attendance by Class:*

Freshmen:	13
Sophomores:	11
Juniors:	15
Seniors:	21

**Average at all regular (i.e. fully open) AIChE meetings: 75**

Note: This average of includes guests at regular meetings—ASME/IEEE/ASCE, but excludes specially called meetings for AIChE conference attendees or the officers planning meetings. We hold a variety of “regular” meetings appealing to various subsets of AIChE members so attendance fluctuates considerably.

- *Average Faculty Attendance: 2*
- *Number of Organizational Meetings (e.g., Officers’ meetings):*

In addition to formal meetings, our AIChE advisor and officers met regularly in informal settings to plan, execute and clean-up from meetings.

- *Additional Comments:*

We continued our tradition of holding regular, corporate-sponsored meetings immediately after freshman seminar to encourage our freshmen to get involved with the AIChE chapter.

Sponsoring companies have expressed appreciation for AIChE hosting meetings at which other engineering organizations are invited.

We continue to have graduate students attend AIChE meetings. They are encouraged to participate in any of our events to strengthen their ties to AIChE. We waive local dues for graduate students to further encourage their involvement.

## Other Professional Development Activities (17.5 points)



- Kelsey LeSaicherre, AICHE Vice President for External Affairs was nominated for the national AICHE John J. McKetta Undergraduate Scholarship and the Donald and Mildred Topp Othmer National Scholarship. Kelsey was selected as Mississippi State's scholarship recipient for the Southwest Chemical Association's \$5000 scholarship. She also received the 2012-13 Mississippi State Co-operative Education Student of the Year award. She was also the Swalm School of Chemical Engineering's Inductee into the 2013 Mississippi State Bagley College of Engineering Student Hall of Fame.
- Maggie Eaves, a sophomore now holding an AICHE position as our Community Service and Outreach coordinator, received the AICHE Freshman Recognition award for 2012.
- Loren "Bruce" Strong, now a top junior double majoring in chemical engineering and biochemistry, received the 2012 AICHE Sophomore Academic Excellence award.
- Three AICHE members each received one of five International Paper Scholarships available to students in the Bagley College of Engineering (each scholarship valued at \$6,200 for one year).
- This year, six AICHE members—Sarah Heintz, Hannah Weems, Alex Carrubba, Kelsey LeSaicherre, Scott Adkins and Liza Nalley received the combined Atly and Bette Jefcoat and George Lightsey awards for outstanding service to the local AICHE student chapter. Awarded annually at the Senior Convocation, these



awards are named in honor of two former Mississippi State AICHE Advisors. The awards go to the student(s) showing the greatest leadership and service to AICHE over the past academic year. These individuals have been leaders in AICHE from their earliest days in the Swalm School of Chemical Engineering.



- Number of students attending **Regional AIChE Conference:** **Twenty-nine**  
AIChE Students and Advisor attended the Southern Regional AIChE Conference in Lexington, KY.



Students attending some of the regional activities in Lexington, KY.



- *Did the student chapter advisor attend the Regional AIChE Conference?*

Yes

- *Number of students presenting at Regional AIChE Conference:*

One

Leon Carrubba presented a poster entitled "The Effect of Temperature on the Pigment Production of the Oleaginous Yeast *Rhodoturula glutinosa*"

- ***Participated in ChemE Car Competition at Regional AIChE Conference?***

We reactivated the AIChE car team again this year. The car team met weekly to work on a new car design and develop new ideas. Work began on the potential for making and using biodiesel since renewable energy is a strong research focus within the Swalm School of Chemical Engineering. However we did not make it to the spring regional conference competition. To strengthen team cohesion and activity, Dr. Elmore has created a technical elective course for the fall 2013 term solely focused on the AIChE Car competition.

- ***Number of students attending 2012 AIChE Annual Student Conference in Pittsburgh:***

***Seventeen***

- ***Did the student chapter advisor attend the AIChE Annual Student Conference?***

***yes***

- ***Number of students presenting research at Annual Student Conference (Posters, etc.):***

***none***



***Participation in other activities at AIChE Annual Student Conference (please explain):***

- Our chapter **presented a conference workshop** on *Building Leadership through Service Learning*. Approximately fifty students from other chapters attended the two workshop sessions.
- Attended various workshops, AIChE car competition, awards ceremonies and poster presentations. Students returned from the conference “fired up” about re-starting our own AIChE car team.

***Participation in Local Section Meetings/Activities (please explain):***

The closest local AIChE section is based in Memphis (mid-South section)—outside the range that students can easily travel to attend meetings. Also, this section has been generally inactive—particularly with regard to an historic offering of a regional “Design Competition” among Christian Brothers University, University of Mississippi and Mississippi State university. This competition was once conducted annually at the



conclusion of the academic year as part of the Mid-South Section April or May meeting. Changing and inactive membership in the Mid-South section and scheduling problems among the universities has prevented holding this event in recent years.

- *Number of plant trips; list and include student attendance at each: none*

- *Additional Comments:*

Liz Rayfield, Michael Harper and Zach Morton represented AIChE on the Bagley College of Engineering, Engineering Student Council—key leadership positions for keeping our AIChE student chapter aware of events and competitions ongoing within the College of Engineering.

## **Community Service (10 points)**

- *Number of activities; list and include student participation for each activity:*

1. **June 22, 2012**— Four AIChE members and Advisor provided lunch for 24 students and 12 counselors from a local school's Upward Bound summer program (Westpoint High School). Lunch was followed by a LEGO Robotics activity.



2. **July 11, 2012**—AIChE provided a luncheon and building tour for 15 Bagley College of Engineering Quest summer campers (rising high school seniors participating in a three week research program across the College of Engineering) and three Quest counselors.
3. **July 10-31, 2012**— One AIChE student member and Advisor provided a summer research experience and an introduction to various AIChE functions and activities for four rising high school seniors participating in the Bagley College of Engineering Quest summer research program.
4. **September 15, 2012**—37 AIChE members volunteered to clean and organize at the Palmer Home for Children Thrift Store in Starkville.
5. **September 28, 2012**—16 AIChE students volunteered for Habitat for Humanity.

6. **October 25, 2012.**— Five AIChE members again hosted a “Mummy Wrap” booth for children in the community as part of the MSU Campus Activities Board Halloween carnival.



7. **November 10, 2012.** 21 AIChE students and advisor organized/prepared LEGO robotics projects for a workshop presented at Holmes Community College, November 12<sup>th</sup>, for recruiting students to engineering.

8. **January 26, 2013.** AIChE conducted a service project at the Palmer Children’s Home Thrift Store. Thirty-nine students and AIChE Advisor

were in attendance.

9. **February 22, 2013.** AIChE students, faculty and staff donated over \$200 to the American Cancer Society Relay for Life charity drive during our campus Engineers Week.

10. **February 22, 2013.** Four AIChE women volunteers and advisor presented three workshops at the annual *Women In Science and Engineering* workshop on the Mississippi Community College Campus. Presented to high school women from regional schools, this workshop addressed the many opportunities in engineering for women.



East

11. **March 6, 2013.** AIChE provided lunch for 125 students, 6 faculty and 8 staff/graduate students attending the meeting to celebrate the Swalm School of Chemical Engineering’s first place finish in the “E-week” competition.

**12. April 12, 2013.**

Twenty AICHE volunteers (14 shown in picture) and Advisor conducted a community service project at George Evans city park, painting the basketball court, removing unsightly landscaping, trimming hedges, painting fences and general cleanup. The project was in preparation for a city ceremony the following day—renaming the adjacent street and neighborhood in honor of Mr. George Evans, a longstanding advocate and supporter of the predominantly minority neighborhood.



**13. April 12, 2013.** Eighteen AICHE students served as judges for the state Science Fair on the MSU campus.

**14. April 27, 2013.** Nineteen AICHE students and Advisor led a Merit Badge day in the Swalm Chemical Engineering Building as part of a weekend Camporee for the local Scouting Council. 38 Scouts and Webelos earned both the Robotics and Engineering Merit Badges.

### **Departmental/College/University Service (10 points)**

- *Number of activities; list and include student participation for each activity*

**1. June 12, 14, 15, 19, 21, 22, 26, 28, 29 2012.** 6-12 AICHE students (varies by date) and AICHE advisor conducted orientation sessions for incoming freshmen and transfer students. An average of 8 AICHE students participated in each advising session.

**2. June-May 2012-13.** AICHE still maintains its recycling program, collecting plastic and aluminum from the student lounge area.

**3. August, 29, 2012.** AICHE provided pizza and drinks for first AICHE car team meeting.

4. **October 20, 2012.** AIChE provided setup for the testing center offering the Fundamentals of Engineering exam in the Swalm Chemical Engineering building.
5. **November 29-Dec 4, 2012.** AIChE provide a coffee & snack bar for students, faculty and staff for the week preceding the end of semester.
6. **November 29, 2012.** AIChE provided pizza, drinks for ~125 attending the end-of-semester Freshman Design Symposium (with judging provided by ChE Seniors).
7. **December 1, 2012.** AIChE provided food for students, faculty, staff at annual Christmas party/SEC Football Championship game viewing.
8. **February 2, 2013.** AIChE provided refreshments for the MSU Jigsaw autism awareness meeting.
9. **February 9, 2013.** 16 AIChE members and Advisor met with prospective students at the MSU Academic Insight event (hosting over 500 top prospective high school students). Throughout that Saturday, we provided a presence at panel discussions, an information booth for the Swalm School of Chemical Engineering, and chemical engineering building tours.
10. **February 17, 2013.** Four AIChE student members and Advisor prepared competition materials for the MSU Bagley College of Engineering Engineer's Week competition.
11. **Feb 2013.** 2-3 AIChE members met (throughout the school year) with the Engineering Council for planning the E-week "best major" competition and began organizing ChE participation. This year the Swalm School of Chemical Engineering placed first overall among the eight departments within the Bagley College of Engineering.
12. **March 6, 2013.** 125 AIChE students, 6 faculty, 7 staff and 5 graduate students met to celebrate the Swalm School of Chemical Engineering winning this year's "Best Engineering Major on Campus" (the annual Engineer's Week competition).
13. **March 27, 2013.** AIChE provided pizza and drinks for ~65 students working on senior Plant Design and freshman Analysis design projects, and juniors taking an evening Thermo II exam.





- 14. April 12, 2013.** AIChE provided dinner at Buffalo Wild Wings for 15 of the 20 students attending the George Evans service project.
- 15. April 13, 2013.** AIChE set up tables for F.E. exam (given in Swalm chemical engineering building) and provided refreshments for F. E. exam proctors.
- 16. April 15, 2013.** Seventeen AIChE members and Advisor conducted advising/registration for incoming freshmen at Honors Orientation.
- 17. April 18, 2013.** AIChE provided lunch for ~155 AIChE students, 4 faculty, 6 staff and 8 graduate students as part of the CHE 2213 Analysis freshman and CHE 4233 Plant Design final project symposia.
- 18. April 24, 2013.** AIChE provided dinner for 50 graduating seniors, faculty and staff as a "Senior Appreciation" event. One objective of the event was to update senior plans upon graduation. Dr. E cooked gumbo and creole dishes and provided BBQ.
- 19. May 10, 2013.** AIChE provided commemorative items (cups and pens with the School logo) for graduating seniors as part of our annual Swalm School of Chemical Engineering Senior Convocation ceremony.
- 20. May 13, 2013.** Six AIChE students and Advisor conducted the Phi Theta Kappa honors orientation for transfer students.

## Communication (10 points)

- *Does your AIChE Student Chapter maintain a website? If so, then please give the web address.*

This year, we continued using facebook for MSU AIChE communications. It continues to improve our communication among members for events (as compared to a web page) and for posting pictures of activities. AIChE members regularly post events, recruit for Intramural teams, post picture, etc.



<http://www.facebook.com/#!/groups/AIChE.MSU/>

- *Does your AIChE Student Chapter publish a newsletter? If so, then indicate how many issues were written this year, describe the targeted audience, etc.*

News and updates are also posted on bulletin boards in the hallways and student lounge.

This spring, we elected Elizabeth Stafford (shown at left) as the Editor of our AIChE newsletter. She is working with Dr. Elmore over the summer to gather ideas for articles and assemble a staff for reviving the newsletter on a regular basis during the 2013-14 academic year.

### **Social Events (7.5 points)**

- *Number of activities; list and include student participation for each activity:*
- 1. **July 20, 2012**—AIChE provided pizza for faculty, staff and students attending summer school.
- 2. **September 1, 2012—Jackson State tailgate.** ~70 students, faculty, staff and alumni participated in the tailgate/alumni reception in the Eastman Auditorium prior to the game.
- 3. **September 8, 2012—Auburn tailgate.** ~55 students, faculty, staff and alumni participated in the alumni reception before the game.
- 4. **Informal mixers**—after each AIChE meeting (all students and faculty attending the meeting participate).
- 5. **September 15, 2012.** AIChE provided Lunch-N-Bowl for 33 AIChE members at Bulldog Lanes immediately after the AIChE service project at the Palmer Children's Home Thrift Store
- 6. **September 15, 2012.** AICHE provided pizza, drinks and snacks for ~15 AIChE members streaming the MSU/Troy game at the Swalm chemical engineering building (game not shown on TV).
- 7. **September 22, 2012—South Alabama tailgate.** Approximately 65 attended including several faculty/families, former faculty, students and alumni.
- 8. **October 13, 2012—Tennessee tailgate.** 55 students, faculty, staff, and alumni participated.
- 9. **October 20, 2012. Middle-Tennessee tailgate/Homecoming weekend.** ~50 Saturday's tailgate.
- 10. **October 31, 2012.** AIChE provided pizza and drinks as a study break for students working on projects in the student lounge.



11. **November 3, 2012. Texas A&M tailgate**---~25 in attendance for an early morning tailgate (kickoff at 11:00).

12. **November 17, 2012. Arkansas tailgate** ~40 AIChE students, faculty, staff, alumni and guests attended the tailgate.



13. **December 1, 2012.** ~60 students, faculty and staff attended the annual AIChE Christmas party and SEC Football Championship game viewing. Students participated in a White Elephant gift exchange. Dr. E and AIChE students cooked pancakes, sausage and numerous other breakfast items for the event.

14. **January 31, 2013.** AIChE hosted a cookout for the students, faculty and staff. 86 were in attendance including two faculty,

three staff and three graduate students.

15. **February 18, 2013.** AIChE provided pizza and drinks for ~40 AIChE members participating in and supporting E-week competition events.

16. **April 12, 2013.** AIChE provided dinner at Buffalo Wild Wings for twenty AIChE members and Advisor upon completion of the George Evans city park service project.

17. **April 26, 2013.** AIChE hosted the **Fifth Annual Spring Release** golf tournament and crawfish boil/catfish fry. ~125 students, faculty and staff attended.



18. **April 27, 2013.** AIChE provided lunch for 19 students directing the Boy Scout Merit Badge Day.

19. **May 10, 2013.** AIChE provided lunch for 100, including 27 graduating seniors, family members, friends, faculty and staff as part of the Swalm School of Chemical Engineering Convocation.

## Other AIChE Student Chapter Activities (5 points)

- *(May be separate attachment) Discuss student chapter activities not included above:*

1. **AIChE t-shirts.** AIChE had a variety of shirts made this year to commemorate various events and to contribute to chapter fundraising.

We also had made embroidered polo shirts, and had silk-screened shirts for our chapter made.



## MSU Bagley Chemical Engineer Swalm 2013 T-shirts



Sales from these shirts contributed to our fund raising efforts. Maroon and white tees (long and short sleeve) showing the Swalm School of Chemical Engineering building were printed.

An embroidered athletic shirt (shown at left) was also sold.

To commemorate the fifth annual AIChE Spring Release golf tournament, crawfish boil/cattfish fry/burger burn, a tee was prepared in a variety of colors.

## MSU AIChE Gumbo Fest Spring Release 5 2013 T-shirts



2. **E-week, February, 2013.** AIChE participated in various Engineers-week activities as part of the “Best Engineering Major on Campus” competition. **This year AIChE placed FIRST among all eight engineering departments in the Bagley College of Engineering!**





3. Following the chapter vision of “Leadership, Scholarship, and Service”, each of our chapter activities is geared toward building a strong sense of camaraderie among each member of our School of Chemical Engineering.

We believe the brief glimpse of our chapter provided by images in this report amply demonstrate our chapter vision. Scenes below capture AIChE student involvement in Intramural competition; MSU Community Halloween carnival, Habitat for Humanity, Palmer Children's Home Thrift Store, and (center) Boy Scout Merit Badge Day.

