Full Annual Chapter Report

2018-2019

Guanajuato Beta Theta

A. Initiations

The proper selection of new members for Pi Tau Sigma is a determined factor in the chapter success. Therefore, we must consider the following factors for the selection of outstanding mechanical engineering students:

- School Performance.
- Soundness of character, moral, and honesty.
- Members and Advisor's Opinion.

For the selection procedure, we consider all the sophomore mechanical engineering students with a Mexican Grade Point Average above 8.5 out of 10. After a thorough analysis between the members and advisor, only the students that meet the above factors and the required grade are selected. The selected students are tested along one academic year, if they keep a good performance and further shows cooperation and interest with the chapter, they are initiated during the next academic semester ceremony.

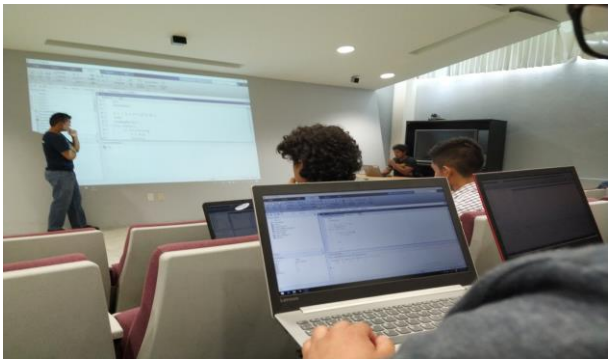
During this academic year, our chapter held two initiations, one per semester. The first ceremony had 2 undergraduate students to be initiated on November 27th, 2018. The second ceremony had 2 undergraduate students as well and it was carried out on Jun 7th, 2019. Also, we selected 10 students to be considered for initiation the next academic year (these students will be involved in all Pi Tau Sigma activities and based on their performance they could attain final selection).

B. Chapter Activities

In order to get most of the chapter members involved in the activities that were carried out, weekly meetings were convened. In this way, members and applicants could clearly communicate their opinions, advances and problems. Some of the activities that were carried out in this academic year are described below:

Engineering Software Courses

Some chapter members teach courses software engineering one session per week for 2 hours, covering the entire course content at 7 weeks. This year we had programming courses in C ++, Matlab and Python. As well as computer assisted design courses in Solidworks and Fusion 360. Finally, more specialized courses were given such as simulation in CFD and analysis of mechanisms in various softwares. Learning these tools is a great help for the students of our university, because it allows them to show a better performance in their subjects and projects.



Nursing Home Visits

Chapter members Guanajuato Beta Theta visited the facilities of the most important nursing home in the city of Salamanca, located in the center of the city. After consulting with the authorities of this institution, we were instructed about the care that should be taken when doing this type of visits. We brought them typical Mexican food, board games and different entertainment activities

were developed. The female musical group of the University of Guanajuato played some songs to brighten up the atmosphere. In total, we made 5 visits throughout the year to take care of the needs of the elderly.

Participation in Mechanical Engineering Week

The Mechanical Engineering Week of the Mechanical Engineering Department has been held every year under the leadership of the ASME-SOMIM Student Section of the University of Guanajuato. Since the creation of our chapter, we have helped this student group with the organization of this event. From March 25 to 29, 2019, 12 lectures were given by researchers from different areas of the Mechanical Engineering Department in order to bring science and technology closer to undergraduate students and encourage them to continue with postgraduate studies.

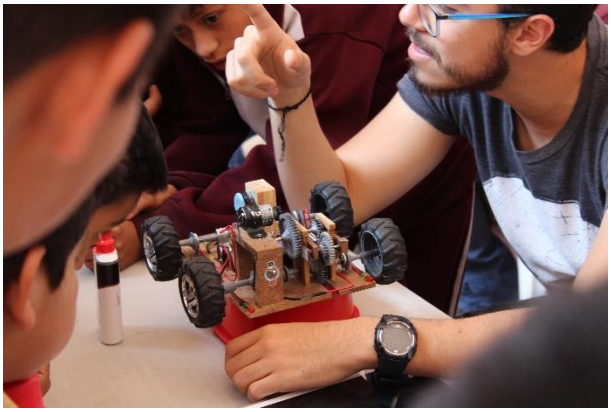
Women in Engineering

The ASME-SOMIM student group of the University of Guanajuato also holds the event called "Women in Engineering" every year. The chapter Guanajuato Beta Theta collaborates in the management and organization of the event held in November 2018. In this event, more than 500 high school women attended the facilities of the engineering division to learn about the academic offer and job opportunities of the region. Members of the chapter gave talks about career guidance. Attendees participated in some games and challenges to win different prizes at the end of the event.

E^3 Fair

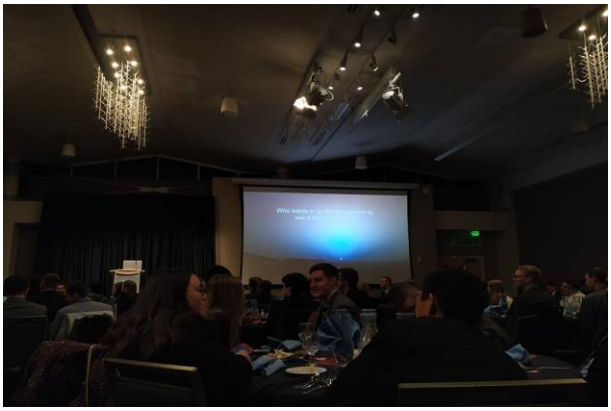
Students of the Electrical, Mechatronics, Mechanics, Computer Systems, and Electronic Engineering careers of the Irapuato - Salamanca Campus participated in the third edition of the "E3 Fair" Science and Technology Fair in Mexico with the exhibition of 45 scientific projects in a didactic and fun way, in the House of Culture of Salamanca. The E3 Fair began in 1991 and was organized by, and is funded by, engineering societies of the Rochester area and local industries. We try to reproduce this idea in our country to bring science and technology to children.

The exhibition was organized by our chapter and we received help from the ASME-SOMIM student section in the University of Guanajuato. In this macro event held on May 22, 2019, more than 900 children from public elementary schools attended to learn about physics, chemistry, mathematics, rocket science and more. We try very hard to encourage children to continue their studies because very few people manage to finish high school in our country due to the economic difficulties in which they live.



Participation in the Pi Tau Sigma National Convention 2019 at CSU

This year we took part in the 98th Pi Tau Sigma National Convention February 15th & 16th, 2019 hosted by the Tau Psi chapter from the Colorado State University.



Academic Decathlon

The academic decathlon is an event that takes place every semester around March to test the students of all the engineering careers of our campus. In this contest groups of 5 people are formed. The objective is to answer a series of questions of general culture and science in the shortest time possible. The two teams that have the best score with the shortest possible time, will be the finalists of the contest. After this, the finalists will face each other to choose a winning team, which will receive a trophy.

Reforestation within the Campus Irapuato - Salamanca of the University of Guanajuato

Some green areas of our university do not have enough vegetation and they are not given continuous care. For this reason, we decided to carry out reforestation and thus improve the appearance and health of our institution. In detail, more than 100 trees were planted and given continuous irrigation for several weeks after reforestation. We had a great response from the engineering students.