



2010 Activities Report

The Universidad Autónoma de Nuevo León SPIE Student Chapter was officially established on January 2008. The purposes of this chapter are:

- The diffusion at different levels of optics and photonics inside and outside of our university.
- To establish communication on regional optics industry.
- To help the professional development of the students of the optics field.

In order to accomplish these goals, the first meeting was dated back February 2008.

At this time, we are reporting the main activists to fulfill the goal of the chapter.

Activities.

Participation of two of our Student members in Optics and Photonics Congress 2010.

Participation in Optics for kids.

Participation in the first national annual reunion of student chapters SPIE-OSA 2010.

Short Courses.

DESCRIPTION OF STAGES:

Short Courses

First Short Course, Ph. D Sabino Chavez Cerda.

The first short course was with the Ph. D Sabino Chavez Cerda, from Instituto Nacional de Astrofísica y Óptica Electrónica (INAOE), the topic was "Solitones Ópticos Espaciales"(fig 1).

The course was in two sessions the first one "Haces Ópticos y sus Características de Propagación en Espacio Libre" was from 10:30 a.m to 1: 30 p.m and the second one "Propagación de Haces Ópticos en Medios con Índice de Refracción No lineal" was from 4:00 p.m to 6:00 p.m.



Fig 1. The promotion for the short course.

Second Short Course, Ph. D Diana Tentori

The second short course was with the Ph. D Diana Tentori, from Centro de Investigación Científica y Educación Superior de Ensenada (CICESE), the topic was “Óptica de Polarización de Fibras Ópticas” (fig. 2). The course was scheduled in this way.

10:15 a 10:30 Inauguración.

10:30 a 12:00 Primera sesión. Polarización y birrefringencia: Descripción usando formalismos matriciales.

12:00 a 12:15 Coffee Break

12:15 a 13:45 Segunda Sesión. Caracterización de la birrefringencia residual de una fibra óptica.

Comida

16:00 - 17:30 Tercera Sesión. Control de la birrefringencia usando deformaciones elásticas.

17:30 - 17:45 Coffee Break

17:45 - 18:00 Clausura



Fig. 2 Short Course with Ph.D. Diana Tentori

The Third Short Course Was with Francisco Cuevas de la Rosa.



Francisco Cuevas de la Rosa, a short course about the opportunities in the Center of Optical Research, and his work, patron recognition.



First Annual Reunion of Student Chapters SPIE-OSA 2010.

The first annual reunion of national chapters, was in Leon, Guanajuato, Mexico, and from our chapter was present Guillermo Ezequiel Sanchez Guerrero (president) and Rogelio Padilla (Fig.5). Here students from all the chapters of Mexico, meet each other to establish communication and organize events in the 2011. One topic of the reunion was the ICO congress that will be in Puebla, we agree that the new reunion will be in Puebla 2 days after the ICO congress.

Also we have conferences and a tour by the Ph. D Mitsuo Takeda (Fig 6.) and a tour by the laboratories of the Center of Optical Investigation (CIO).



Fig 5. From left to right Guillermo Sanchez (SPIE UANL president), Jeane Vargas (OSA UANL president), Helena de los Reyes (OSA UANL) and Rogelio Padilla (SPIE UANL).



Fig 6. Conference with Ph.D. Mitsuo Takeda.

Members from all the country, [CICESE](#), [CIO](#), [INAOE](#), [ITESM Leon](#), [UANL](#), [UDG](#), [Univ of Guanajuato](#), finally meet (fig 7) and establish contact via mail, Facebook (<https://www.facebook.com/SPIEUANL>) and twitter (@SPIEUANL). We will establish these reunions annually, the next will be in Puebla 2 days before ICO congress.



Fig 7. Members and Presidents from SPIE-Mexico.

Optics & Photonics 2010

Members of our chapter, Guillermo Sanchez and Francisco Betancour assist to O&P 2010, where we talk about our chapter in Mexico, and establish contact with members from other countries. We assist to leadership workshop where we did a lot of activities with new people.

We show our poster in O&P 2010, student chapter Univ Autonoma de Nuevo Leon. (Fig 8)



Fig 8. Francisco Betancour and Guillermo Sanchez in O&P 2010 poster show.

We assist to leadership workshop where we learn about some activities that we can do in our chapter. Fig 9.



Fig 9. Guillermo Sanchez and Francisco Betancour at Student Chapter Leadership Workshop



Fig 10. Dirk, Guillermo and Ben at O&P 2010

Óptica para niños (Optics for kids)

Also we do one event for kids in “óptica para niños”, we show 150 kids from elementary school some experiments to show how the optics in the life. The event begins at 9 a.m and at 12:00 p.m with talk with the Ph. D Juan Carlos Ruiz Mendoza about recreational physics (here you can see a short [video](#)). There were different experiments between them: formation of colors, astronomy, diffraction, 3D glasses, etc. And we finish the event with a lunch for the kids.



In this picture we can see the event where more than 150 kids where learning and playing in every table and also we can see the observatory at bottom.

Also we have a talk about physics with Ph. D Juan Carlos Ruiz, where all the kids where in the event, he talk and show the kids different experiments.



Here are some pictures of all the participants in this event at Faculty of math and physical science.



Unique moment capture.



Also we make a “posada”, that’s a reunion traditional from Mexico, in which we eat typical food, like tamales, champurrado and buñuelos. In that we close the events for the 2010, and we have some time to relax. We make some commemorative gift, a scarf labeled with SPIE.



Financial report (2009-2010)

2009's Ending balance **+\$ 125 dlls.**

New members' subscription at U.A.N.L. SPIE Chapter and food for our January 2011 reunion (Día de Reyes)

- \$ 125 dlls,

Due

0 dlls

2010's Beginning balance **+\$ 1140 dlls (Outreach grant)**

Airfares -\$ 185 dlls

Bus Services -\$ 475 dlls

Food -\$ 265 dlls

CIO-commemorative t-shirt -\$ 20 dlls

Christmas Scarf -\$ 80 dlls

2010's ending balance **+\$ 115 dlls**

Future activities

We are planning to do 5 Short courses with invited PhD, with a bi-month frequency and we are planning to start in the last Friday of April. We also planning to go the industry and in this time we are thinking to go to Takata, which is an international company for the automobile industry. We also plan to do an open day at each open terms of our school in order to gain more students interested in optics.

- Informal photonics talks
- Socials (Teachers day, Mothers day, Students Day, etc)
- Short courses.
- Companies visits (Takata)
- Student Members to assist to the Optics and Photonics conference 2011 (San Diego, CA)
- Student Members to assist to the 2nd annual national reunion of chapters 2011.
- Student Members to assist to ICO international commission of optics biannual congress.
- Optics for kids.

List of current chapter members

1. Francisco Manuel Betancourt Ibarra
2. Gustavo Cárdenas
3. Andrés Castrillón
4. Abraham Elizondo Chapa
5. Mario López Cueva
6. Victoria Navarro
7. Ciro Quilantán Cerda
8. Luis Ramos Traslosheros López
9. Guillermo Sánchez Guerrero
10. Perla Viera González
11. Leopoldo Villarreal



2010 President: Guillermo Sanchez Guerrero