

# **2009 ACTIVITIES REPORT**

The Universidad Autonoma de Nuevo Leon 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.

- 1. Participation of one of our Student member in a international congress in September 2009,
- 2. Participation of two of our student members in the Optics and Photonics Congress 2009,
- 3. We visited a company on 27/June to the company Motorola,
- 4. We organized the *Primer Simposio en Ciencias Opticas*, a project which was supported by the outreach grant,
- 5. We organized the open day in the beginning of the fall terms at the FCFM (School of Mathematical and Physical Science,

### **DESCRIPTION OF STAGES:**

In September 10<sup>TH</sup>, one of our chapter members had the opportunity to assist to the VII Symposium of the optics in industry in Guadalajara Mexico, in which, he presented a paper work in a poster section entitled "Novel Automatic Alignment of specialty Optical Fiber". The UANL chapter then supported economically to Samuel Almaguer who also represents us in a meeting held with others SPIE Mexican chapter members.



Photo 1: Poster of Samuel Almaguer, member of the SPIE Chapter

In August 2009, we repeat our participation in the student chapter leadeship workshop at San Diego and in this time, our former president Paulina Segovia assisted and gave the details of all the activiities made in our chapter at this meeting. In the optics and photonics 2009, there was also the outrearch grant winners reception where Miss Paulina received the diploma.

The grant in question, was used to organize a simposio "en ciencias opticas" and as a consequence, we get a good impact within the UANL students.



Photo 2: Winners of the outreach grant at the O&P 2009

From November 9<sup>th</sup> to 10<sup>th</sup>, we organized the Symposium of Optical Science 2009 in the School of Mathematical and Physics Science. We invited several researchers from our country and from the SPIE, we invited Professor Robert A. Fisher as our visiting lecturer.



#### Photo 3: Publicity for the symposium

The list of our invited speakers:

- Dr Sabino Chavez Cerda
- Dr. Gerardo Trujillo Shaffinoy
- Dr. Esteban Luna Aguilar
- Dr. Gilberto Anzueto Sanchez
- Dr. Rene Dominguez Cruz
- Dra. Hilda Mercado Uribe
- Dr. Steve Cundiff
- Dr. Robert Fisher
- MC Joaquin Baes (Senior Engineering, Motorola)
- MC Sergio Mendoza Aguirre (Senior Engineering, Motorola)
- MC Ruben Rodriguez Espinosa (Project Leader, TAKATA)
- MC Alma (Project Leader, AFL Telecommunications)



# Simposio de Ciencias Ópticas 2009

Monterrey, N.L. México

	lunes 9 Nov 09	Martes 10 Nov 09
09:00 - 10:00	Registro	Registro
10:00 - 11:00	Inauguración / Coffee Break	Dr. Gerardo Trujillo Schiaffino (Instituto Tecnológico de Chihuahua) "Perfilometría 3D de objetos sólidos aplicando técnicas ópticas"
11:00 - 12:00	SPIE Traveler	Dr. Hilda Mercado Uribe (Cinvestav - Monterrey) "Aplicaciones de la óptica en la dosimetría"
12:00 - 13:00	Dr. Gilberto Anzueto Sánchez (Universidad Politécnica de Chiapas) "Láseres de fibra óptica en el IR medio"	Lunch with experts
13:00 - 14:00	Dr. Esteban Luna Aguilar (Instituto de Astronomía - UNAM) "Instrumentos afines para la observación astronómica moderna en el OAN"	Dr. Esteban Luna Aguilar (Instituto de Astronomía - UNAM) "Pulido hidrodinámico para superficies con calidad óptica"
14:00 - 16:00	Comida	Comida
16:00 - 17:00	Dr. René Domínguez Cruz (Universidad Autónoma de Tamaulipas) "Contraste de fase no lineal usando nano-estructuras"	Mesa redonda con RediColor, TAKATA, AFL y Motorola
17:00 - 18:00	Dr. Sabino Chávez Cerda (Instituto Nacional de Astrofísica, Óptica y Electrónica - INAOE) "Propagación de haces"	Prof. Steven Cundiff (University of Colorado and the National Institute of Standards and Technology) "Ultrafast Coherent Spectroscopy"
18:00 - 19:00		Ceremonia de clausura
	www.sco2009.web	

Photo 4: Schedulle of our symposium



Photo 5: The inaguration ceremony of the Primer Simposio de Ciencias ópticas

We have had a lot of assistance to all the conferences and as it is referred in the schedule, we held an expert breakfast which consists in combining the participants with the invited speakers in an informal chat during the lunch time.

We also invited people from the industry in order to share their working experience to all of us. It was a nice round table in our symposium.



Photo 6: Closure ceremony of the Primer Simposio de Ciencia Optica

At the end, the closure ceremony was followed by a nice dinner with most of the participants of our symposium.



Photo 7 : Members of the SPIE chapters and some of the invited speakers at the Simposio de Ciencias Opticas



Photo 8: Dinner during the symposium

We visited Motorola Engineering and Design Center Monterrey on 27<sup>th</sup> June. Some of the chapter members have the opportunity to see the newly facilities of the Motorola Company set at Monterrey and it was very impressive to know about the advances made in telecomm and in the mobile technology industry.



Photo 9: Motorola E&D Center Monterrey

We organized the open day on 30<sup>th</sup> January, and it consisted in a talk to inform the students what is all about our chapter, and we set at that time several wonderful experiments in optics.



Photo 10. Speaker in the open day (Dr. Romeo Selvas)

# Financial report (2008-2009)

# 2008's Ending balance +\$ 333 dlls,

Student's participation in an international Symposium (Optica en la Industria) Airfare, Food and Hotel (September 10<sup>th</sup> 2009)

## - \$333 dlls,

Due

0 dlls

2009´s Beginning balance	+\$ 4, 500 dlls (Outreach grant)
Airfares	-\$ 1300 dlls
Hotel	-\$ 1110 dlls
Food	-\$ 895 dlls
Coffee breaks	-\$ 300 dlls
Polo-commemorative t-shirt	-\$ 165 dlls
Recognitions plates	-\$ 375 dlls
Materials	-\$ 105 dlls
Best poster prize	-\$ 125 dlls
2009's ending balance	+\$ 125 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: (Dr. Sabino Chavez Cerda, Dr. Francisco Cuevas, Dra. Diana Tentori, Dr. Hector Cerecedo, Dr. Amparo Lucio).
- Companies visits (Takata)
- Student Members to assist to the Optics and Photonics conference 2010 (San Diego, CA)

# List of current chapter members

- 1. Samuel Almaguer
- 2. Francisco Manuel Betancourt Ibarra
- 3. Antonio Briones Alvarado
- 4. Martha Cabral
- 5. Arturo Castillo-Guzman
- 6. Luis Cortez
- 7. Raul Lamadrid
- 8. Armando Mendez Davila
- 9. Rogelio Padilla
- 10. Jeane Vargas
- 11. Valentin Guzman
- 12. Guillermo Sanchez Guerrero
- 13. Juan Manuel Tamez Vela



President: Guillermo Sanchez Guerrero



Treasurer: Armando Mendez Davila