

CIOp-UNLP Student Chapter. Annual Report. December 2016

This report presents the chapter's activities from December 2015 to December 2016. Some of them were held at Centro de Investigaciones Ópticas (CIOp), at the Universidad Nacional de La Plata, while others took place at different cities in Argentina.

1. Officers Information

- President: David Muñetón Arboleda (davidmuar@gmail.com)
- Vice-President: Angelica Mesa Yandy (angelicam@ciop.unlp.edu.ar)

1.a. Next year officers (2017)

- President: Juana Gallego (chinchiya@gmail.com)
- Vice-President: David Muñetón Arboleda (davidmuar@gmail.com)

2. List of current CIOp-UNLP Student Chapter members

- Andrés Escobar Mejía
- Valentín Guarepi
- Angelica Mesa Yandy
- David Muñetón Arboleda
- Enrique Gustavo Neyra
- Agustina Corti
- Patricio Fluxa
- Juana Gallego
- Jorgelina Hansen
- Enrique Neyra
- Roberto Peyton
- Damian Presti
- Nahuel Sede
- Demián Biasetti
- Alejandro Velez

Alumni

- Dafne Amaya
- Jesica Santillán
- Fabián Videla

- Gustavo Forte

3. Detailed Chapter activities

- Helped in the organization and attended the National Optics Students Meeting (EEOF2016, hosted by the Territorial Committee for Optics (Facultad de Ingeniería, Universidad de Buenos Aires, Argentina, May-2015). This year's topic was Optics and Photonics in the Engineering. Members from our chapter (and others from Argentina) attended this meeting and stayed for the National Optics Meeting (TOPFOT).
- We have performed FOCAL, fair of optical and technologies applied to light, in the Faculty of Engineering UNLP, where with lectures and interactive experiences, for students and people interested, knew everything related to optics in industry and everyday life.
- Our chapter participates in “Científico por un día” (Scientist for a day), program of the CONICET in which elementary and high school spend an entire afternoon sharing with different academic stuff. This is to increment the interest for science in the school students.
- We have organized the third version of the Plasmonics Symposium. In this case we invited different research in this area in order to they tell to different kind of public about their research topics. The attendance was from high school up to grade students.
- Chapter treasurer Jesica Santillán attended the Student Chapter Leadership Workshop (August 2016) at San Diego Convention Center, San Diego, California, USA. Where she could learn new ways to attract people to study optics and news experiences to show to the students.
- **Lectures at CIOp**
 - “Aplicaciones de Láseres Compactos en el Ultravioleta Extremo: Nanopatterning y Holografía de Alta Resolución” Dr. Mario C. Marconi, Professor at the Electrical and Computer Engineering Department, Colorado State University, Fort Collins

- “Ligo, Ondas Gravitacionales, Física y Astronomía” Dr. Héctor Vucetich, Profesor Emérito, Universidad Nacional de La Plata
- “Nanostructure synthesis by supersonic cluster beam deposition and non-thermal laser ablation” Dr. Luca Gavioli, Interdisciplinary Laboratories for Advanced Materials Physics (i-LAMP) & Dipartimento di Matematica e Fisica, Università Cattolica del Sacro Cuore, via dei Musei 41, I-25121 Brescia, Italy
- “Microwave-assisted in-situ synthesis of nanoparticles, two- and tri-dimensional nanocomposites” Dra. Anna Roig, Institut de Ciència de Materials de Barcelona (ICMAB), Consejo Superior de Investigaciones Científicas (CSIC), Campus de la UAB, SPAIN
- “Diseño de Grandes Salas Para Música” Ing. Gustavo Jorge Basso, Ingeniero en Telecomunicaciones especializado en Acústica and Profesor Titular de Acústica Musical en la Facultad de Bellas Artes.
- “Tendencia internacional sobre Normalización en Innovación (ISO/TC279 Innovation management)” Ing. Cristian Vázquez, Dirección de Certificación del IRAM (Instituto Argentino de Normalización y Certificación.)
- “Nanopartículas y Hongos; una extraña pareja” Dra Cecilia Carmaran, Departamento de Biodiversidad Biología Experimental and Facultad de Ciencias Exactas y Naturales, UBA-CONICET
- “La importancia de la comunicación en ciencia, educación y tecnología” Dr. Eduardo A. Castro, INIFTA, Departamento de Química, Facultad de Ciencias Exactas, Universidad Nacional de La Plata.
- “Cristales fotónicos sintonizables por campo magnético” Dr. Ignacio Bruvera, Centro de Investigaciones Ópticas – CIOp.
- “Uso de un detector Piroeléctrico en las frecuencias de los Terahertz” Ing. Andrés Felipe Escobar Mejía, Centro de Investigaciones Ópticas – CIOp
- “Generación de Armónicos de Alto Orden con pulsos con chirp no-lineal” Lic. Enrique Neyra, Centro de Investigaciones Ópticas CIOp
- “Caracterizando las Nanopartículas que fabricamos por ablación láser” Fis. David Muñeton Arboleda, Centro de Investigaciones Ópticas CIOp

- “Localización de defectos generados dentro de una red con chirp a partir del análisis de su espectro de reflexión y el retardo de grupo” Ing. Angélica María Mesa Yandy, Centro de Investigaciones Ópticas CIOp
- “Encriptación óptica de escenas 3D” Fis. Alejandro Velez Zea, Centro de Investigaciones Ópticas – CIOp
- “Refuerzo de campo en nanopartículas metálicas multicapa. Inclusión de materiales magnéticos” Mg. Joaquín Mendoza Herrera, Centro de Investigaciones Ópticas – CIOp
- “Diseño, desarrollo y caracterización de un modulador de amplitud integrado en LiNbO₃” Ing. Damian Presti, Centro de Investigaciones Ópticas “Ab initio studies of ultrafast structural changes in femtosecond laser excited materials” Tobias Zier, University of Kassel, Germany. August 31st.
- “Cooperación científica, un caso con larga historia: CIOp – GOF” PhD. John Fredy Barrera Ramírez, Grupo de Óptica y Fotónica, Universidad de Antioquia, Medellín-Colombia. November 11th.
- “Espectroscopia de Materiales Luminiscentes”, PhD. Eugenio Cantelar, Universidad Autonoma de Madrid, Spain. December 11th.
- “Nano-fósforos luminiscentes activados con Eu³⁺. NaGdF₄:Eu³⁺ como caso modelo”, PhD. Eugenio Cantelar, Universidad Autonoma de Madrid, Spain. December 14th.

4. Details of planned activities for the future

- Help in the organization and collaboration for the TOPFOT 2017 (National Workshop in Optics and Photophysics) and the EEOF (School for Students of Optics and Photophysics), to be realized in 2017, in Neuquén, Argentina.
- Meetings and CIOp-UNLP SPIE Chapter membership managing.
- Maintaining of Chapter Website.

- Printed information and publicity.
- Rural area school outreach.
- Local and guest Lecturers at CIOp and UNLP, Physics Department, Exact Sciences Faculty and Engineering Faculty.

5. Financial Information

Description	USD
Activity grant SPIE	500
Activity grant OSA	250
Other financial supports	400
Beginning balance	1150
EEOF 2015	-500
Seminars	-200
FOCAL	-250
Plasmonics symposium	-200
End balance	0

6. Pictures of some of the activities



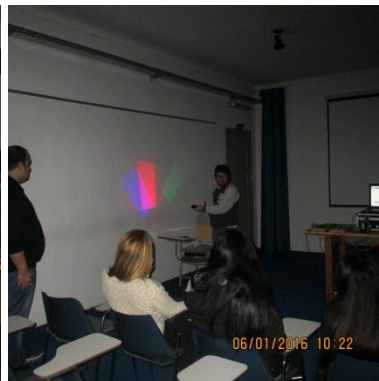
Conference about Optics in Universidad Nacional de La Plata



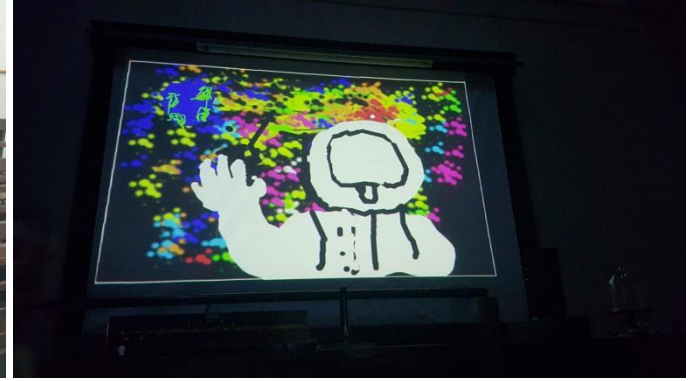
FOCAL stands of different companies and research centers



Seminars at CIOp



Scientist for a day program



Show of different optical experiments in Facultad de Ciencias Exactas UNLP



Third Plasmonics Symposium Tandil Argentina



Organization together with the SPIE UBA chapter of the EEOF and TOPTOF



Sharing with the SPIE visiting Lecturer



Participation in SPIE Leadership Workshop and Optics + Photonics 2016, San Diego – USA.

David Muñetón Arboleda
CIOp-UNLP SPIE Student Chapter President
La Plata, Argentina December 14th, 2016