

## 2019 SPIE Student Chapter Annual Report



**Prepared by:**

Mario Martin Arreola Esquivel

*President*

*And*

Maricela Delgadillo Herrera

*Secretary*

[https://spie.org/membership/student-services/student-chapters/student-chapter?chapter\\_id=1066325](https://spie.org/membership/student-services/student-chapters/student-chapter?chapter_id=1066325)

**Executive Summary:**

The Universidad Politécnica de Tulancingo Student Chapter (SPIE Student Chapter UPT) was established on 18 October 2012 by students of the Optics Master program. The purpose of the Student Chapter is to promote optics inside and outside of the university. Moreover, we are also interested in the opportunity to exchange ideas with experts in optics, photonics and related fields, which greatly contribute to the development of our research projects. We think that, by sharing our experience with the optical sciences in our community, we may arouse the interest of new generations, let people know about relevant accomplishments, spread awareness of applications of optics, and promote the development of this area in our region.

This year, our chapter organized classes, teaching young fellows about optics, math and physics. Our goal is to grow their interest in order to continue studying in one of these subjects in the near future. One of the biggest challenges that our chapter faced this year has been planning the events and to accomplish the reunion of different schools.

**Contact Information:**

To promote optics in social networks, we use a Facebook page, in which all the activities and photos of the events are published.

The link to the Facebook Page is:



<https://www.facebook.com/UPTChapter/>

And this is our email to contact for more information about the Student Chapter:



[upt\\_chapter@outlook.com](mailto:upt_chapter@outlook.com)

## Advisor



Alfonso Padilla-Vivanco  
PhD in optics  
[alfonso.padilla@upt.edu.mx](mailto:alfonso.padilla@upt.edu.mx)

## 2018-2019 Chapter Officers

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- President: Karina Ortega Sánchez [karina.ortega.1631025@upt.edu.mx](mailto:karina.ortega.1631025@upt.edu.mx)
- Vice-President: Benjamin Islas Amador [benjamin.islas.1631024@upt.edu.mx](mailto:benjamin.islas.1631024@upt.edu.mx)
- Secretary: Horlando Vargas Vargas [horlando.vargas.1631027@upt.edu.mx](mailto:horlando.vargas.1631027@upt.edu.mx)
- Treasurer: Laura Benita Alvarado Cruz [laura.alvarado.1631026@upt.edu.mx](mailto:laura.alvarado.1631026@upt.edu.mx)

## 2019-2020 Chapter Officers

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- President: Mario Martín Arreola Esquivel
- Vice-President: Arturo Guzmán Barraza
- Secretary: Maricela Delgadillo Herrera
- Treasurer: Sonia Buendia Aviles

[mario.arreola.1731024@upt.edu.mx](mailto:mario.arreola.1731024@upt.edu.mx)  
[arturo.guzman.1731025@upt.edu.mx](mailto:arturo.guzman.1731025@upt.edu.mx)  
[maricela.delgadillo.1731022@upt.edu.mx](mailto:maricela.delgadillo.1731022@upt.edu.mx)  
[sonia.buendia.1731023@upt.edu.mx](mailto:sonia.buendia.1731023@upt.edu.mx)

## 2020-2021 Chapter Officers

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- President: Manuel Reyes Alfaro
- Vice-President: Carolina de Monserrat Cabrera
- Secretary: Ana Rosa Cruz Garrido
- Treasurer: Elizandro Delgadillo Hernández

[manuel.reyes1831027@upt.edu.mx](mailto:manuel.reyes1831027@upt.edu.mx)  
[carolina.cabrera1831023@upt.edu.mx](mailto:carolina.cabrera1831023@upt.edu.mx)  
[ana.cruz1831025@upt.edu.mx](mailto:ana.cruz1831025@upt.edu.mx)  
[lisandro.delgadillo1831026@upt.edu.mx](mailto:lisandro.delgadillo1831026@upt.edu.mx)

### Student and Community Membership

At the time of this report, there are 17 student members affiliated to the SPIE Student Chapter UPT.

| Name                                 | SPIE Membership Expiration Date |
|--------------------------------------|---------------------------------|
| <b>Laura Benita Alvarado Cruz</b>    | 19 September 2020               |
| <b>Mario Martin Arreola-Esquivel</b> | 17 September 2020               |
| <b>Aurora Becerra</b>                | 15 October 2020                 |
| <b>Gabriela Bello Cruz</b>           | 15 October 2020                 |
| <b>Alejandro Bello Cruz</b>          | 5 November 2020                 |
| <b>Carolina de Monserrat Cabrera</b> | 12 September 2020               |
| <b>Daniel Canales</b>                | 11 November 2020                |
| <b>Raúl Castro-Ortega</b>            | 7 December 2019                 |
| <b>Ana Rosa Cruz</b>                 | 12 September 2020               |
| <b>Lisandro Delgadillo</b>           | 12 September 2020               |
| <b>Maricela Delgadillo-Herrera</b>   | 17 September 2020               |
| <b>Arturo Duarte Rangel</b>          | 15 October 2020                 |
| <b>Alitzel Garcia</b>                | 15 October 2020                 |
| <b>Arturo Guzmán Barraza</b>         | 20 February 2020                |
| <b>Karina Ortega Sánchez</b>         | 21 January 2020                 |
| <b>José Manuel Reyes Alfaro</b>      | 12 September 2020               |
| <b>Abel Trejo Aguirre</b>            | 13 September 2020               |

# Activities Report

## Recruiting activity meeting

Participants: The student chapter

The chapter of students of the Polytechnic University of Tulancingo has a meeting to receive new members showing the benefits of being part of the chapter. We usually celebrate with pizza and snacks. We also do some activities that give warmth and sense of belonging to the members of the chapter. The activities we have carried out and the future activities planned are discussed.



## SPIE Visiting Lecture

Participants: The student chapter and students from UPT

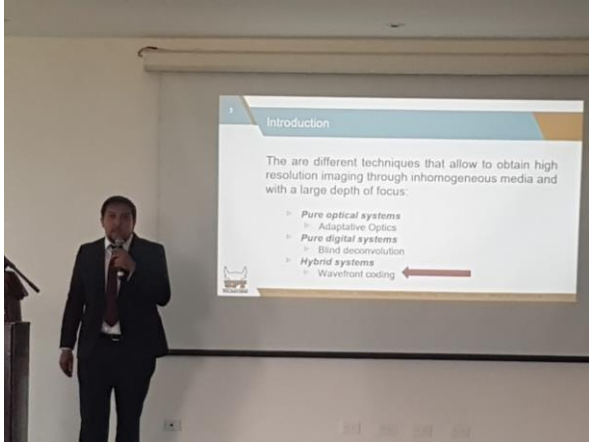
Thanks to the international SPIE optics and photonics society, on February 21, 2019, Professor Philip Stahl was invited to participate through the Visiting Lecture. It was possible to interact with the Professor about his lines of research and topics related to the James Webb Space Telescope. Professor Philip Stahl gave the conference called " James Webb Space Telescope ". He made a guided tour through the laboratories to learn about the different research works. He shared talks with the members of the chapter, where they had the opportunity to talk about their topics of interest and organized a visit to a representative place in our country and a meal with all the members of the chapter.



# Weekly Seminars Every Wednesday

Participants: The student chapter and students from UPT

The Weekly seminar is organized every week in our university, in which graduate students have the opportunity to present current research and to receive feedback from the student chapter and faculty of the optics and computer image vision program.



## Event of a look at the sky

Participants: members of the student chapter and middle schools

An event called look at the sky was organized middle school students. In this event there was a talk about telescopes. In addition, the participants were invited to objects using the telescopes from our institution.



## Workshop

Participants: members of the student chapter and students from UPT

The members of the student chapter show students of university how the white light can be seen in its different wavelength.

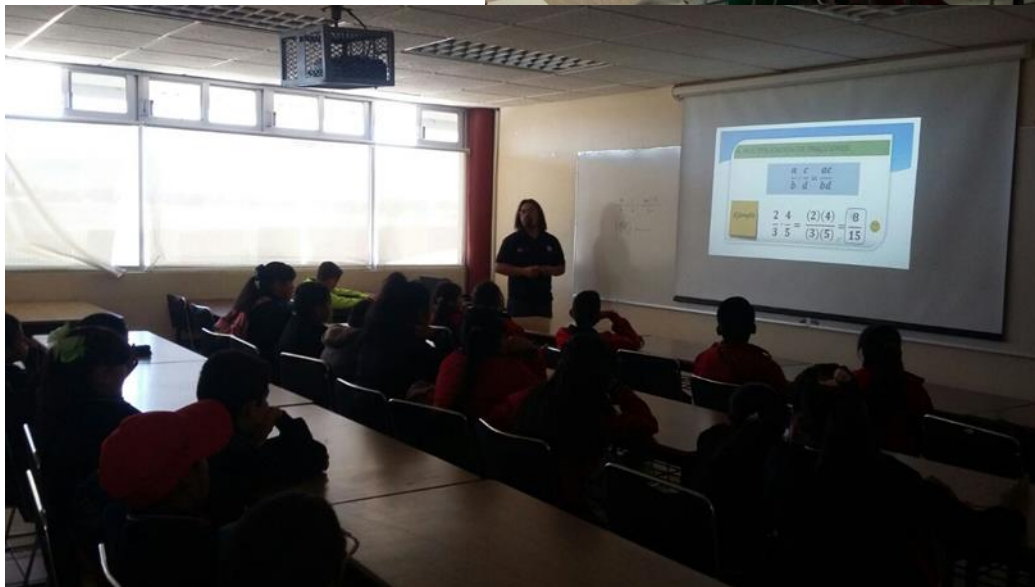




## Monthly classes

Participants: members of the student chapter and middle school

The members of the student chapter give classes every last Saturday of the month to middle school students. The topics cover during this lessons are physics, optics and math.



## **Event of Women in the science**

**Participants: The student chapter and students from UPT**

The woman in science event was proudly organized. A series of lectures was prepared with the topic of research of woman who carry out their work in our university.



## Visiting Lecture

Participants: The student chapter and students from UPT

Professor Virendra Mahajan visit our university for two weeks, were he gives lectures to members of the chapters and give conferences to the UPT students.



## Guided tours to the different laboratories

Students from high school and undergraduate students of our university visit the different Laboratory of Optics, where multiple experiments from different areas of research demonstrate to motivate students to continue studying and to choose an area of research in optics to work.



## SPIE Optics + Photonics 2019

The president of the student chapter Mario Martin Arreola Esquivel attended SPIE Optics + Photonics 2019, organized by SPIE in San Diego (California). During the he attended lectures and workshops, interacting and sharing experiences with students from more than different countries. The UPT student chapter participated in the Optics Outreach Games 2019 and presented the 2019 Chapter Activities Poster.



## **Conclusions and Recommendations**

The members of the SPIE Student Chapter UPT, like to increase the curiosity in science to the new generations so that shortly they study optics and photonics of their different branches. The SPIE Student Chapter UPT wishes to continue participating in the next SPIE optics and photonics congresses and continue learning to be better leaders, as well as to establish contacts with members of the chapters around the world. We thank SPIE for the program of visiting lecture that allows us to meet renowned researchers from around the world and share ideas that help improve and understand optics and photonics.