



ANNUAL REPORT

University of São Paulo, Nuclear Energy Research Institute

President: Noé Machado

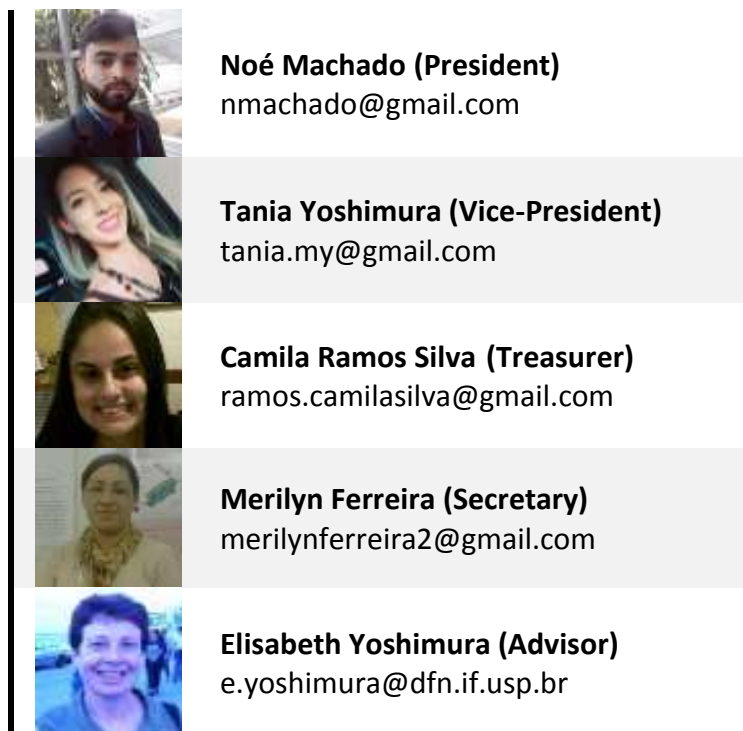
Vice-President: Tania Yoshimura

Advisor: Elisabeth Yoshimura

Brazil

2017

1. Chapter officers



2. Regular student members

Fernando Bastos de Melo	Merilyn Ferreira
Lucas Borges	Eduardo Gonçalves
Carolina Contatori	Noé Machado
Andreia de Araujo Almeida	Sandro Schott
Laura de Freitas	Caetano Padiál Sabino
Diego Eterno de Oliveira Mendonça	Saulo Pereira
Rafael Denaldi	Camila Ramos Silva
Carolina dos Anjos	Diego Silvério
Daniel Espinosa	Fernanda Viana Cabral
Armando Valter Felicio Zuffi	Tania Mateus Yoshimura
Amauri Ferreira	

3. Alumini

Hilde Buzzá	Lilian Moriyama	Amin Murad
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4. Activities

During this year the chapter was restructured with new student members from the Center for Lasers and Applications (Nuclear Energy Research Institute - IPEN) and the Physics Institute (University of Sao Paulo). The students were encouraged to present their research projects to the

group, this way everyone had the chance to learn more about each other. Below are listed the presented research topics:

- Influence of photobiomodulation on cancer cells dynamics;
- Effects of photodynamic therapy on leishmania;
- Photobiomodulation for obesity and diabetes management;
- Uses of laser ablation for radioactive waste decontamination (surfaces);
- Pulsed laser deposition and development of new devices;
- Waveguided manufacturing with femtosecond laser;
- Manufacturing of new laser systems;
- Studies with femtosecond laser and high harmonic generation;
- Optical properties of magnetic nanocrystals.

In august we decided that our chapter's main objective is to organize and host optics and photonics' events. We think this will help us to develop leadership, proactivity, creativity and it definitely will put all group to work together. Nevertheless, we will continue engaging on scientific outreach activities, since our mission remains to educate students (and society) on optics and photonics so the Chapter's following activities will focus on promoting those topics.

Our meetings have been taking place at IPEN, where we have been planning our activities throughout the next year:

- Knowing chapter's members research projects;
- Planning Optics and Photonics schools for next year (Jorge André Swieca and FAPESP's São Paulo School of Advanced Science, both happening in July);
- Student attendance at SPIE Photonics West and SPIE officer travel grant use (2018);
- SPIE education outreach activities inside University of Sao Paulo.

On November 30th we have held our chapter's election according to SPIE's bylaws. The new elected officers are:

- President: Noé Machado;
- Vice-president: Tania Mateus Yoshimura;
- Treasurer: Camila Ramos Silva;
- Secretary: Merilyn Ferreira.

In the same meeting our group decided to award Camila Ramos Silva to attend SPIE Photonics West using the Officer Travel Grant.

We are proud that more than 75% of your twenty-one student members are engaging on the chapter's activities. In this sense, we feel our members are rather motivated and we expect great projects happening in the next year. We will continue to make huge efforts to encourage our members to participate in our meetings, activities and scientific schools, spreading science and developing their leadership and group skills.

5. Planned activities for the next year

During the next year our chapter would be mainly focused on organizing two schools of optics and photonics that will be hosted at IPEN. The Chapter's schedule includes:

- Feedback of officers that attended of Leadership Workshop at SPIE Photonics West;
- Jorge André Swieca School;
- São Paulo School of Advanced Science (FAPESP);
- SPIE Photonics West officer attendance;
- Outreach activities.