

2015 Annual report, EPFL Photonics Chapter (EPC)



The 7th of January 2015, the EPFL Photonics Chapter held its 2015 General Assembly. The occasion to celebrate the successes of the past year and to plan the International Year of Light ahead. A new committee has been elected.

Our new 2015 team :

Anderson, Mitchell : Membre de l'association mitchell.anderson@epfl.ch

Infante, Daniel : Secrétaire daniel.infante@epfl.ch

Javerzac-Galy, Clément : Président clement.javerzac-galy@epfl.ch

Mohamed, Sabry : Vice-président mohamedsabry.mohamed@epfl.ch

Rostykus, Manon : Membre de l'association manon.rostykus@epfl.ch

Smolik, Grégoire : Trésorier gregoire.smolik@epfl.ch

Walger, Thomas : Membre de l'association thomas.walger@epfl.ch

More details on our team can be found on our website (team page): <http://photonics.epfl.ch/page-101682-en.html>

As a short reminder of our chapter history, you can have a look on the dedicated page of our website <http://photonics.epfl.ch/page-101686-en.html>. We are now a joint chapter with the EPFL OSA Student Chapter. The OSA and the SPIE chapters are regrouped under the EPFL Photonics Chapter (EPC) which is an officially recognized association from the EPFL administration. The creation of the EPC was needed to be able to organize events on the campus and in the same time was mandatory in a legal point of view according to the Swiss law.

The events we are organizing are held under the SPIE or the OSA banner depending on the funding we received from both societies.

By regrouping the chapters under the same entity we can assure the durability of the activities we do on campus.

We are the EPFL student organization gathering all the photonics enthusiasts on campus and promoting optical science and technology. Our mission is to provide exciting networking, educational and outreach activities for the EPFL community. If you are interested or already passionate about photonics, come attend our events!

EPC is a joint OSA and SPIE Student Chapter.

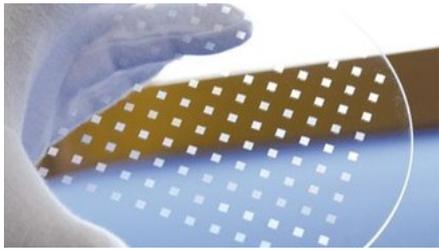


Student Chapter
EPFL



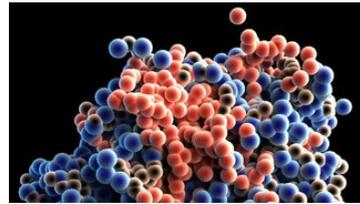
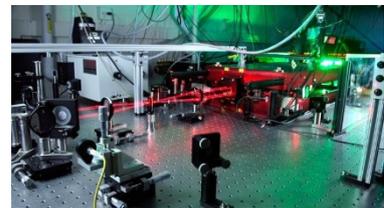
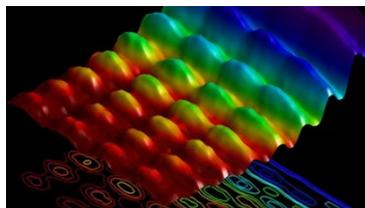
A list of our current members can be found in attachment to this document.

Chapter activities



We had the pleasure to organize several times (every first Wednesday of the month) our monthly EPFL Photonics Chapter (EPC) 'Pizza-optics-beer' (POB) seminar. This is our most attended event and it gathers a large portion of the EPFL photonics community.

Topics were as broad as “Magic mirrors of the XXIst century”, “High SHG throughput for time resolved, label free imaging of neurons”, “The first ever photograph of light as both a particle and wave”, “Multi-D Coherent Optical Spectroscopy of Semiconductor Nanostructures”, “Real-time Protein Aggregation Monitoring with Bloch Surface Waves” or “Engineering of Artificial Photosynthesis Systems”.



Thanks to the the SPIE Visiting Lecturer Program, the EPFL Photonics Chapter (EPC) was able to propose as part of its lecturer series:

"Making the most of your presentation", by Jean-luc Doumont.

We were happy to welcome more than 200 attendees for the event, which included bachelor, master, and doctoral students as well as post-docs and professors. Jean-luc managed to captivate his audience throughout the two-hour duration of a very informative session, presenting them with a simplistic approach towards creating and delivering effective scientific presentations. We would like to thank Jean-luc Doumont on behalf of the EPFL audience!



The EPFL Photonics Chapter (EPC) was also very pleased to organize the lecture by renowned physicist Alain Aspect on quantum optics:

"From the Einstein-Bohr debate to Quantum Information: a new Quantum Revolution". Pr. Alain Aspect recently received the Balzan Prize in Switzerland.



More recently, thanks to the OSA Visiting Lecturer Program, the EPFL Photonics Chapter (EPC) proposed as part of its distinguished lecturer series: "MANUSCRIPT PREPARATION & SUBMISSION" (On how to write a good paper and get published in Nature Journals), by Dr. Rachel Won (International Editor, Nature Photonics).



To build a strong photonics community on campus we organized during summer 2014 and 2015 our Summer Photonics BBQ.



To continue on our idea of company visit for our members (Visit of Optotune in Zurich in 2013) we joined a POB with a company visit in Neuchatel (SussMicroOptics, who are specialized in refractive and diffractive micro-optical element fabrication as well as wafer-level optics).



We helped the EPFL Doctoral School of Photonics in the organization of the EPFL Photonics day, in particular in organizing a poster prize and community building events. This is the opportunity to connect with the EPFL photonics community and to discover the most recent developments in this field of research, from fundamental research to applications.

Congratulations to Dino Carpentras from the Laboratory of Applied Photonics Devices (LAPD) for winning the Best Poster Award at the Photonics Day 2014, for his poster on "biomedical imaging with wearable smart eyewear (Bwise)". The EPFL Photonics Chapter is glad to sponsor his prize.



As part of outreach, we took part in several big events in Switzerland and on campus, which is the first year for our chapter! Perfect timing for IYL2015!



The 5th and 6th of July 2014, we showcased some of our research and colorful experiments at "Nuit de la Science", organized by the city of Geneva and hosted by the Museum of History of Sciences. The occasion to meet our EPC members in action!



Don't miss the Solar Eclipse on Friday 20 March

Friday 20 March 2015, under a clear sky, several thousands of people gathered next to the Rolex Learning Center on the EPFL campus to enjoy a partial Solar eclipse. Good time for the optics-enthusiasts and EPC members to use their telescopes, and perfect timing for IYL2015!

Look at the news and nice videos <http://actu.epfl.ch/news/don-t-miss-the-solar-eclipse-on-friday-20-march/>

All the tools from SPIE for IYL were super useful and super used!



More than 1900 youngsters, from 7th and 8th grades, were invited with their class (100 classes!) to discover science and technology, on Tuesday June 2nd, 2015. This year, the event was organized around the International Year of Light and Light based technologies (IYL2015). Members from the EPFL Photonics Chapter (EPC) had the occasion to inspire the youngsters with optics fun. A great success!

Over 50 activities including lab tours, lectures, workshops and shows were organised on EPFL campus. Many of them linked to IYL2015.

Check out the program for more details: journeesdesclasses.epfl.ch/programme2015

Students were able to build solar toys, attend conferences, communicate directly with the Solar Impulse team, conduct chemistry or optics experiments, program robots and much more. Plus, they were able to test the amazing adaptability of our brains through scientific experiments and games.



July - At the occasion of the Science Camps 'La science c'est ... aussi pour les filles' (Science... it's also for girls) organized by the EPFL science outreach department, some of our members initiated young girls to the beauty of the Science of Light. Caroline, Manon, Marie, Séverine and Paul (all EPC members and women models in science) welcomed groups of girls (from 11 to 13 yo) in their labs to show them what they do through entertaining experiments. The girls followed a quest to discover the daily lives of women in Science and in the lab. At the end of the week they presented small spectacles to all the other participants and their families on what they discovered during their quests/visits. EPC members were happy to answer all their questions and maybe to inspire some future female scientists!



Our treasurer was awarded the travel grant to attend the leadership workshop at the Optics & Photonics conference in San Diego. He met a member of the student chapter of ETHZ, EPFL's sister university in the German speaking part of Switzerland. This gives us the opportunity to connect with the other student chapter and hopefully organize an event together in Switzerland later this year. During the outreach Olympics and the chapters' poster session, he had interesting discussions with other students about their activities.

Planned activities:

- Next monthly EPFL Photonics Chapter (EPC) 'Pizza-optics-beer' (POB) seminars are to come.



Thanks to the SPIE Visiting Lecturer Program, the EPFL Photonics Chapter (EPC) is planning to present as part of its distinguished lecturer series: "James Webb Space Telescope: The First Light Machine", by Dr. H. Philip Stahl from the NASA Marshall Space Flight Center.



At the occasion of the ForumEPFL - Biggest recruitment platform of graduate students in Switzerland - the EPFL Photonics Chapter (EPC) and SwissPhotonics team-up to organize a student-industry workshop on "Photonic opportunities and companies in Switzerland". It will be held Thursday, 08.10.2015, @SwissTech Convention Center, Lausanne. See more details and the agenda on SwissPhotonics website or on our news section

<http://actu.epfl.ch/news/workshop-forum-epfl-industry-day-2015-photonics/> . We managed to secure external funding for the organization.

- Next EPFL Photonics day is expected in two months as well. *Every year since our creation, we organize a Photonics Day on campus together with the Photonics Doctoral School. We now have more than 300 participants and fellows from other countries joining! The event punctuates the year on campus and all the community is present, showcasing their research, exchanging, etc. We also have a poster award for professional development. Industrial partners are present, with booths, presentations, scouting and job offers. We believe this particular annual event has a big impact in building the development of a Photonics cluster in Switzerland. This is beneficial for all our young members that will then get jobs and further develop the cluster. This is 12 hours of pure optics exchange, that ends up with a small party for all the younger participants, around a ket tournament.*
- We are planning a big closing ceremony of the International Year of Light in Switzerland that will be held the 5th of December in Lausanne at the Swiss Federal Institute of Technology. The event will have the format of a TED show (with short presentations and performances). We will have speakers ranging from ESA astronaut, Google X, Intel, IBM, startups or Nobel Laureate to foster learning, inspiration and wonder with light. We have in particular support from J. Dudley. We don't give you more details and keep it for next year's report! We hope this event will be a success.
- More outreach, a summer BBQ and other activities will be organized during 2016.

Find all the info and news on our website: http://photonics.epfl.ch/epc_en

Financial information

All amounts in CHF

2014-15 Income		2014-15 Expenses	
Amount	Source	Amount	Source
638	Grant from SPIE	1390	9 x POB Events
2400	Grant from EPFL Doctoral School	601	Photonics BBQ
		493	Outreach event
		500	Visiting lecturer (planned)
Total	3038	2984	
Balance	54		

Conclusion

Switzerland is a very tiny country but with strong science and photonics activities at the heart of Europe. Our chapter really represents the dynamism of a growing cluster with an innovation spirit. Our chapter is young (created in 2011) but expanding really quickly! We are now one of the most active association on campus. The Photonics community at EPFL is definitely a model for the campus thanks to our chapter. We are now bringing together students and industry through our events. We are building a strong community. We have events with international participants and people from other areas, that expose our members to many opportunities. We can say for sure that now, people doing photonics at EPFL know each other because of our activities. We develop this further towards career development with our incoming job fair. Outreach is now also a big part of our activity, going from no activity at all at our creation to these huge events (mentioned above) reaching 3000 people!

Thank you very much for your support. We are really happy and grateful to be able to organize these events and build a community on campus.

Best regards,

Clément
For the EPC team