The Khet Tournament we hosted in March 2012
About Us

Our chapter is composed of 70 graduate and undergraduate students in optics and photonics at Université Laval (Québec City, Canada), and of 3 alumni. Combined with Université Laval’s OSA student chapter, we form the REPOL (Regroupement des Étudiants en Optique et Photonique à Laval), representing over than 200 graduate students in optics and photonics. Our laboratories and offices are located in the Center for Optics, Photonics and Lasers (COPL) at Université Laval. Our website is www.repol.copl.ulaval.ca.

The main goal of our chapter is to gather, inform and represent students from Université Laval who are members of SPIE and OSA. More specifically, the REPOL aims to:
- organize conferences and workshops;
- establish a link between university and industry;
- inform the students about new developments in optics;
- organize social, cultural and sportive events;
- promote the science of light to high school students;
- correspond with other OSA and SPIE chapters around the world;
- manage the chapter’s funds.

Chapter Officers for 2011-2012*

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>E-mail address</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Gabrielle Thériault</td>
<td><a href="mailto:gabrielle.theriault.1@ulaval.ca">gabrielle.theriault.1@ulaval.ca</a></td>
</tr>
<tr>
<td>Interim President**</td>
<td>Jean-Raphaël Carrier</td>
<td><a href="mailto:jean-raphael.carrier.1@ulaval.ca">jean-raphael.carrier.1@ulaval.ca</a></td>
</tr>
<tr>
<td>Vice-president</td>
<td>David Hélie</td>
<td><a href="mailto:david.helie.1@ulaval.ca">david.helie.1@ulaval.ca</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Mathieu Boivin</td>
<td><a href="mailto:mathieu.boivin.4@ulaval.ca">mathieu.boivin.4@ulaval.ca</a></td>
</tr>
<tr>
<td>Outreach Events Coordinator</td>
<td>Anne-Sophie Poulin-Girard</td>
<td><a href="mailto:anne-sophie.poulin-girard.1@ulaval.ca">anne-sophie.poulin-girard.1@ulaval.ca</a></td>
</tr>
<tr>
<td>Communications Officer</td>
<td>Véronique Zambon</td>
<td><a href="mailto:veronique.zambon.1@ulaval.ca">veronique.zambon.1@ulaval.ca</a></td>
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<tr>
<td>Conference Coordinator</td>
<td>Harold Dehes</td>
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<tr>
<td>Undergrad Representative</td>
<td>Jade Ghaoui</td>
<td><a href="mailto:jade.ghaoui.1@ulaval.ca">jade.ghaoui.1@ulaval.ca</a></td>
</tr>
<tr>
<td>Social Events Coordinator</td>
<td>Daniel Bouffard-Landry</td>
<td><a href="mailto:daniel.bouffard-landry.1@ulaval.ca">daniel.bouffard-landry.1@ulaval.ca</a></td>
</tr>
</tbody>
</table>
**Elections for the 2012-2013 committee will be held in October.**

**Gabrielle Thériault resigned from presidency in April 2012; from that moment Jean-Raphaël Carrier took the position in her stead.**

### Current chapter members

This list of members is accurate as of September 29th, 2012.

**Students (70):**

Karen Allahverdyan
Siamak Amiralizadeh Asl
Alexandre April
Aymen Arfaoui
Benoit Aubé
Nicolas Ayotte
Cheikhou Ba
Seydou Bassene
Steve Begin
Yousra Ben-Msallem
Jean-Philippe Bérubé
Mathieu Boivin
Sébastien Bouchard
Sylvain Boudreau
Danny Brouard
Evelyne Brown Dussault
Charles Brunet
Jean-Raphaël Carrier
Julien Carrier
Emilie Chamma
Wing Chau Ng
Imen Chermiti
Joël Crépeau
Alexandre D. Simard
Xavier Dallaire
Mansour Dastmalchi
Harold Dehez
Jean-Daniel Deschênes
Jean-Francois Dion

Julie Dodier
Simon Duval
Ramtin Farhoudi
Jean Filion
Vincent Fortin
Jade Ghaoui
Guillaume Gingras
Yann Gravel
Marc-André Guérard
David Helle
Karl-Alexandre Jahjah
Cang Jin
Jonathan LaBerge
Dany Lachance Quirion
Daniel Landry
Martin Larivière Bastien
Jérôme Leclerc-Perron
Reno Lessard
Christophe Libbrecht
Francois Magnan
Claude Marceau
Vincent Marceau
Vincent Michaud-Belleau
Mehrdad Mirshafiei
Maxime Paiement Marchand
Denis Panneton
Carlos Perilla
Anne-Sophie Poulin-Girard
Houman Rastegarfar
Outreach Activities

One of our student chapter goals is to increase awareness about photonics and careers in this field to high school and pre-university college students. To achieve this, we organize many outreach activities throughout the year. We also built a demonstration laboratory that received more than 800 visitors so far.

Photonic Games

Last October, we held the fourth edition of the Jeux Photoniques (Photonic Games), a yearly competition for grade 11 students that encourages learning optics and photonics through hands-on application of physics principles and problem-solving. On the day of the event, 130 participants, divided in teams of five, solved seven different challenges: optical mini-golf, laser maze, photonic quiz, Jell-Optics, photo contest, solar car race and holography. More than fifty university-level students volunteered during that day. For those, this event is an annual day of fun, where we get to share our passion for science with teenagers and meet students from different programs. Pictures and videos of the Photonic Games can be found on the website www.jeuxphotoniques.com and on our YouTube channel: http://www.youtube.com/user/RepolCOPL.

Girls and Science

Les Filles et les Sciences (Girls and Science) is an annual event aimed at introducing the world of science and technology to girls aged between 14 and 16. Invited for one day to the Université Laval campus, the young girls have the opportunity to discover a wide variety of applied science fields through interactive displays and many dynamic workshops. We have contributed to this event since 2008 by holding kiosks and leading workshops. The kiosk we present contains various demonstrations of impressive optical phenomena, such as fluorescence, image forming with diffractive optical elements and three-dimensional mirror effects. Approximately 100 girls visited our kiosk this year.
**Holography Laboratory**
One of our student chapter’s main projects in 2010 was to equip a laboratory in our research center at Université Laval to introduce the science of light to the general public. This room now contains a holography set-up that is fully functional. Visitors are introduced to the exciting world of lasers by making their own holograms to take home afterwards. We are now planning to add three more demonstration set-ups, each of them representing one the research axes of our research center. Since its inauguration, the laboratory was visited by more than 800 visitors (high school students and teachers, career counselors, pre-university college professors, and university students). Information about our laboratory can be found on the website: www.repol.copl.ulaval.ca/holographie

**Careers in Optics**
Sensing a lack of information about careers in optics, we had been thinking about creating an outreach activity about careers for more than two years. We used the CIPI Canadian Photonic Kit as a starting point for our project. We created seven videos showing demonstrations of experiments contained in the Photonic Kit as well as interviews with professionals and students in the field of optics. The photonic kit was developed by the Canadian Institute for Photonic Innovations (CIPI) to demonstrate various applications of photonics to high schools students in a fun and original way. One of the seven experiments contained in this kit comes from our student chapter.

**Sports**
For the second year our chapter has its own soccer team: the FC OPL (Football Club of Optics, Photonics and Lasers). The team allows students to know their colleagues in a totally different and interesting context. Other students also gathered to support the team during important matches. Moreover, our Sports Officer organized social events such as the projection of playoff matches of the Euro 2012 last summer.

**Student paper contest: REPOL-COPL Grant**
Every year, we hold a student paper competition. In April 2012, the six participants presented their research to a jury composed of three professors, and all students were invited to attend these presentations. This contest allowed students to showcase their efforts and learn more about the various research subjects that are carried out at our center. The candidate who distinguished himself the most by the excellence of his scientific contribution in 2012, but also by the quality of his oral presentation, received a $500 grant.
**Industrial events**

Our student chapter organized various activities aimed at bridging the gap between academia and industry, such as industrial visits and discussion panels.

**Industrial visits**

In Fall 2011, 30 students from our chapter went to visit ABB-Bomem, a company hiring several scientists and engineers in various domains of physics, but more specifically in FTIR spectroscopy applications. In September 2012, a visit of the fiber fabrication towers of our research center was organized and attended by a dozen of graduate students.

**Social Activities**

All over the year, our student chapter organized various social activities. The main goal of these is to catalyze interactions between students of all research groups. More than one collaboration hatched from friendly conversations during social events!

**Recruitment Lunch**

In December 2011 we held a Recruitment Lunch. The main goal of this activity was to inform non-members of what our chapter is, what it does and how students can take advantage of being a member. This activity was part of an OSA contest, from which we earned a prize. Furthermore, the number of our members has doubled since last year, and this is in great part due to this new activity.

**Christmas Party**

Again this year, we organized and hosted the Christmas Party of our research center (COPL). The event gathered about a hundred students and professors!

**Khet Tournament**

For the second year we organized a laser chess (Khet) tournament. In fact, two simultaneous tournaments were held: one for first-time players and the other for “pros”. More than 20 students came to play, more than half for their first time!

**Outing to the Sugar Shack**

In April 2012, about 40 students and professors enjoyed a typically québécois meal at the sugar shack. This activity is particularly anticipated by foreign students who otherwise would not have the opportunity to taste this so delicious, and so sweet, typically French-Canadian food!

Information, pictures and videos of our different activities are available on our website: [www.repol.copl.ulaval.ca](http://www.repol.copl.ulaval.ca).
Upcoming activities for 2011-2012

Outreach activities
The fifth edition of Photonic Games is coming up in November 2012. There will be this year about 140 students from 5 different Quebec City high schools, with a total budget of about $8,000. We also plan on participating again in Girls and Science as we did last five years. The holography laboratory will remain open and we expect over 500 visitors throughout the year.

Industrial Start-ups
We are currently planning to invite former students from our research center who developed their own company in optics. This would be the first time our chapter would be hosting a conference on this subject.

Social Activities
As we plan the return of our traditional social activities (Khet Tournament, Sugar Shack, Christmas Party...), we constantly brainstorm for new ideas, in order to reach all the students of our research center.

Sports
Our chapter’s soccer team is more and more popular! They will play all through the year, indoors in fall and winter, and outdoors during summer. We will encourage our members to support the team, especially during the playoffs.

Invited speaker
We invited Mr. Joe Shaw who will give a conference for us on November 9th. We will also invite all the students of Université Laval who wish to come, members from our chapter or not.

REPOL-COPL Grant, 6th edition
We will organize the student paper contest based on the way it worked previously. The COPL has agreed to help us out and give again $250, as they have done in the past. We would like to reach out to local companies to get funding and boost the grant, which would also increase the number of students interested in participating!
Financial information (in Canadian dollars)

**Beginning Balance (August 12th, 2011)** $3,363

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**TOTAL INCOMES & OUTCOMES** $4,509 $3,924

**Ending Balance (September 24th, 2012)** $3,948