2015/2016 chapter officers

President: Nicole Kallweit, 3490052, n.kallweit@lzh.de
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Secretary: Anton Hoerdt, 3675448, a.hoerdt@lzh.de
Treasurer: Jan Hahn, 3421215, j.hahn@lzh.de
Advisor: Dr. Tammo Ripken, 649808, t.ripken@lzh.de

List of current members:
Jan Hahn
Georg Leuteritz
Ben Matthias
Emanuel Saerchen
Ulf Seemann
Nadine Tinne
Yixiao Wang
Tim Wolfer
Mateusz Wysmolek
Stefan Kalies
Anton Hoerdt
Lena Nolte
Nicole Kallweit
Chapter's activities during the last year

Travel Grant
The Travel Grant was used by Jan Hahn to attend the BiOS conference at the Photonics West 2016 in San Francisco. In the conference on Ophthalmic Technologies XXVI he gave a talk on a “Setup for analysis of geometrical and optical property changes in ex vivo crystalline lenses modified with fs-laser pulses for presbyopia treatment”. Therein he presented his recent results in the field of surgery with femtosecond lasers to a broad scientific community. Furthermore he attended the Student Chapter Meeting at the Intercontinental Hotel where he took the chance to exchange ideas and experiences with other chapter officers from around the world.

Swin Golf
In September 2015, the Hannover Optics Student Chapter went to Burgdorf for a game of Swin Golf. Swin Golf a variation of the well-known game of golf and is inspired by old peasant French games. Here we spend a nice social afternoon with the chapter. In teams of four people, we had the chance to get to know each other in a not scientifically oriented environment. After the game, we had dinner together at the Ständige Vertretung in Hannover. This was a great day that strengthened the social cohesion of the group strongly.

Swin Golf trip to Burgdorf. We had great day and the chance to get to know each other better.
Christmas Market Guided Tour
Some weeks before Christmas, the Hannover Optics Student Chapter and some student visited the Christmas Market in Hannover. This was accompanied by a guided tour, that showed us Christmas related places and traditions that are unique for Hannover. Accompanied by a hot Glühwein we learned a lot about the city and its traditions. This event was a possibility to attract new members for the chapter.

Visiting DESY in Hamburg
On 8\textsuperscript{th} April 2016 our chapter visited the DESY (Deutsches Elektronen-Synchrotron) in Hamburg, a research center of the Helmholtz Association. DESY is one of the leading accelerator centers and, before we got a tour of the huge DESY area, we had a presentation about the history of DESY. We got also the possibility to see some switched off accelerators from the inside. We have largely been satisfied with our trip to Hamburg since we got a good insight into current research and development in the field of accelerators. In addition to the interesting tour we had the possibility to ask many questions.
Visiting Lecturer Prof. Popescu

In June, we were glad to invite Professor Gabriel Popescu of the University of Illinois by use of the traveling lecturer grant. He is an expert in the field of quantitative phase imaging of cells and tissues and developed several types of quantitative light microscopy techniques which have applications in the field of life science and material science.

Professor Popescu gave an exclusive one day specialty seminar in the area of spatial light interference microscopy for us. Chapter members and associated students learned a lot about the principle, applications, as well as pros and cons of phase microscopy. There was time for controversially discussions, for example about the role of current companies and their target market.

On his second day in Hanover we were able to show him the research in our labs and gained new ideas where quantitative phase imaging may be useful in our daily research. Furthermore, professor Popescu gave a talk in the University of Hanover for all interested students in the field of phase imaging.
Visiting a company for process engineering

In August 2016 our chapter visited the Herrenhaeuser brewery in Hannover. The brewery was founded in 1868. We got first a history of the company and after a guided tour through the floors of the brewery. We could get an insight into the process engineering and got the possibility to ask many questions. After the tour, we could experience the full range of the beers.

Visiting a biological institution on Helgoland

In summer 2016 our chapter visited the biological institution on Helgoland (Biologische Anstalt Helgoland, BAH) in the North Sea, which is one of two research institutions of the Alfred Wegener Institute (AWI). There we got the chance to get a deeper look into marine science. Helgoland is the only island of Germany located in the open sea. We took the possibility to be on board of a research vessel and to collect biological samples as plankton, crabs, starfishes, and snails and so on. After return to the institute, we imaged and classified the samples with different microscopes. Furthermore, we visited a lobster breeding station and had the chance to talk to the experts.

Group of the chapter on the island and collected biological samples.
Chapter meetings

- 17.12.2015 at a pub in Hannover (Christmas Market)
- 04.02.2016 at LZH
- 31.03.2016 at LZH
- 05.05.2016 at LZH
- 13.06.2016 at LZH

Financial Status

1. Beginning Balance:
   579.40 €

2. Funds raised and expended

<table>
<thead>
<tr>
<th>Date</th>
<th>Expenses €</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 Sep 2015</td>
<td>-349.50 €</td>
<td>Swing Golf</td>
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<tr>
<td>24 Nov 2015</td>
<td>-18.80 €</td>
<td>First SPIE fee for new members (Lena Nolte)</td>
</tr>
<tr>
<td>16 Dez 2015</td>
<td>624.67 €</td>
<td>Student Chapter Award</td>
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<tr>
<td>22 Dez 2015</td>
<td>-240.00 €</td>
<td>Guided Tour</td>
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<tr>
<td>05 Apr 2016</td>
<td>-264.08 €</td>
<td>DESY</td>
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<tr>
<td>07 Jun 2016</td>
<td>-65.65 €</td>
<td>Visiting Lecturer</td>
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<td>16 Sep 2016</td>
<td>-187.40 €</td>
<td>Biological institute</td>
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<tr>
<td></td>
<td>-0.90 €</td>
<td>Banking fees</td>
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3. Details of SPIE funding received:
   Activity Grant, Travel Grant, Lecturer Grant and Optic research kit has been requested during the report period.

4. Other sources:
   None

5. Ending balance:
   77,74 €