

WOMEN IN PHOTONICS – A REVIEW

APRIL 17 – 19, 2018 // Jena // Germany



SUMMARY

The international workshop “Women in Photonics” took place from 17 to 20 April, 2018 at the Leibniz Institute of Photonic Technology (Leibniz IPHT) in Jena for the first time. The objective of the event was to improve networking among young female scientists who undertake research in the field of photonics and to point out different career paths in research and industry.

More than 35 researchers from 13 countries actively participated in the scientific lecture program and presented their work in poster sessions. All in all about 90 participants visited the workshop – among them numerous representatives of companies operating in the field of photonics.



Ursula Gibson //

President-elect of OSA – The Optical Society

“The workshop was a wonderful example of industries, universities and disciplinary societies working together to support underrepresented groups. The opportunity for these women to connect with each other, and share their biophotonics expertise was invaluable.”



FACTS AND FIGURES

 28

Scientific talks (speakers from 13 different countries (per affiliation): Australia, Portugal, Ireland, Germany, Switzerland, Austria, USA, Italy, Sweden, Canada, England, Brazil, Netherlands)

 7

Talks by industry partners in career opportunity sessions (OptoNet, Asphericon, Zeiss, TRUMPF, Jenoptik, Analytik Jena, Fraunhofer IOF)

 11

Industry and academic partners participating in the Speed Dating (Analytik Jena, Asphericon, BLINK, Fraunhofer IOF, Friedrich Schiller University, Jenoptik, Leibniz IPHT, OptoNet, LEG Thüringen, TRUMPF, Zeiss)

 2

Special presentations by Ursula Gibson (OSA President-elect) & Katarina Svanberg (Lund University & Former President of SPIE)

 2

Career reports by experienced, female scientists

 23

Industry partners & supporters overall

 10

Poster presentations

about  90

Participants overall



BACKGROUND

Photonics is a rapidly growing economic sector and a focal point of research in Germany. In Thuringia and particularly in Jena, universities, research institutes and companies from the fields of optics and photonics decisively shape the science and business location.

Although there is a high number of young and well-qualified female graduates, female scientists with leadership functions in research and hightech industry are still underrepresented.

Even though the percentage of women in German professorships could be increased since 2002 from 12 percent to 20 percent in 2014, it is still a fact that with an increasing qualification level the share of women continuously decreases. While half of the new students and graduates in 2012 were female, the share of women with doctorates was only 45 and of women with habilitations only 27 percent. With a share of only 29 percent, women with leadership functions are also significantly underrepresented in companies and public administration.

In physics, the research field from which the Leibniz IPHT recruits most of its scientists, the gap between men and women is becoming wider with increasing qualification level. The working group on equal opportunities of the German Physical Society (DPG) points out that there is a lack of female role models.



OBJECTIVE

With the workshop “Women in Photonics” the Leibniz IPHT would like to improve the networking among excellent young female scientists as well as the networking with executives from research institutions and companies.

Furthermore Thuringia and especially Jena should be presented to the young scientists as an ideal location for research, study and economy. At the same time other research institutions as well as local companies from the field of optics / photonics and chemistry had the opportunity to get to know interesting potential applicants who might be considered for executive positions.



Prof. Jürgen Popp //
Scientific Director at Leibniz IPHT

“Our objective is to stronger integrate young female scientists into the scientific community from the very beginning. By creating possibilities to establish their own research topic we can make an academic career or a perspective in industry for women more attractive.”



NETWORKING

A substantial part of the workshop was the interaction with industry partners. Representatives from numerous relevant companies gave an insight into their day-to-day work and shared their experience with the attendees. The accompanying industry exhibition offered the chance for both the female scientists and the industry partners to get acquainted and explore the possibility of future collaborations.

To stay in touch even beyond the workshop, Leibniz IPHT established a “Women in Photonics” group at the platform biophotonics.world, which is open for all participants of the workshop and fosters the exchange within this newly formed community.



PARTICIPANTS

Twenty-eight presentations were given by the attendees, all females, coming from 13 different countries. Eight additional countries were represented among the workshop delegates. This meant that from a global perspective the attendees represented countries from Sweden in the North to Australia in South, China in East to the US, Canada and Brazil in West. Countries in Europe were well represented including Spain, Portugal, Italy, Ukraine, The Netherlands, Ireland, United Kingdom, Switzerland, Austria, Sweden, Norway, and of course Germany. Additionally, female professors, group managers and representatives of local companies such as Carl Zeiss, Jenoptik and Asphericon reported about their research and presented their individual careers.



EVENT OVERVIEW

Besides the technical talks, which covered a very broad area in Photonics, the workshop also featured talks by experienced, professional, female scientists, which illustrated different personal career paths. Significant in these talks was how “non-straight” the path had been and how opportunities “popped up” along the road that seemed to be very effectively leading to good positions.

The four-day workshop offered numerous possibilities to exchange ideas, e.g. during the OSA Networking & Get-Together opening at the Zeiss planetarium, a speed-dating (match-making with companies and research institutions), poster sessions and the SPIE Gala Dinner at Scala Restaurant.



Prof. Ute Neugebauer //
Deputy Scientific Director at Leibniz IPHT

“Similar to mentoring programs the participants were able to exchange information with experienced colleagues and to jointly develop strategies for a successful professional career.”



CONCLUSION

The symposium provided valuable time and space to the participants to talk to scientists of various research institutions and to representatives of local companies. Through this exchange the attendees learned about career options in this region and received valuable advice on their individual professional development.

The participants were impressed by the laboratory visits offered on Friday. Besides the premises at Leibniz IPHT (e.g. fiber drawing tower and clean room) they visited the laboratories at the research campus InfectoGnostics in the Center for Applied Research of the Friedrich Schiller University, the University Hospital Jena and the Abbe Center of Photonics.



Prof. Katarina Svanberg //
Lund University & Former President of SPIE

“Knock at the door and if it opens put the foot inside the door so you have the possibility to deliver your message – be brave and feel confidence in yourself. Be visible in your professional approach but do not accept tasks where you are chosen just because you are a female and they need to fill in a quota.

I am very convinced that the young scientists who took part in the event will use the experience from this event in their own professional life and I am sure they learned a lot both for their professional and personal life.”



THANKS TO ALL PARTNERS OF THE WORKSHOP

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SPIE.

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