

Funding Initiative

Free-electron Laser Science: Peter Paul Ewald Fellowships at LCLS in Stanford

Deadlines

January 30, 2015 (last call)

Contact

Dr. Ulrike Bischler
Phone: +49 (0) 511-83 81 350
Fax: +49 (0) 511-83 81 4350
E-Mail: bischler@volkswagenstiftung.de

VolkswagenStiftung
Kastanienallee 35
30519 Hannover
GERMANY
www.volkswagenstiftung.de

1. Objectives

The advance of free-electron lasers will open up new possibilities for X-ray science. Aiming at an early progress of this field, the Volkswagen Foundation offers postdoctoral research fellowships for projects carried out at Stanford, USA, in affiliation with a home institute in Germany. After all, the European XFEL in Hamburg will be operational in 2015 at the earliest. Until then the most powerful free-electron laser for X-rays LCLS is situated at SLAC National Accelerator Laboratory, operated by Stanford University.

The free-electron lasers mentioned generate ultrafast X-ray pulses with highest brightness. Using these unique X-ray flashes it will become possible to decipher atomic details of viruses and cells, to take three-dimensional pictures from the nanoscopic world, to film chemical reactions, and to study matter under extreme conditions similar to the interior of planets.

By means of this initiative the Volkswagen Foundation wants to encourage highly qualified untenured scientists to spend a longer research stay at Stanford (or a neighboring research institution). The purpose is twofold: taking advantage of the research experience and boosting the field after returning to Germany.

2. Funding Possibilities

The Peter Paul Ewald Fellowships are aiming at postdoctoral researchers. They are initially awarded for three years. A research stay at Stanford lasting as a rule between one and two years, and research work in Germany during the remainder of the time is funded. If for scientific reasons an affiliation with SLAC or Stanford University is not viable, another host institution in the Bay Area is acceptable. The home institute in Germany must be an academic institution as well. Otherwise, it can be freely chosen. The distribution of the time spent at the two locations can be arranged according to the project's necessities and to family-related duties. However, a concluding project phase in Germany is required.

The candidates are expected to present a research idea in the context of the LCLS or the European XFEL. Experiments as well as new concepts in theory

and data analysis will be considered. An active involvement in a collaboration, which is conceiving, performing and analyzing experiments with free-electron lasers, is a prerequisite. The cooperation has to be agreed-upon prior to an application. Beam time must be applied for directly with LCLS.

Each year up to five fellowships are awarded. The processing of an application takes about six months. It is alright to submit an application as a finishing graduate student in order to start the fellowship immediately after being awarded with a PhD. Fellowships for PhD students are not envisaged.

The prospective fellow can apply for

- his/her salary (plus an overseas bonus of EUR 1,200 per month while in the US and family-related benefits as detailed in the separate leaflet under Family and Career on the Foundation's homepage),
- a travel allowance regarding cooperation visits, conferences and measuring campaigns,
- consumables as needed,
- indispensable, hence limited, equipment items.

In case of an unpaid leave from a position only the salary for the duration of the research stay in the US is considered. However, the budget for all other expenses is made available for the whole duration of the fellowship. An awarded fellowship has to start within one year. The funds for the concluding project phase (as a rule the third year) cannot be postponed, but are only released when returning to Germany immediately.

Fellows with an award from 2011, 2012, and 2013 may submit a follow-up application, provided that the course of the project is successful and a potential career in academia is likely. Such a second funding period will be limited to selected fellows. The extension should tackle a wider research goal and can last up to three years maximum. The renewal may include the fellow's salary, up to two PhD student positions as well as materials and travel expenses. The purpose is to start the fellow's independent research group in Germany. Fellows with an award from 2014 and 2015 are excluded from this subsequent funding option.

A scientific workshop for networking among the fellows is planned. Additionally, the fellows are invited to the Foundation's professional trainings (writing workshop, media skills).

Furthermore, symposia and summer schools on the funded topic are supported according to the corresponding funding initiative. Besides informal inquiries on pilot projects (e. g. seed money) are in general welcome. However, the Foundation can only engage in selected projects, particularly for the further development of this funding initiative.

3. How to apply and check-list

The application has to be written in English. The Foundation expects the prospective fellow to author the application him/herself. The following aspects are important evaluation criteria and should be covered in an application:

- elaboration on a scientific problem and substantiation, also with respect to the advantages of an X-ray laser compared with alternative methods;
- detailed research plan for the duration of the fellowship;
- expected results and further prospects;
- own project-related preliminary work and expertise;
- affiliation with research collaborations and reasoning for the choice of the host institutes;
- time schedule, including the duration of the stay abroad.

The applications will undergo an international comparative peer review. Among others scientists affiliated with SLAC and DESY will be involved in the selection process. In a first step the most promising candidates will be shortlisted. They will be given the opportunity to present their research ideas in front of the review panel. Subsequently, the Foundation's Board of Trustees decides on the applications.

Electronic Application

Please use the Foundation's electronic application system in the internet:

portal.volkswagenstiftung.de

Please remember to print the cover sheet provided, sign, scan and upload it. Instructions on the electronic application system are provided online and on the following page.

All applications have to be submitted using the Foundation's electronic application system. The following data and documents (pdf files) are requested:

- information on the applicant, grant recipient (i. e. German home institute), and host institute in the USA,
- brief title and summary,
- budget with justification (including salary scale, duration, and for equipment above EUR 10,000 one quotation each),
- description of the proposed research with references (10 to 12 numbered pages approx.; minimum 11pt font and 2 cm page margins),
- scientific curriculum vitae with list of up to 10 most relevant publications,
- copy of the PhD certificate (or preliminary confirmation),
- signature sheet generated in the electronic application system with the applicant's signature.

Furthermore, the following documents should be sent directly by the proposed home and host institute (in Germany and USA, respectively)

- letter of recommendation with statement on the feasibility.

The Foundation must be informed if the same or a similar application is pending or will be submitted to another funding institution. The Volkswagen Foundation can award grants to scientific institutions only. Applicants outside of universities and well-known publicly-maintained research institutions are asked to provide details on the legal status, statutes, trustees and boards, charitable/non-profit status, budgeting and auditing of the institution to be funded.

Electronic Application Made Easy – Instruction and Tips

The Volkswagen Foundation accepts applications for Peter Paul Ewald Fellowships via its electronic application system portal.volkswagenstiftung.de. Please note that only registered users of the electronic application system have access to application data, can submit applications and receive corresponding e-mail messages. Hence, it is required for applicants with project responsibility to register him/herself or to ask a co-worker to register in his/her name with the proper e-mail address.

Please follow the six steps to compile and submit your application:

- If you are a new user please **register** at the application portal with your name, your e-mail address and your own password. When registering you will be asked about your work address details. Subsequently, you must **activate** your account using the link sent by e-mail. If you already have a user account you can immediately **login** using your e-mail address and password.
- The function **new application** starts the selection of the corresponding funding initiative (here: Free-electron laser science, the application type (here: Fellowship application or symposium, the grant-receiving institution, and the language.
- Now – and later on – you can interrupt the compilation of your application at any time. As required you can logout and login again.
- Please check whether the pre-filled data on the applicant are correct. Furthermore, we need application data (e. g. project title, duration) and the budget. You are asked to enter all information in the respective forms. Please note that the **save** button does not transfer any data to the Foundation. You are able to revise all data until the submission of your application. Please keep in mind to read and **accept** the legal statement. If you wish you can generate a PDF of the filled-in forms for verification and for your filing.
- Under enclosures you are able to **upload files** as required according to the checklist in the „Information for Applicants“. Only PDF files are accepted. Before submission all files can be exchanged for new versions.
- Once your application is complete you can **submit** it electronically to the Foundation. Prior to submission, a PDF generation of a signature sheet is required. Please put your original signature on the hardcopy, scan it and eventually upload it as “signature sheet”.
- In the course of processing your application the Foundation might request additional information.

The function new supplement is used to upload and submit the respective files.

Technical Support

Please contact
support@volkswagenstiftung.de
for any technical questions when
using the electronic application
system.