

The Paul Drude Institute for Solid State Electronics (PDI), member institute of the Forschungsverbund Berlin e.V. in Germany, is an independent research institute of the Leibniz Association with about 100 employees from over 15 nations, carrying out basic and applied research at the nexus of materials science, condensed matter physics, and device engineering. The PDI is one of the internationally leading research institutions for the growth of novel optoelectronic materials by molecular beam epitaxy, conducting research on fundamental physics aspects and applications of functional hetero- and nanostructures, superlattices, and artificial materials by design. Emphasis is placed on exploring their electronic and optical functionalities and exploiting those properties for quantum technology applications.

We seek to attract individuals (f/m/d) to apply for the

'Klaus H. Ploog' Junior Research Fellow Award

This highly prestigious award is named after Klaus H. Ploog, internationally recognized pioneer of molecular beam epitaxy and inaugural director of PDI. This Junior Research Fellow Award is a fixed term appointment for three years with the option to extend it by four additional years, and the possibility to turn this into a permanent position at the institute. Funds to support two Ph.D. students for two years and additional financial resources to expand experimental capabilities will be provided. The successful candidate will have the opportunity to establish a junior research group at PDI's PHARAO Beamline at the synchrotron BESSY II (part of Helmholtz Center Berlin for Materials and Energy in Berlin Adlershof) and will be directly advised and supported by the institute's director to build and strengthen student advising, project management, proposal writing, teaching, and academic leadership skills. Responsibilities and expectations include:

- lead the scientific efforts for the growth of functional thin films at the PHARAO Beamline (in-situ X-ray diffraction beamline in Berlin Adlershof)
- setup and operate different epitaxy systems at the beamline
- work collaboratively with senior beamline scientist and technical staff at PHARAO and coordinate the growth and research efforts
- establish and distinguish yourself with an internationally recognizable research program by taking full advantage of the unique experimental capabilities
- initiate/foster collaborations with external partners from academia and industry
- get actively involved in advising B.Sc., M.Sc., and Ph.D. students

We are looking for an ambitious and motivated researcher who aspires to take the next career step to lead a junior research group, to get involved in advising, as well as taking on teaching responsibilities. Candidates for this position must have:



a Ph.D. degree in Physics, Materials Science, Chemical Engineering, Electrical Engineering, Chemistry, or a closely related field

- several years of experience in epitaxial thin film growth
- several years of experience in structural characterization of epitaxial thin films and physical property measurements
- ambition to take up a scientific junior leadership role
- ability to work in an interdisciplinary team of scientists, engineers, and students

Compensation will be at E13 level in accordance with german TVÖD regulations. Applicants should submit their application package (PDF files) including

- cover letter
- curriculum vitae
- list of publications and presentations
- research interest and vision statement
- 5-page proposal outlining research activities in the first three years including timeline, milestones, required resources for funding and personnel
- statement outlining the commitment to foster diversity, equity, and inclusion in the junior research group and at the institute
- contact information of three professional references (name, position title, affiliation, e-mail addresses)

electronically to recruiting@pdi-berlin.de with the subject line „**Klaus H. Ploog**’ **Junior Research Fellow**“. We will accept applications between **Dec 1 and Dec 31, 2022**. The interview process will start shortly after with the goal to award the inaugural PDI junior research fellowship shortly after in Spring 2023.

PDI takes an active role in building a talented, inclusive, and culturally competent workforce. We understand that our shared future is guided by basic principles of fairness and mutual respect. We aim to increase the number of female scientists at the institute, applications from women are particularly welcome. Among equally qualified applicants, preference will be given to candidates with disabilities. PDI is a member institute of the Forschungsverbund Berlin e. V. Salary and benefits are according to the Treaty for German public service (TVöD). As equal opportunity and family-friendly employer, we offer highly flexible employment conditions, such as flexible working hours, parental leave, and home office. We strive to create a family- and life-conscious work environment. Please send scientific and related inquiries to the institute director Prof. Dr. Roman Engel-Herbert (he/him/his) and inquiries regarding diversity, equity and inclusion to the equal opportunity officer Kai Hablitzel (she/her/hers).

