

PRESS RELEASE

Well-structured Ph.D. program

New HZB Graduate School: Ph.D. candidates to study materials for energy conversion

Yesterday's workshop was the official starting signal for the opening of the Helmholtz Center Berlin's new Materials for Solar Energy Conversion (MatSEC) Graduate School. MatSEC is the first HZB graduate training program for the Center's doctoral students. The school is located at the Dahlem Research School (DRS) of the Freie Universität Berlin (FU Berlin). Up to ten Ph.D. students will be able to take advantage of MatSEC's course offerings while working towards their degree.

The MatSEC graduate school's focus is on the study of kesterites, a new class of materials used in photovoltaics. Kesterites are considered highly promising absorption film candidates for thin-film photovoltaics and could potentially double as photoelectrodes for splitting water using solar energy. The ultimate goal is to arrive at a comprehensive understanding of the relationship between this connecting semiconductor's internal structure and its properties. This knowledge could aid researchers in developing customized materials for use in more cost-effective and efficient solar cells.

Prof. Dr. Susan Schorr, head of the Department for Crystallography at the HZB and a professor at FU Berlin, is the new graduate school's spokesperson. Research groups at FU Berlin, the Technical University of Berlin, the Humboldt University of Berlin, and the Brandenburg University of Technology in Cottbus are all partners of the new graduate school. "It is precisely in this interdisciplinary research structure that MatSEC's strengths lie," says Schorr.

Doctoral students attend lectures that are relevant to their research at the different participating university campuses. Workshops, study abroad programs, and course offerings at the Dahlem Research School complement the program. "We're thrilled that we're able to offer seven additional spots for students as part of our graduate program," says Gabriele Lampert, Ph.D. coordinator at the HZB.

The **Helmholtz-Zentrum Berlin für Materialien und Energie (HZB)** operates and develops large scale facilities for research with photons (synchrotron beams) and neutrons. The experimental facilities, some of which are unique, are used annually by more than 2,500 guest researchers from universities and other research organisations worldwide. Above all, HZB is known for the unique sample environments that can be created (high magnetic fields, low temperatures). HZB conducts materials research on themes that especially benefit from and are suited to large scale facilities. Research topics include magnetic materials and functional materials. In the research focus area of solar energy, the development of thin film solar cells is a priority, whilst chemical fuels from sunlight are also a vital research theme. HZB has approx. 1,100 employees of whom some 800 work on the Lise-Meitner Campus in Wannsee and 300 on the Wilhelm-Conrad-Röntgen Campus in Adlershof.

HZB is a member of the Helmholtz Association of German Research Centres, the largest scientific organisation in Germany.

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