

First Announcement and Call for Application

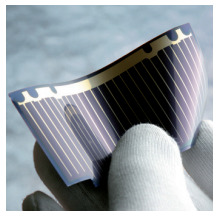
# International Summer School on Photovoltaics and New Concepts of Quantum Solar Energy Conversion

September 1-8, 2019 in Hirschegg, Austria

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TECHNISCHE UNIVERSITÄT  
ILMENAU

**HZB** Helmholtz  
Zentrum Berlin

## QUANTSOL



We would like to inform you about the upcoming „International Summer School on Photovoltaics and New Concepts of Quantum Solar Energy Conversion (Quantsol)“ to be held from September 1-8, 2019 in Hirschegg, Kleinwalsertal, Austria. The school is now open for application until June, 2019.

The school primarily addresses young postdocs, PhD students, and master students in their final year at university with an interest in photovoltaics, photoelectrochemistry and solar energy conversion. Please note that due to the strong interest in our school people that have already participated cannot be accepted a second time. Invited speakers, all recognized scientists from leading world institutions, will give lectures covering a wide range of topics on the fundamental principles of the conversion of solar energy into chemical and electrical energy as well as the physical and technical challenges.

The school will follow the tradition of previous very successful summer schools in 1998, 2001, 2003, 2006-2018. It is organized to be very interactive and the participants and speakers are requested to present their field of research and themselves in a short oral presentation on the first day of the school. Details of the school's program can be found on the webpage:

[www.helmholtz-berlin.de/quantsol](http://www.helmholtz-berlin.de/quantsol)

### Subjects of the school are

Climate change  
Energy scenarios  
Principles of photovoltaics  
Principles of photoelectrochemistry  
Thermodynamics of solar energy conversion  
Crystalline silicon solar cells  
Thin-film solar cells (silicon, CdTe, CIGS)  
Plastic solar cells  
Perovskite solar cells  
Multi junction solar cells with ultimate efficiencies (III-V)  
Material properties  
Light harvesting and spectral conversion  
Semiconductor nanostructures and quantum dots  
Photovoltaics on the TW scale  
Solar fuel production  
Solar cell simulation

### Confirmed speakers are

P. Würfel (Karlsruhe Institute of Technology, GER)  
R. van de Krol (HZB, GER)  
K. Jäger (HZB, GER)  
T. Unold (HZB, GER)  
T. Kirchartz (FZ Jülich, GER)  
R. MacQueen (HZB, GER)  
T. Hannappel (TU Ilmenau, GER)  
K. Lips (HZB, GER)  
J.C. Hummelen (University Groningen, NL)  
R. Santbergen (TU Delft, NL)  
E. Unger (Lund University, SWE; HZB, GER)

### Location

The lectures will be given in the mountain guesthouse „Darmstädter Haus“ ([www.darmstaedter-haus.tu-darmstadt.de/unserhaus/index.de.jsp](http://www.darmstaedter-haus.tu-darmstadt.de/unserhaus/index.de.jsp)) of the Technische Universität Darmstadt in Hirschegg (Kleinwalsertal, Austria), where all attendants and lecturers will be lodged.

### School fee

School fee is **450 €** for participants from universities and research institutes and **590 €** for participants from industry. The school fee includes board, lodging, and registration fee.

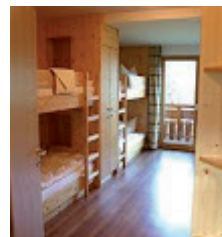
### Applications

Students who intend to participate in the summer school are required to apply through the school's homepage:

[www.helmholtz-berlin.de/applyforquantsol](http://www.helmholtz-berlin.de/applyforquantsol)

Since the summer school is limited to 55 students, we have a selection procedure. In order to be able to judge on your qualification, you are requested to submit your curriculum vitae plus a short statement that justifies favorable consideration as a participant.

Students that are accepted to participate in the summer school will be notified mid of June 2019 and are then asked to register by paying the school fee via bank transfer (credit cards are not accepted). Further details will be sent out with the notification of acceptance.



Mountain guesthouse  
„Darmstädter Haus“ of  
TU Darmstadt in Hirschegg

### Organized and financed by:

Helmholtz-Zentrum Berlin für Materialien und Energie (HZB)  
Ilmenau University of Technology (TU Ilmenau)  
The European Society for Quantum Solar Energy Conversion

### Organizing committee:

Chair and organizers: Prof. Dr. Klaus Lips (HZB, GER)  
Prof. Dr. Thomas Hannappel (TU Ilmenau, GER)

### Contact for further information

E-Mail: [quantsol@helmholtz-berlin.de](mailto:quantsol@helmholtz-berlin.de)  
Webpage: [www.helmholtz-berlin.de/quantsol](http://www.helmholtz-berlin.de/quantsol)

**Deadline for application is June 9, 2019 (12pm gmt+2)**