First Announcement and Call for Application

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

September 2-9, 2018 in Hirschegg, Austria

TECHNISCHE UNIVERSITÄT **ILMENAU**



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 2-9, 2018 in Hirschegg, Kleinwalsertal, Austria. The school is now open for application until May 18, 2018.

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, 2006-2017. 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

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 efficiences (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)

D. Vanmaekelbergh (University of Utrecht, NL)

R. MacQueen (HZB, GER)

T. Hannappel (TU Ilmenau, GER)

K. Lips (HZB, GER)

I.C. Hummelen (University Groningen, NL)

R. Santbergen (TU Delft, NL)

E. Unger (Lund University, SWE; HZB, GER)





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Location

The lectures will be given in the mountain guesthouse "Darmstädter Haus" (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/applyforguantsol

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 2018 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 Webpage: www.helmholtz-berlin.de/quantsol

Deadline for application is May 18, 2018 (12pm gmt+2)