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, 2024 in Hirschegg, Kleinwalsertal, Austria. The school is now open for application until May 31st, 2024.

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 recognised 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, 2006-2023. It is organised 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 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

- R. van de Krol (HZB, GER)
- T. Unold (HZB, GER)
- T. Kirchartz (FZ Jülich, GER)
- S. Siebentritt (University of Luxembourg, LU)
- T. Hannapel (TU Ilmenau, GER)
- K. Lips (HZB, GER)
- J.C. Hummelen (University Groningen, NL)
- R. Santbergen (TU Delft, NL)
- E. Unger (Humboldt University, HZB, GER)
- D. Vanmaekelbergh (Utrecht University, NL)
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 690 € for participants from universities and research institutes and 790 €
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

Since the summer school is limited to 52 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 2024 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.

Organised 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

Organising committee:
Chair and organisers: 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 Friday 31st of May 2024, 23.59 p.m. CET