

## PRESS RELEASE

**Untiring dedication to solar energy**

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**HZB researcher honoured with solar award for his successful research**

**Further Information:**

Prof. Dr. Hans-Werner Schock, department head and spokesman for Solar Energy Research at Helmholtz-Zentrum Berlin (HZB), received today the prestigious “Becquerel Prize” at the 25th “European Photovoltaic Solar Energy Conference and Exhibition” in Valencia. The EU Commission honoured the HZB scientist for his life’s work in the field of photovoltaics.

**Prof. Dr. Hans-Werner Schock**  
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The award ceremony took place as a highlight of the European photovoltaics conference which was held this year together with the 5th “World Conference on Photovoltaic Energy Conversion”. Hans-Werner Schock received the “Becquerel Prize” following his plenary lecture on “The Status and Advancement of CIS and Related Solar Cells”. The chairman was Daniel Lincot, head of solar energy research at the Ecole Nationale Supérieure de Chimie de Paris (ENSCP).

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Prof. H.-W. Schock was distinguished by the committee for his outstanding performance in the field of solar energy technology and the development of thin-film solar cells. The first pioneer tests on chalcopyrite-based solar cells took place under his direction as early as 1980, and were to make solar energy more efficient and more competitive.



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**Prof. Dr. Hans-Werner Schock at  
Institute of Solar Energy Research.**

Such solar cells are made of copper-indium-sulphide (CIS) or copper-indium-gallium-selenide (CIGSe), for example. At present, Hans-Werner Schock’s group is researching new material combinations of abundant, environmentally friendly chemical elements and is continuing to refine solar cells based on these materials. The solar cells developed at HZB under Hans-Werner Schock’s leadership hold several efficiency records: CIS cells in the high-voltage range (12.8%), flexible cells made from plastics (15.9%) and conventional CIGSe cells (19.4%). The aim is for “solar cells to be integrated into buildings, for example, no longer as an investment, but as a matter of course,” says Schock.

Scientific director for Research Field Energy at HZB, Prof. Dr. Wolfgang Eberhardt, is delighted about the award: “With its research on thin-film solar cells, HZB has made it its duty to develop the technology for our future energy supply. Mr. Schock’s work is a major contribution to this. We are delighted about the worldwide recognition his work has found, and congratulate Mr. Schock on receiving this award.”

Hans-Werner Schock, born in 1946 in Tuttlingen, studied electrical engineering at University of Stuttgart and earned his doctorate at the Institute of Physical Electronics, where he later became scientific project leader of the research group “Polycrystalline Thin-Film Solar Cells”. Since 2004, he has worked at HZB as department head of the Institute for Technology. He is author and co-author of more than 300 publications and has submitted and been involved in more than ten patents in the field of solar energy technology.

The “Becquerel Prize” was first awarded in 1989 on the occasion of the 150th anniversary of Becquerel’s classic experiment on the description of the photovoltaic effect. With it, French physicist Alexandre Edmond Becquerel laid the foundation for the use of photovoltaics.

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.