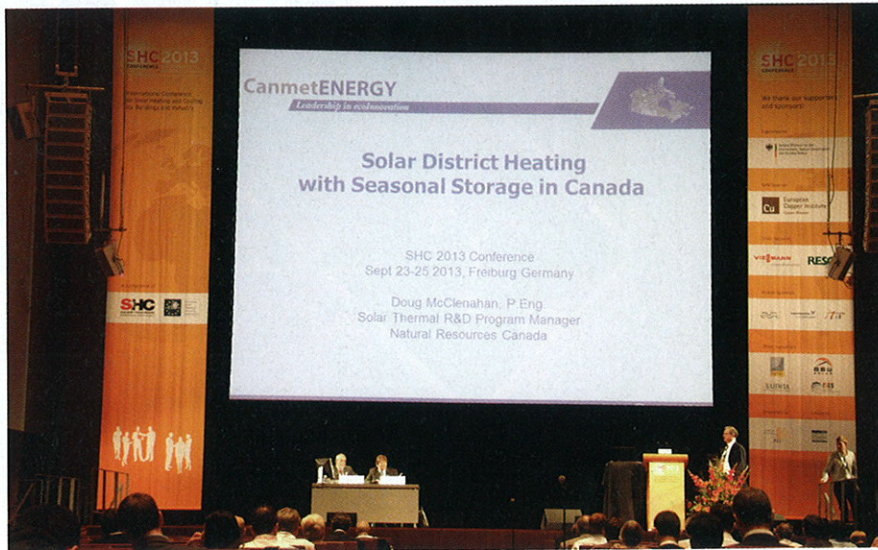


# Lower costs, raise of efficiency



The SHC 2013 was attended by 400 participants, which is almost twice as many as last year.

Photos (2): PSE AG

**A**t the second international solar thermal conference SHC 2013 in Freiburg, experts from around the world presented their current research and development work.

Research results are not only useful for discussions among experts; they can also be presented with great effect publicly. Employees of the Fraunhofer Institute for Solar Energy Systems and their partners from industry apparently also had this idea when they parked a trailer full of product innovations in front of the concert hall in Freiburg. While 400 experts from over 39 countries discussed the current state of solar thermal research inside, their colleagues from Freiburg demonstrated solar panels and storage units made of plastic materials outside. „Polymer materials are an important key to cost reduction and quality improvement,“ Michael Köhl of Fraunhofer ISE said.

Further door-openers for solar thermal were presented to the participants in 105 lectures and 140 poster presentations. Among other things, materials for long-term storage of solar heat, concepts for buildings that are heated primarily with solar thermal and technology for using solar heat in industrial processes were presented. The Solar Heating & Cooling (SHC) Programme of the International Energy

Agency (IEA) established the conference. It is the only international conference focused on solar heating and cooling as well as solar buildings. Last year it was held for the first time in San Francisco. In Freiburg, the European solar thermal organisation ESTIF acted as co-organiser.

## More research is needed

Exactly how much the sun can contribute to heating, even at colder latitudes, is demonstrated by a solar district heating project in

Canada. For example, a new housing estate in the town of Okotoks, Alberta, uses the summer sun to heat during the winter as well. Its solar heating grid supplied 98 per cent of the heating energy needed by the 52 single-family homes in the sixth year since its installation. For the IEA, this performance was worth a prize. The operating company Drake Landing Company received the SHC Solar Award in Freiburg. „It is the first large solar thermal power grid with long-term storage in North America. It is also the first in the world that was designed to cover more than 90 per cent of the demand for heating energy with solar heat,“ IEA SHC Chairman Werner Weiss commented on the decision.

The conference clearly demonstrated that further research and knowledge are needed to help the solar market to grow. Gerhard Stryi-Hipp, President of the European Technology Platform on Renewable Heating and Cooling, went through the list of the most important tasks that researchers must face: reduce costs of the systems, improve their performance and reliability, develop systems technology for medium temperature applications and the combination with other renewable technologies, and improve the production technology. In the coming year in China, solar researchers will be able to discuss the progress they have made in their efforts. The SHC 2014 will take place from 27 to 29 October 2014 in Beijing.

Joachim Berner

Further information:  
[www.shc2013.org](http://www.shc2013.org)



The participants of the SHC 2013 had enough time between lectures to discuss the results of research projects.