

## **Completely revised Solar Cooling Handbook published**

The 3<sup>rd</sup> edition of the Solar Cooling Handbook – A Guide to Solar Assisted Cooling and Dehumidification Processes has been published by Hans-Martin Henning, Mario Motta and Daniel Mugnier. The 368 pages handbook for planners is the product of a co-operative initiative carried out by experts from fourteen countries in the project "Solar-Assisted Air-Conditioning and Refrigeration (Task 38)" of the Solar Heating & Cooling Programme of the International Energy Agency (IEA SHC). The book is published by the Austrian publisher AMBRA | V.

"The main goals of this handbook are to encourage planners and potential users to consider the installation of solar-assisted cooling systems and to provide them with helpful information during the decision-making and the design processes", explains Hans-Martin Henning of Fraunhofer Institute for Solar Energy System. "We aim to provide comprehensive information about solar thermal energy systems used for air-conditioning in buildings and also for applications in industrial refrigeration."

The main focus is on technologies and equipment which are commercially available today or which are undergoing pilot tests. The key components covered are thermally driven cooling systems and solar collectors, as the major heat source to drive the cooling system. The handbook also puts a major focus on the entire systems including all auxiliary components and experiences derived from real life installations.

Typical questions, which the book intends to answer, are:

- Is the use of solar-assisted air-conditioning feasible for a given building at a specific site?
- Which technology can be used?
- How can the best system for a given application under the conditions of the specific site be identified?
- Which solar collector types should be used for the selected air-conditioning system?
- What dimensions of the solar collector area and other system components result in the best energy cost-performance?
- Which tools are available that can support a user to further address these questions?

The Solar Cooling Handbook is available directly from <u>Ambra</u>, from online retailers like <u>Amazon</u> and many local bookshops.

See also the handbook's Table of Contents.

## About the International Energy Agency's Solar Heating and Cooling Programme (IEA SHC):

- The Programme was established in 1977.
- Its objectives are co-operative research, development, demonstration and exchange of information regarding solar heating and cooling systems.
- 21 countries and the European Union are IEA SHC members.
- The research topics of the current 12 projects range from general topics, such as "Solar Resource Assessment and Forecasting" and system and materials research, such as "Large Solar Thermal Systems" and "Polymeric Materials for Solar Thermal Applications" to market support topics such as "Solar Rating and Certification".
- Additional information: <u>www.iea-shc.org</u>

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