





in co-operation with



FREIE UNIVERSITÄT BOZEN LIBERA UNIVERSITÄ DI BOLZANO FREIE UNIVERSITY OF BOZEN - BOLZANO seenschaften I Facoltà di Scienze I Faculty of Science







Eco-buildings in hot climates. Technologies for solar-powered air-conditioning.

TIS innovation park and the European Academy Bolzano (EURAC), in co-operation with the Free University of Bolzano invite architects, engineers and decision makers from the public administration to participate in the international conference "In Case of Sun", which will take place on the 29th and 30th of April, 2010 at the University of Bolzano and EURAC. The presentations are focused on "eco-buildings" in hot climates, addressing new technologies using solar energy for climate control applications.

Participation is free. For the event "Eco-Buildings In Hot Climates" translation in English, Italian and German is foreseen. For the event "Solar And Heat Pump System" translation in Italian and German is foreseen.

To register: www.tis.bz.it/events/in-case-of-sun

"Eco-Buildings In Hot Climates"

On Thursday, April 29th 2010 the conference will analyze emerging trends in solar cooling and natural lighting with a special focus on passive houses in the Mediterranean. Among the others, Paola Leardini from the University of Auckland will discuss the experience of passive houses in New Zealand, Jürgen Schnieders from the Passivhaus Institut Darmstadt will be delivering the keynote address on "Passive houses on the Mediterranean" and Alessandro Rogora from Politecnico di Milano will focus on the balancing of daylighting and solar heat gain. Amongst the aforementioned are a total of 10 national and international speakers that will be participating in the symposium with other top speeches.

The event is sponsored by ENERBUILD, a project of the European Alpine Space Program, which is focused on strengthening small and medium enterprises in the building sector. One of the key topics of the project is the comparison of labels for energy efficient buildings and the production of market oriented scientific studies about the performance of energy saving and producing buildings.

"Solar And Heat Pump Systems"

During the second day, a workshop will take place focusing on the combined utilization of solar thermal collectors and heat pumps. In the last years an increasing number of systems for house heating and/or domestic hot water preparation has been developed, which use electric heat pumps in combination with solar thermal collectors instead of boreholes. At the moment, the research sector has not clear indications of what could be the best combinations of the two technologies involved. Aim of the event is to give basic knowhow about the single components and their integration into solar heating systems, toward an improved awareness about their possible performance, the proper installation and use.

The workshop is organized within the project Task44 of the International Energy Agency that groups together about thirty European experts both from the industry and the research sectors.

Programme:

8.45	Registration
9.30	Opening and Welcome
	Massimo Tagliavini – Dean of the Faculty of Science and Technology (FUB)
	Hubert Hofer – Director, TIS innovation park
10.00	CasaClima nature, the new certification
	Ulrich Klammsteiner – CasaClima Agency
10.30	Natural building materials. How does the future look like?
	Siegfried Camana - ANAB
11.00	Indoor air quality in low-energy houses
	Bernhard Oberrauch - TBZ
11.30	Coffee break
11.45	Passive Houses in the Mediterranean
	Jürgen Schnieders - Passivhaus Institut Darmstadt (GER)
12.15	New Zealand Passive House: The Auckland experience
	Paola Leardini - University of Auckland (NZ)
12.45	Optimizing daylight, thermal comfort and energy demand in summer
	Alessandro Rogora - Politecnico di Milano
13.15	Lunch
14.30	From B to A without costs
	Michael Tribus – Michael Tribus Architecture
15.00	Coffee break
15.15	SOLARTUBE - innovative daylighting system
	Veronica Garcia Hansen – Queensland University of Technology (AUS)
15.45	Solar cooling: air conditoning with solar energy
	Roberto Fedrizzi - EURAC
16.15	Parametric analysis of low-energy office buildings in different climatic
	context
	Roberto Lollini - EURAC
16.45	LEAF House: towards the zero energy buildings
4745	Simone Bussotti – Gruppo Loccioni
1/15	Unen discussion

17.15 Open discussion

"Solar And Heat Pump Systems"

EURAC Friday April 30th 2010

Programme:

13.30	Registration
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- 14.15 Introduction to the WorkShop and to the EU perspective on hybrid renewable Energy technologies
 Wolfram Sparber, EURAC
- 14.35 **Introduction to Task44 and to solar-heat pump systems** Jean Christophe Hadorn, Base Consultants
- 14.45 Do we need special collectors for systems combining heat pumps and solar thermal technology? Matthias Rommel. SPF
- 15.00 **Testing and development of combined solar and heat pump systems with the Concise Cycle Test method** Michel Haller. SPF
- 15.15 **Electric driven heat pumps to be used in solar systems** Ivan Malenkovic, AIT
- 15.45 **Storages and boreholes to be used in solar systems** Frank Thole, Schueco
- 16.15 **System integration and performance assessment** Sebastian Herkel, Fraunhofer ISE
- 16.45 **Market overview and financial issues** Christian Stadler, Sonnenkraft

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