GOALS

· Combine architectural aspects, materials properties and efficient thermal design in order to achieve zero net energy (ZNE) buildings.

· Conceive the building skin not only as an architectonic and structural element but also as a device to collect, store and distribute energy.

HEAT AND MASS TRANSFER TECHNOLOGICAL CENTER

CTTC **UPC**

Centre Tecnològic de Transferència de Calor
UNIVERSITAT POLITÈCNICA DE CATALUNYA

Escola Tècnica Superior d'Enginyeries

Industrial i Aeronàutica de Terrassa

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eit Knowledge & Innovation Community
KIC InnoEnergy

DECODE

Workshop on

SKINS FOR BIO-CLIMATIC BUILDINGS

HYGRO-THERMAL TRANSFER IN WALLS.
MODELLING AND MEASUREMENT IMPROVEMENT

Universitat Politècnica de Catalunya

BARCELONA
20-21 SEPTEMBER 2012

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Termo Fluids S.L.
Computational Fluid Dynamics and Heat Transfer Services

KIC INNOENERGY

A strongly integrated alliance of reputable players from the education, research and industry sectors based on long-standing links of cooperation.

FIRST ANNOUNCEMENT

1st Workshop on Skins for bio -climatic buildings. HYGRO-THERMAL TRANSFER IN WALLS. MODELLING AND MEASUREMENT IMPROVEMENT.
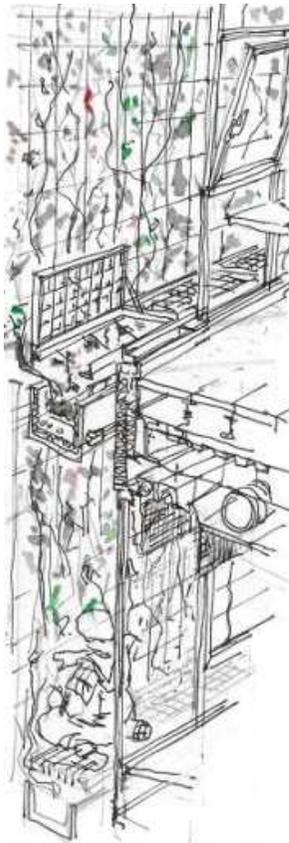
WORKSHOP TOPICS:

1-*Materials*: improve thermal insulation panels, renewal materials, heat and moisture transfer properties, energy collection and storage properties (sensible and latent heat), cost, availability, recyclability and suitability for different climates.

2- *Numerical simulations*. Different modeling levels and strategies to combine highly accurate models with computationally efficient models, allowing accurate and efficient simulations of the designs for long time periods. Thermal and fluid dynamic behavior of materials and designs. Validation and verification of the simulation results.

3-*Experimental techniques*. Test cells. Definition of benchmark situations. Measurement improvements. Information updates, possible enhancements, unification of criteria, adaptation to new simulation possibilities.

PRELIMARY PROGRAM:

Wednesday, September 19th, 2012:

Evening
- Welcome reception & Cocktail party

Thursday, September 20th, 2012:

Morning
- Plenary Sessions (Invited lectures)
- Technical sessions

Afternoon
- Technical sessions

Evening
- Conference dinner

Friday, September 21th, 2012:

Morning
- Plenary Sessions (Invited lectures)
- Technical sessions

Afternoon
- Technical sessions

Evening
- Conference ending

LOCAL ORGANIZING COMMITTEE:

- *Joaquim Rigola*
- *Oriol Lehmkuhl*
- *Assensi Oliva*

SCIENTIFIC COMMITTEE:

- *Arnaud Jay (CEA)*
- *Virginie Renzi (CEA)*
- *Jürgen Frick (USTUT)*
- *Markus Krüger (USTUT)*
- *João Bordado (IST)*
- *Gilles Rusaouen (INSA)*
- *Assensi Oliva (UPC)*
- *Joaquim Rigola (UPC)*

DEADLINES:

Δ *Abstract Deadline*: **March 19, 2012**. Submit abstracts by e-mail to the contact address indicated below, including the word Abstract in the subject.

Δ *Abstract acceptance*: Abril 9, 2012

Δ *Full papers due*: June 4, 2012

Δ *Revised papers due*: July 9, 2012