New task on new generation solar cooling system
Task definition meeting

Presentation of zafh.net
and related activities

21-22th March 2013, CNAM Paris
Some facts about the HFT Stuttgart:

**History:**
- Founded in 1832 as the “Winter School for Building Craftsmen”
- Since 1971 University of Applied Sciences
- **Today:**
  - 100 Professors, 250 Assistant Lecturers, 3000 Students
  - 14 Bachelor- and 13 Master Programmes including 4 international Programmes
  - Over 70 partner universities worldwide
The Centre of Applied Research (IAF) connects research activities of the Stuttgart University of Applied Sciences.
zafh.net - organisation structure

Dr. Dirk Pietruschka
MANAGING DIRECTOR
ENERGY SYSTEMS AND BUILDING PHYSICS

Prof. Dr. habil. Ursula Eicker
SCIENTIFIC DIRECTOR

Michael Bossert
MANAGING DIRECTOR
ARCHITECTURE AND BUILDING INTEGRATION

Dietrich Schneider
Research Activities Coordinator

Research Unit
Urban Energy Concepts
Alexandra Fischer
Group Leader

- Polycity
  Energy Networks in Sustainable Cities
- Eneff: Stadt Ludwigsburg
  Energieeffiziente Stadtquartiersentwicklung in Ludwigsburg
- EnVisage
  Kommunale netzgebundene Energieversorgung der Gemeinde Wüstenrot

Research Unit
Renewable Energy Technology
Antoine Dalibard
Group Leader

- SorpStor
  Flüssigssorptionsspeichersysteme für Kühl-, Heiz- und Trocknungsprozesse
- InSun
  Industrial Process Heat by Solar Collectors
- SolaRück
  Effiziente Rückkühlung für die sol.therm. angetriebene Kälteerzeugung

Research Unit
Innovative Buildings
Andreas Biesinger
Group Leader

- REGII
  Ressourceneffiziente Gebäude für die Welt von Übermorgen
- Eta Fabrik
  Energieeffiziente Fabrik für interdiszipl. Technologie- und Anwendungsforschung
- EnSign
  Energetisch nachhaltige Sanierung der HFT

Antoine Dalibard, Task definition meeting, Paris, 21.03.2013
SolaRück Project

• Title: Efficient heat rejection of solar driven chillers

• National project funded by the German Ministry for the Environment, Nature Conservation and Nuclear Safety

• Project duration: from 01.09.2012 until 31.08.2015

• Other partners involved: ISE, ILK, Sortech, Invensor...

→ expected contribution to subtask A (performance figures definition) and subtask B (model development and validation, optimised control strategies,...)
SorpStor Project

• Title: Liquid sorption storage systems for cooling, heating and drying processes

• National project funded by the German Ministry of Education and Research

• Project duration: from 01.06.2012 until 31.05.2015

• Other industry partners involved: WOLF, Airwasol

→ expected contribution to subtask A (activity A4 on storage)
PVT-HeatCool Project

• Title: Multivalent use of uncovered PVT collectors for heating and cooling of buildings

• National project funded by the German Ministry for the Environment, Nature Conservation and Nuclear Safety

• Project duration: from 01.12.2012 until 30.11.2014

• Other partners involved: MEFA, Kupferzell, Transsolar

→ expected contribution to subtask C (provide measurement data of two demonstration plants)
PVT-HeatCool Project

SOLAR DECATHLON EUROPE 2010
HFT Stuttgart (3rd place)

SOLAR DECATHLON EUROPE 2012
HTWG Konstanz

Antoine Dalibard, Task definition meeting, Paris, 21.03.2013
Other related activities

• Simulation studies on comparison solar PV versus solar thermal cooling systems

• Simulation studies on the influence of system design on energy and economic performance of solar cooling systems in office buildings worldwide

→ expected contribution to subtask B (model, control strategies,...)