

Program for IEA SHC/ECES Task/Annex 42/29 12th Experts Meeting, Lyon

8-10 October, 2014

Participants:

Andreas Hauer, ZAE Bayern, Germany (Operating Agent for ECES);
Matthias Rommel, SPF, Switzerland (Operating Agent for SHC);
Motoi Yamaha, Chubu University, Japan (Organizing the experts meeting);
Yuriko Terao, Heat pump and thermal storage center, Japan (Organizing the experts meeting);
Wim van Helden, AEE INTEC, Austria;
Masaya Okumiya, Nagoya University, Japan;
Takeshi Hikawa, Heat pump and thermal storage center, Japan;
Yusuke Takebe, Heat pump and thermal storage center, Japan;
Camilo Rindt, Technical University Eindhoven, The Netherlands;
Christoph Rathgeber, ZAE Bayern, Garching, Germany;
Benjamin Fumey, EMPA, Dübendorf, Switzerland;
Laurent Zalewski, University of Artois, France;
Stephan Ippisch, Siemens, Erlangen, Germany;
Mark Dannemand, DTU, Denmark;
Ana Lazaro, University of Zaragoza, Spain;
Patrick Kefer, ASiC, Wels, Austria;
Andreas König-Haagen, University of Bayreuth, Germany;

Stefan Gschwander, Fraunhofer ISE, Freiburg, Germany;
Harald Mehling, ZAE Bayern / Consultant, Würzburg, Germany;
Frédéric Kuznik, INSA Lyon, France;
Saman N. Gunasekara, Royal Institute of Technology (KTH), Stockholm, Sweden;
Erwin Franquet, LaTEP, France
Kazunobu Sagara, Osaka University, Japan;
Masashi Momota, Tokyo Denki University, Japan;
Gyuyoung Yoon, Nagoya City University, Japan;
Tomonori Imamura, Denso corporation, Japan;
Takashi Shimazu, Toyota Central Research & Development Laboratories, Inc., Japan;
Masayuki Tanino, Takasago Thermal Engineering Co., LTD., Japan;
Noboru Sue, Takasago Thermal Engineering Co., LTD., Japan;
Hitoshi Hashimoto, Chubu University, Japan;
Hang Yang, Chubu University, Japan;
Wan Lun, Chubu University, Japan;
Hajime Onojima, OBAYASHI CORPORATION, Japan;
Nobuki Matsui, DAIKIN INDUSTRIES, Ltd., Japan;
Tomohisa Takebe, NIHON SEKKEI, INC., Japan;

Absent with notification: Lingai Luo, University of Nantes, France; Luisa Cabeza, Camila Barreneche and Aran Solé, University of Lleida, Spain; Inés Frenández, University of Barcelona, Spain; Markus Brychta, University of Innsbruck, Austria; Pablo Dolado, University of Zaragoza, Spain; Alenka Ristic, NIC, Slovenia; Johan van Bael, VITO, Belgium; Halime Paksoy, Cukurova University, Turkey;

8 and 9 October: Presentations and discussion (all experts)

Each presentation has 15 minutes, including discussion.

The presenters are requested to also send in a 1-page summary of their presentation; These will be collected and distributed, and used for the work in the Working Groups.

General

Welcome address

Motoi Yamaha, Chubu University, Nagoya, Japan.

Andreas Hauer, ZAE Bayern, Germany and **Matthias Rommel**, SPF, Rapperswil, Switzerland:

Welcome address, Introduction

Stephan Ippisch, Siemens, Erlangen, Germany: PCM based storage system for peak load shaving in electronic cooling systems.

Materials

Laurent Zalewski, University of Artois, France: Characterization of octadecane

Erwin Franquet, LaTEP, University of Pau, France: Applications of PCM characterization to a macroscopic sample

Saman Gunasekara, Royal Institute of Technology (KTH), Stockholm, Sweden: Binary phase equilibrium studies for PCM design for TES

Frédéric Kuznik, INSA-Lyon, France: Development and characterization of a Zeolite open reactor for building application

Frédéric Kuznik, INSA-Lyon, France: PCM integrated in building walls: influence of the thermodynamical modeling on the prediction of building temperatures

Camilo Rindt, Technical University Eindhoven, The Netherlands: Overview of research on TES at TU/e

Applications

Mark Dannemand, DTU, Denmark: update on the work on seasonal heat storage with supercooled sodium acetate trihydrate

Benjamin Fumey, EMPA, Dübendorf, Switzerland: Initial operation results from COMTES Line B, seasonal solar thermal storage with sodium hydroxide.

Wim van Helden, AEE INTEC, Austria: Solid sorption seasonal solar thermal storage in the COMTES project.

Ana Lazaro, University of Zaragoza, Spain: Ongoing activities related to the Task 42-Annex 29 at the I3A-University of Zaragoza, Spain.

Patrick Kefer, ASiC, Wels, Austria: Results from the SENTHERMS project on new sensing techniques for compact thermal storage technologies.

Theoretical limits

Christoph Rathgeber, ZAE Bayern, Garching, Germany: Working Group C: Economical limits – Bottom-up approach for storage cost evaluation

Industry presentations:

1. DAIKIN INDUSTRIES, Ltd.,

The world's leading manufacturer of air conditioning equipment.

http://www.daikin.com/index.html?ID=daikintop_jpn

2. NIHON SEKKEI, INC.

With over 400 Architects and Engineers, they expertise ranges over the entire field of architectural design, engineering and project management consulting, with extensive international experience, including consulting work for ODA (Official Development Assistance).

<http://www.nihonsekkei.co.jp/en/>

3. OBAYASHI CORPORATION

One of the world's leading construction contractors and Japan's leading listed companies.

<http://www.obayashi.co.jp/english/index.html>

Thursday, 9 October, afternoon

Delegated Experts Meeting

Discussion of the work in the Working Groups

The WG leaders will shortly present an overview of the past work and the status of the Deliverables, and then we go around the table to make an inventory of the work relevant to the WG