

Wednesday, 5 June 2024

<b>09:00 - 09:30</b>		
09:00 - 09:05	<b>Opening ENERSTOCK24</b>	
09:05 - 09:15	Kévy Johannes and Frédéric Kuznik, Organizers	
09:15 - 09:30	Marie-Christine Baietto, Vice-President for Research, INSA LYON Bert Gysen, IEA ES TCP Chair	
<b>09:30 - 10:00</b>		
<b>Plenary Session 1, Auditorium Pasteur</b>		
<b>Carnot Battery development - state of the art &amp; prospects - Annelies Vandersickel - DLR - GERMANY</b>		
Chairperson: TBA		
<b>10:05 - 12:55</b>		
<b>Session 1: Auditorium Pasteur</b>		<b>TCM Materials</b>
<b>Chairperson: TBA</b>		
10:05 - 10:25	Unexplored synthetic approaches for CaCl <sub>2</sub> impregnation for thermal energy storage	Fotia Antonio
10:25 - 10:45	Thermal discharge performance of a composite foam in an indirect fixed-bed reactor for thermochemical energy storage	Funayama Shigehiko
10:45 - 11:05	Nanofabrication of Multi-Shells Hollow CuO Microspheres for an Enhanced Cyclic Redox Reaction in High-Temperature Thermochemical Heat Storage Applications	Agalit Hassan
<b>11:05 - 11:35</b>		
<b>Break: Place Haute</b>		
11:35 - 11:55	Evaluation of the life cycle energy and greenhouse gas emissions of a space heating systems using ettringite as an adsorbent material	Bonnin Salomé
11:55 - 12:15	Influence of host matrices on the thermochemical energy storage capacity of novel organic salt hydrate	Previti Emanuele
12:15 - 12:35	Thermochemical energy storage properties of Ca <sub>2</sub> AlMnO <sub>5</sub> ·d	Tanahashi Keita
12:35 - 12:55	Thermochemical energy storage in a CSA-based cementitious material	Beaupere Noé
<b>10:05 - 12:55</b>		
<b>Session 1: Room Rhône 1</b>		<b>PCM Materials</b>
<b>Chairperson: TBA</b>		
10:05 - 10:25	Critical review on the environmental assessment of xylitol as phase change material	Santos Humberto
10:25 - 10:45	Development and characterization of a new bio-sourced composite material based on phase change material and hemp shives	Toifane Hachmi
10:45 - 11:05	Bio-based shape-stabilized phase change materials for hot water storage	Marske Felix
<b>11:05 - 11:35</b>		
<b>Break: Place Haute</b>		
11:35 - 11:55	Impact of Using Different Phase Change Materials on a PCM-HX's Performance	Dominic Groulx
11:55 - 12:15	Multi-scale experimental characterization and management of the supercooling of Isosorbide as Phase Change Material for thermal energy storage	Bruch Arnaud
12:15 - 12:35	Stability test of three different phase change material emulsions	Gschwander Stefan
12:35 - 12:55	Sensible/latent hybrid heat storage using molten nitrate and Al alloy-based phase-change material	Shimizu Yuto
<b>10:05 - 12:55</b>		
<b>Session 1: Room Rhône 3A</b>		<b>PCM Systems</b>
<b>Chairperson: TBA</b>		
10:05 - 10:25	Experimental analysis of partial charge and discharge operation of a Latent Heat Thermal Energy Storage device	Safae Raman
10:25 - 10:45	Phase change material integrated underground thermal energy storage in heating and cooling applications: A review	Dong Haoyang
10:45 - 11:05	Enhancing energy flexibility in buildings: A design-phase approach to couple Latent Heat Thermal Energy Storage (LHTES) and Heat Pumps	Fabrizio Enrico
<b>11:05 - 11:35</b>		
<b>Break: Place Haute</b>		
11:35 - 11:55	Enhance the productivity of solar still by using combined reflectors and latent thermal energy storage	Al-Saaidi Hussein Alawai Ibrahim
11:55 - 12:15	Solar heating and cooling with latent heat storage for temporary shelters	Paksoy Halime
12:15 - 12:35	Bench-scale long-term phase change material analysis for thermal energy storage design	Gunasekara Saman Nimali
12:35 - 12:55	Manufacturing Composites for High-Temperature Thermal Energy Storage applications From lab to pilot scale	Navarro Helena
<b>10:05 - 12:55</b>		
<b>Session 1: Room Rhône 3B</b>		<b>IEA ES TCP TASKS</b>
<b>Chairperson: TBA</b>		
10:05 - 10:25	Task 37: Smart Design and Control of Energy Storage Systems	Ryozo Ooka
10:25 - 10:45	Task 41: Economics of Energy Storage – EcoEneSto	Andreas Hauer
10:45 - 11:05	Task 42: System flexibility from Medium-Duration Energy Storage	Seamus Garvey
<b>11:05 - 11:35</b>		
<b>Break: Place Haute</b>		
11:35 - 11:55	Task 45: Accelerating the Uptake of Large Thermal Energy Storages	Wim van Helden
11:55 - 12:15	Task 40: Compact Thermal Energy Storage – Materials within Components within Systems	Andreas Hauer
12:15 - 12:35	Task 38: Ground Source De-Icing and Snow Melting Systems for Infrastructure	Aysegul Cetin & Bijan Adl-Zarrabi
12:35 - 12:55	Task 43: Standardized Use of Building Mass as Storage for Renewables and Grid Flexibility	Christoph Rohringer
<b>13:00 - 14:30</b>		
<b>Lunch: Salon Pasteur</b>		

## Wednesday, 5 June 2024

14:30 - 15:30

Poster session: Auditorium Pasteur

15:30 - 17:30

Session 2: Auditorium Pasteur

TCM Systems

Chairperson: TBA

15:30 - 15:50

Thermochemical Energy Storage Unit for H<sub>2</sub> Based Systems

Buerger Inga

15:50 - 16:10

Performance of high-temperature thermochemical systems based on carbonates and mixed oxides in fluidized bed reactors.

Liberatore Raffaele

16:10 - 16:30

Experimental investigation of a facade-integrated adsorption system for solar cooling

Boeckmann Olaf

16:30 - 16:50

Break - Poster

16:50 - 17:10

Small-scale field demonstration of zeolite based mobile thermochemical energy storage

Fujii Shoma

17:10 - 17:30

Evaluation of thermal energy storage performance of composite binary salt hydrates with MgCl<sub>2</sub>/2CaCl<sub>2</sub> in a packed bed reactor

Liu Hongzhi

15:30 - 17:30

Session 2: Room Rhône 1

PCM Materials

Chairperson: TBA

15:30 - 15:50

Investigating the relation between the crystallisation velocity and the hysteresis of phase change materials with two polyethylene glycols

Hiebler Stefan

15:50 - 16:10

Supercooling suppression of Al-Si phase change material for efficient thermal energy storage and practical applications

Mba Joshua Chidiebere

16:10 - 16:30

Continuous synthesis of 9,10-dihydroxystearic acid from bio-based resources for sustainable PCM production

Escriba-Gelonch Marc

16:30 - 16:50

Break - Poster

16:50 - 17:10

Study of solid-state transition kinetics of supercooled neopentyl glycol by infrared thermography

Dauvergne Jean Luc

17:10 - 17:30

Improved Thermophysical and Mechanical Properties in LiNaSO<sub>4</sub> Composites for Thermal Energy Storage

Taeno Maria

15:30 - 17:30

Session 2: Room Rhône 3A

TCM Systems

Chairperson: TBA

15:30 - 15:50

Layered manganese dioxide as a versatile heat-storage material utilizing environmental water vapor

Okamoto Norihiko L.

15:50 - 16:10

Development and multiscale characterization of a sensible/sorption bimodal heat storage for cooling tower application

Arnaud Bruch

16:10 - 16:30

Experimental assessment of inorganic salts impregnated silica gel matrix for thermal energy storage applications.

Fotia Antonio

16:30 - 16:50

Break - Poster

16:50 - 17:10

Assessing Zeolite Imidazolate Frameworks as Thermal Energy Storage Materials

Byrne Ciara

17:10 - 17:30

Numerical simulations for improvements of the experimental system for testing adsorption heat storage materials

Mlakar Urska

15:30 - 17:30

Session 2: Room Rhône 3B

IEA ES TCP TASKS

Chairperson: TBA

15:30 - 15:50

Task 44: Power-to-Heat and Heat integrated Carnot Batteries for Zero-Carbon (industrial) Heat & Power supply

ES TCP TASKS

15:50 - 16:10

Annelies Vandersickel

16:10 - 16:30

16:30 - 16:50

Break - Poster

16:50 - 17:10

17:10 - 17:30

17:30 - 19:00

INPATH TES Network: Auditorium Pasteur

Chairperson: Luisa Cabeza

19:00 - 21:00

Welcome Cocktail, Salon Pasteur

## Thursday, 6 June 2024

<b>08:30 - 09:00</b>	<b>Plenary Session 2, Auditorium Pasteur</b> <b>Share of storage in the electricity mix of prospective scenarios in France - Pierre Sacher - ADEME</b> Chairperson: TBA	
<b>09:05 - 11:55</b>	<b>Session 3: Auditorium Pasteur</b> <b>Chairperson: TBA</b> <b>Numerical modelling of Heat storage systems</b> 09:05 - 09:25 Thermocline thermal storage material based on reclaimed and low-cost materials. 09:25 - 09:45 Numerical investigation of porous media layers for improved stratification within cold storage 09:45 - 10:05 Thermal Energy Storage with Molten Salts: Predictive Models for thermo-physical properties. 10:05 - 10:35 Break: Place Haute 10:35 - 10:55 A Review of Pilot-scale and Application-scale Latent Thermal Energy Storage Heat Exchanger Configurations 10:55 - 11:15 Comparison between a conventional TES system and an EAF slag-based thermocline configuration for CSP plants using the LCA methodology. 11:15 - 11:35 Innovative transient modelling of concrete-based solid medium for thermal energy storage systems 11:35 - 11:55 Large Scale Testing of Refractory Bricks for Molten Salt Thermal Energy Storage	Devise Charles Gamisch Sebastian Liberatore Raffaele  Suswal Aditya Singh Majo Marc Tagle-Salazar Pablo D. Odenthal Christian
<b>09:05 - 11:55</b>	<b>Session 3: Room Rhône 1</b> <b>Chairperson: TBA</b> <b>PCM Materials</b> 09:05 - 09:25 Solidification enhancement by changing fin structures using Straight and Y-shaped fins for M-TES applications 09:25 - 09:45 Development of microencapsulated phase change material with Zn-10 mass% Al alloy core for heat utilization around 400 °C 09:45 - 10:05 Prediction and experimental characterization of a peritectic mixture of sodium acetate trihydrate and sodium nitrate to be used as phase change material 10:05 - 10:35 Break: Place Haute 10:35 - 10:55 Synergistic Approaches to Modulate Transition Temperatures in Enhanced Organic Plastic Crystals 10:55 - 11:15 Thermal response of layered hybrid organic-inorganic perovskites as solid-solid phase change materials 11:15 - 11:35 Rheological study on xylitol crystallization by seeding and shearing for its use as PCM: Influence of shear rate, temperature and seed size 11:35 - 11:55 Use of plastic waste to formulate new microencapsulated phase change materials (MPCM) with thermal, mechanical and chemical resistance	Demirkiran Ismail Kawaguchi Takahir Rathgeber Christoph  Serrano Ángel Salgado-Pizarro Rebeca Navarro Miguel Giro-Paloma Jessica
<b>09:05 - 11:55</b>	<b>Session 3: Room Rhône 3A</b> <b>Chairperson: TBA</b> <b>TCM Materials</b> 09:05 - 09:25 Testing and Analysis of a Dual-Tube Latent Heat Storage System 09:25 - 09:45 Experimental study of heat transfer enhancement in a latent heat thermal energy storage using metal wool 09:45 - 10:05 High Temperature PCMs for industrial steam systems 10:05 - 10:35 Break: Place Haute 10:35 - 10:55 Selection of suitable inorganic materials to be applied as PCMs in high temperatures thermal energy storage system 10:55 - 11:15 Experimental Evaluation of a Phase-change Thermal Storage 11:15 - 11:35 Design and commissioning of the worldwide first nitrate molten salt test rig for component testing at 620°C 11:35 - 11:55 Experimental Characterization of a High-Temperature Thermal Energy Storage System Based on Nitrate Salt as Phase-Change-Material for Steam Generation	Dietz Larissa Mani Kala Saranprabhu Zondag Herbert  Martinez Alcocer Franklin R. Harrison Stephen Klasing Freerk Fluri Thomas
<b>09:05 - 11:55</b>	<b>Session 3: Room Rhône 3B</b> <b>Chairperson: TBA</b> <b>High Temperature Applications</b> 09:05 - 09:25 High Temperature Thermal Energy Storage with Phase Change Materials in Concentrated Solar Power System: A Case Study 09:25 - 09:45 Liquid metals, an efficient heat transfer fluids for high-temperature heat storage 09:45 - 10:05 Corrosion control of a Fe-based alloy (DMV 310 N) in molten MgCl <sub>2</sub> -KCl-NaCl for heat storage and transfer at very high temperatures 10:05 - 10:35 Break: Place Haute 10:35 - 10:55 Compatibility of demolition wastes with solar salt for high temperature packed-bed thermal energy storage applications 10:55 - 11:15 Experimental Study of a Bench Scale Packed-bed Latent Heat Storage Unit with Al-Si based PCM pellets 11:15 - 11:35 Electrical tortuosities of honeycomb and triply periodic minimal surface (TPMS)-based porous structures for Power-to-Heat applications 11:35 - 11:55 Recent advance on metal/alloy based micro-encapsulated phase change materials for middle-high temperature applications	Shan Lianying Niedermeier Klarissa Ding Dr. Wenjin  Kocak Burcu Nakamura Tomokazu Ott Thorsten Nomura Takahiro
<b>12:00 - 13:30</b>	<b>Lunch: Salon Pasteur</b>	

## Thursday, 6 June 2024

**13:30 - 14:30**      **Poster session: Auditorium Pasteur**

**14:30 - 16:30**      **Session 4: Auditorium Pasteur**      **Numerical modelling of Heat storage systems**  
**Chairperson: TBA**

14:30 - 14:50	Carbon Capture and Heating - Can we combine long-term energy storage with Direct Air Capture?	Linder Marc
14:50 - 15:10	Enhancing grid integration of renewable energy with seasonal thermal energy storage using molten salt tanks	Prieto Cristina
15:10 - 15:30	Optimizing the size of a heat storage tank for a district heating system	Stritih Uros
15:30 - 15:50	Break - Poster	
15:50 - 16:10	4-Dimensional monitoring of the temperature and energy performance of borehole heat exchanger systems: the Hoogezand pilot (Groningen, Netherlands)	Daniel Bakker
16:10 - 16:30	Surface engineering for TES application enhancement.	Betancor Lorena
16:30 - 16:50	Membrane-Encapsulated Salt Hydrate: An Anti-agglomeration Approach to Enhance Cyclability	Elahi Behrooz
16:50 - 17:10	Integrated High Temperature Heat Pump and Thermal Energy Storage Laboratory Rig - Engineering Considerations and Preliminary Design	Sanclemente Lozano Mateo
17:10 - 17:30	Electrified cascade PCM concept for Thermal Energy Storage in a CSP plant	Lopez-Roman Anton

**14:30 - 16:30**      **Session 4: Room Rhône 1**      **PCM Materials**  
**Chairperson: TBA**

14:30 - 14:50	Ceramic coatings for containment of aluminium silicon metallic phase change material in thermal storage applications	Villada Carolina
14:50 - 15:10	Degradation of Erythritol after ageing at elevated temperature and cycling under real application conditions	Kluender Franziska
15:10 - 15:30	Metallic phase change material (PCM) for high temperature applications, selection, synthesis and characterisation.	Williamson Kyran
15:30 - 15:50	Break - Poster	
15:50 - 16:10	Characterization of coated silica sand by Mn diffusion into crystal cell.	Cerutti-Cristaldo Leonel Mario
16:10 - 16:30	Development of ceramic protective coatings for solid-solid Phase Change Materials	Crocomo Paola
16:30 - 16:50	Solid-Solid Phase Change Materials for the Thermal Management of Li-Ion Batteries	Saad Ali
16:50 - 17:10	Mechanochemical synthesis of layered hybrid organic-inorganic perovskites for thermal energy storage materials	Fernandez A Ines
17:10 - 17:30	Long-term stability investigation of capric acid as potential phase change material	Ayaz Hamza

**14:30 - 16:30**      **Session 4: Room Rhône 3A**      **PCM Systems**  
**Chairperson: TBA**

14:30 - 14:50	Performance enhancement of a Latent Heat Thermal Energy Storage for Domestic Hot Water production	Champel Benedicte
14:50 - 15:10	Thermal modelling of the discharge of a 180kW.h latent thermal energy storage demonstrator	Da Col Amandine
15:10 - 15:30	Advanced numerical model to analyze the thermal response of macroencapsulated PCMs for building applications	Alvarez-Rodriguez Matias
15:30 - 15:50	Break - Poster	
15:50 - 16:10	Molecular Dynamics Simulation of the Polyvinyl Alcohol Template Effect in n-Octadecane Phase Change Slurry Crystallization	Kick Moritz
16:10 - 16:30	Numerical analysis of an off-grid positive temperature cold room coupled with latent thermal energy storage for food preservation	Slaviero Gianluca
16:30 - 16:50	Experimental characterisation and numerical modelling of a novel heat exchanger for latent heat thermal energy storage composed with open-cells metallic lattice structure	Vesin Sebastien
16:50 - 17:10	From Heat Storage to Heat Sink: The Role of Phase Change Materials in Battery Thermal Management	Balwani Apoorva
17:10 - 17:30	A critical Outlook to commercial high-temperature Thermal Energy Storage	Ammann Sebastian

**14:30 - 16:30**      **Session 4: Room Rhône 3B**      **Numerical modelling of Heat storage systems**  
**Chairperson: TBA**

14:30 - 14:50	Modeling multi-basin water-gravel thermal energy storages with STORE	Bott Christoph
14:50 - 15:10	System and Component Model Development of a Secondary Loop System with Buried Thermal Energy Storage Tank	Spitler Jeffrey
15:10 - 15:30	LargeTESmtk: A comprehensive modeling toolkit for large-scale thermal energy storage systems	Reisenbichler-Sommerhofer Michael
15:30 - 15:50	Break - Poster	
15:50 - 16:10	Renewal planning method of air-conditioning heat source system with diurnal water thermal storage for demand response in an existing building	Imaida Moi
16:10 - 16:30	Design of borehole heat exchangers combined with a permanent dewatering system in series	Kim Eui-Jong
16:30 - 16:50	Assessing Zeolite Imidazolate Frameworks as Thermal Energy Storage Materials	Byrne Ciara
16:50 - 17:10	Long term thermal function of the HT BTES plant at Xylem in Emmaboda, Sweden	Andersson Olof
17:10 - 17:30	Development of a lifetime assessment approach for polyolefinic insulation materials in pit thermal energy storages	Peham Lukas

**19:30 - 23:30**      **Gala Dinner: Espace H7 - <https://maps.app.goo.gl/jvGp1yh42gQ79FAf7>**



## Friday, 7 June 2024

<b>09:00 - 09:30</b>	<b>Plenary Session 3, Auditorium Pasteur</b> <b>Energy storage for supporting Renewable businesses - Lionel Nadau - ENGIE - France</b> Chairperson: TBA	
<b>09:35 - 12:25</b>	<b>Session 5: Auditorium Pasteur</b> <b>Chairperson: TBA</b>	<b>Heat storage Systems</b>
09:35 - 09:55	Modelling of thermal storage systems using artificial intelligence	Rojas Cala Edgar Felipe
09:55 - 10:15	Thermal energy storage in energy communities: a perspective overview through a bibliometric analysis	Brunelli Luca
10:15 - 10:35	Characterizing Na2S kinetics for thermochemical energy storage applications through algorithmic optimization	Kieskamp Bram
10:35 - 11:05	Break: Place Haute	
11:05 - 11:25	Malta's Pumped Heat Energy Storage Technology: a Clean Combined Heat and Power Plant	Hippler-Nettlau Janina
11:25 - 11:45	Thermal Energy Storage as a Service Business Model for Food Supply Chain Decarbonisation	Wang Xinfang
11:45 - 12:05	An innovative, modular sorption storage system for residential applications	Hengel Franz
12:05 - 12:25	Synergistic effect of textile-reinforced mortar and phase change materials in buildings	Borri Emiliano
<b>09:35 - 12:25</b>	<b>Session 5: Room Rhône 1</b> <b>Chairperson: TBA</b>	<b>PCM Materials / Systems</b>
09:35 - 09:55	Biomimicry-inspired design optimization of a latent thermal energy storage system using phase change materials	Mehraj Nadiya
09:55 - 10:15	Swedish State-of-the-Art on Ground-source De-Icing and Snow Melting Systems	Gehlin Signhild
10:15 - 10:35	Impact of thermocouple position on the supercooling of distilled water	Rabbi Jawad
10:35 - 11:05	Break: Place Haute	
11:05 - 11:25	Demonstration of cold thermal energy storage for air conditioning in a CO2 supermarket refrigeration system	Selvnes Hakon
11:25 - 11:45	Influence of operating conditions on the melting front movement in tube-in-tube latent thermal energy storage heat exchangers	Van Zele Julie
11:45 - 12:05	Utilization of UTES with solar energy in de-icing and snow melting - IEA ES TASK 38	Adl-Zarrabi Bijan
12:05 - 12:25	Cool-Data: PCM cold storage development for server room cooling	Englmair Gerald
<b>09:35 - 12:25</b>	<b>Session 5: Room Rhône 3A</b> <b>Chairperson: TBA</b>	<b>Numerical modelling of Heat storage systems</b>
09:35 - 09:55	Erosion of a tube immersed in a bubbling fluidized bed at high temperature: a numerical study	Dominnguez-Coy Pedro
09:55 - 10:15	Numerical and dynamic energy modeling for performance analysis of an integrated photovoltaic/thermal-heat pump system	Chae Soowon
10:15 - 10:35	Numerical modelling of a Pit Thermal Energy Storage used for performance guarantee.	Fournier Nathan
10:35 - 11:05	Break: Place Haute	
11:05 - 11:25	Numerical investigation about the electrical heating of a molten salt mixture for thermal energy storage applications	Cagnoli Mattia
11:25 - 11:45	Development and performance evaluation of a K2CO3-based closed-cycle sorption heat storage system	Jain Kartik
11:45 - 12:05	Comparative Simulations for the Verification of Simulation Models for Large Thermal Energy Storages	Schmidt Thomas
12:05 - 12:25	Modelling of heat and moisture transfer through the lid of Pit Thermal Energy Storages	Brand Tom
<b>09:35 - 12:25</b>	<b>Session 5: Room Rhône 3B</b> <b>Chairperson: TBA</b>	<b>Heat Storage Systems</b>
09:35 - 09:55	Reduction of the Winter Gap Problem - Energy Efficiency vs. Energy Flexibility	Ochs Fabian
09:55 - 10:15	An analysis of energy storage policy in the UK (2000-2023): capturing key insights and lessons learned	Radcliffe Jonathan
10:15 - 10:35	Conceptual Development and Upscaling Considerations of a Radial Flow Packed Bed Thermal Energy Storage with Multiple Coaxial Particle Layers	Apostolopoulos - Kalkavouras Konstantinos
10:35 - 11:05	Break: Place Haute	
11:05 - 11:25	Design Optimization of Synthetic Methane Production Sites Incorporating Direct Air Capture Technology	Humbert Gabriele
11:25 - 11:45	Methodology for integrating renewable energy and thermal storage systems in the electricity market	Pavon-Moreno M.carmen
11:45 - 12:05	A novel synthesis and characterization of $\alpha$ -Fe2O3@Ppy photoanode for photoelectrochemical water splitting	Kardas Gulfeza
12:05 - 12:25	Interpretable Reinforcement Learning Control for Battery Storage in Grid-Interactive Communities	Takahashi Ken
<b>12:25 - 13:00</b>	<b>Closing session - Awards Ceremony - Auditorium Pasteur</b>	
<b>13:00 - 14:00</b>	<b>Lunch box: Place Haute</b>	

## Wednesday, 5 June 2024

### 14:30 - 15:30

#### Poster session 1: Auditorium Pasteur

14:30 - 14:34	Unlocking feasibility: Role of insulation distribution in large-scale seasonal thermal energy storage applications
14:34 - 14:38	Monitoring results of energy-efficient demonstration buildings with thermal activated building mass as energy storage
14:38 - 14:42	Selection of the storage system for industrial steam supply with heat pumps
14:42 - 14:46	Test rig for investigating the optimisation of operating strategies for steam supply with passive Latent Heat - Thermal Energy Storages
14:46 - 14:50	Energy Storage Systems and Renewable Integration: Pathways to Carbon Neutral Buildings
14:50 - 14:54	Specific heat capacity variability analysis of Chilean copper slag for packed-bed thermal energy storage applications
14:54 - 14:58	GIS-Based GSHP Sizing and Estimation Tool: Facilitating Non-Expert User Engagement and Technology Dissemination
14:58 - 15:02	Protic dialkylammonium-based ionic liquids as promising solid-solid phase change materials for thermal energy storage: synthesis and thermo-physical characterization.
15:02 - 15:06	Graphite Based Encapsulation Concept for a High Temperature Metallic Latent Thermal Energy Storage System
15:06 - 15:10	A novel process for the generation of ice slurry based on a dispersible two-substance system
15:10 - 15:14	Corrosion test on nitrate salts for building heating applications
15:14 - 15:18	Use of bibliometric analysis to evaluate the influence of cement and concrete on carbon capture, utilization, and storage over the years
15:18 - 15:22	Advanced controllers for electrically heated floors in residential buildings to shift peak load
15:22 - 15:26	Study on Estimation of Time-Specific CO2 Emission Factors and New Operation of Thermal Energy Storage System.

Dahash Abdulrahman  
Rohringer Christoph  
Nefodov Dimitri  
Dietz Larissa  
Han Gwangwoo  
Segovia Valentina  
Badenes Borja  
Lopez-Morales Jorge L.  
Stahl Veronika  
Urbaneck Thorsten  
Palacios Anabel  
Santini Carolina  
Sun Ying  
Yamanashi Haruki

## Thursday, 6 June 2024

### 13:30 - 14:30

#### Poster session 2: Auditorium Pasteur

13:30 - 13:34	Experimental Study of Thermochemical Heat Storage with Zeolite 13X for Utilization of Industrial Wasted Heat
13:34 - 13:38	The IN-Campus: A lighthouse site for re-used infrastructures as seasonal thermal energy storage
13:38 - 13:42	Highly Accurate Simulation of the Flow Effects during Loading with Swirl
13:42 - 13:46	Genetic Algorithm Based Optimization of a closed sorption heat storage system using COMSOL Multiphysics and MATLAB
13:46 - 13:50	Stability Evaluation of Cation-exchanged Zeolites through Repeated Experiment of Heat Charging and Discharging
13:50 - 13:54	Investigation of a thermochemical storage system for the use of solar energy in domestic applications
13:54 - 13:58	Experimental Study on Thermal Storage System with Sand and Al-Si Alloy for Coal-fired Plant Retrofit Carnot Battery
13:58 - 14:02	Lignin modified ecological coating as thermal barrier in container materials for sorption heat pumps.
14:02 - 14:06	Proposal of advanced electrochemical techniques for improved monitoring control in sorption materials for TES systems
14:06 - 14:10	Evaluation of volcanic ash as TES material: Case of study of a CSP plant
14:10 - 14:14	GeoBOOST: Pioneering Efficient Geothermal Solutions through Barrier Mitigation in Europe
14:14 - 14:18	Inventory data generation for prospective lifecycle design thorough full-year simulation of Carnot Battery with Al-Si based PCM
14:18 - 14:22	Thermo-mechanical assessment of steels under service conditions in hot tanks used in CPS.
14:22 - 14:26	Binder-free K <sub>2</sub> CO <sub>3</sub> granules for thermochemical heat storage
14:26 - 14:30	Specific heat capacity variability analysis of Chilean copper slag for packed-bed thermal energy storage applications

Hong Sungkook  
Bayer Peter  
Oestreich Felix  
Abohamzeh Elham  
Seongeun Kim  
Niederkofler Tobias  
Junhyun Cho  
Amini Sara  
Fernandez Ángel G.  
Barreneche Camila  
Witte Henk  
Fujii Shoma  
Ardila Sergio  
Salehzadeh Delaram  
Segovia Valentina