

Tuesday, 15 September 2026

8:45 AM - 9:30 AM - (A) Großer Saal

Opening SolarPACES

9:30 AM - 10:20 AM - (A) Großer Saal

SolarPACES & EuroSun Joint Opening Session

10:20 AM - 10:35 AM -

Coffee Break

10:35 AM - 11:35 AM - (A) Großer Saal

Joint Session - Sustainable Heat for Industrial Processes

11:35 AM - 12:45 PM - (A) Großer Saal

Joint Session - Thermal Energy Storage

12:45 PM - 2:00 PM -

Lunch

2:00 PM - 3:30 PM - (A) Großer Saal

CSP Around the World

3:30 PM - 5:00 PM - (A) Großer Saal

Bankability and Financing of Solar Thermal Projects

5:00 PM - 5:30 PM -

Coffee Break

5:30 PM - 7:00 PM - (A) Großer Saal

Solar Fuels and High Temperature Applications (beyond commercial status)

7:00 PM - 9:00 PM -
Welcome Reception

Wednesday, 16 September 2026

8:30 AM - 10:00 AM - (A) Großer Saal
AI Driven Autonomous Operation of Solar Thermal Power Plants

10:00 AM - 10:30 AM -
Coffee Break

10:30 AM - 11:50 AM - (A) Großer Saal Thermal Energy Storage 1	10:30 AM - 12:30 PM - (B) Silberberg Analysis and Simulation 1	10:30 AM - 12:30 PM - (C) Johannisberg Measurement 1	10:30 AM - 12:10 PM - (D) Ahrtal Solar Chemistry 1
10:30 AM - 10:50 AM Development of a Honeycomb Storage Brick using Waste Material from the Silestone® production Stefan Gschwander ¹ . ¹ Fraunhofer Institute for Solar Energy Systems ISE.	10:30 AM - 10:50 AM Dynamics of TCES-CaL systems: The role of temporal resolution and dispatch strategies Alberto de la Calle ¹ . ¹ Instituto de Catálisis y Petroleoquímica (ICP), CSIC, C/ Marie Curie 2, Madrid, 28049, Spain.	10:30 AM - 10:50 AM The Enhanced Power-On Test for Measuring Receiver Efficiency Marc Röger ¹ . ¹ German Aerospace Center (DLR).	10:30 AM - 10:50 AM A Unique Test Infrastructure for Industrial-Scale Solar Fuels Technologies Kai Wieghardt ¹ . ¹ German Aerospace Center.
10:50 AM - 11:10 AM Development of Al-Si-Fe phase change materials for high temperature thermal energy storage Joshua Chidiebere Mba ¹ . ¹ Hokkaido University.	10:50 AM - 11:10 AM Simulation and Optimization of Flexible Molten Salt Steam Generator System for CSP Darío Pardillos-Pobo ¹ . ¹ University Carlos III of Madrid.	10:50 AM - 11:10 AM Concentrated Solar Flux Measurements Based on Optical Fibers and Multiple Photodetectors Javier García-Borja ¹ . ¹ Universidad de Sevilla.	10:50 AM - 11:10 AM Designing a Solar-Powered Membrane Reactor for Syngas Production Nicole Carina Neumann ¹ . ¹ German Aerospace Center DLR.

11:10 AM - 11:30 AM Structured versus random arrangement filler: experimental comparison Esther Rojas ¹ . ¹ CIEMAT.	11:10 AM - 11:30 AM Enhancing CSP Capacity Value with Pumped Thermal Energy Storage under Energy and Capacity Markets Antonio J. Subires ¹ . ¹ Universidad Nacional de Educación a Distancia (UNED).	11:10 AM - 11:30 AM High-Flux Solar Density Characterization: A Sensitivity Analysis of Indirect Fluxmetry Method for Small and Medium Solar Furnace Emmanuel Guillot ¹ . ¹ PROMES-CNRS.	11:10 AM - 11:30 AM Simulation and Experiment of Thermochemical Green Hydrogen Production in Steel Mills Using Industrial Gas as a Reducing Agent Yehyeong Lim ¹ . ¹ Ewha Womans University.
11:30 AM - 11:50 AM Thermodynamic Database for Identifying Salt Compositions for High Temperature Thermal Storage Michael Müller ¹ . ¹ Forschungszentrum Jülich GmbH, Institute of Energy Materials and Devices, IMD-1, Jülich, Germany.	11:30 AM - 11:50 AM Annual Assessment of a novel Integrated System Combining Photovoltaics, Compressed Air Energy Storage, Reverse Osmosis and Concentrated Solar Power Aarón-Raúl Poyatos-Bakker ¹ . ¹ CIEMAT-Plataforma Solar de Almería - CIESOL, Ctra. de Senés s/n, Tabernas, 04200, Almería, Spain.	11:30 AM - 11:50 AM High-Temperature Distributed Measurements Based on Femtosecond Fiber Bragg Gratings Javier García-Borja ¹ . ¹ Universidad de Sevilla.	11:30 AM - 11:50 AM Electrochemical Oxygen Pump Assisted Solar Thermochemical CO2 Reduction Runsen Wang ^{1, 2, 3} . ¹ Department of Mechanical and Energy Engineering, Southern University of Science and Technology, ² SUSTech Energy Institute for Carbon Neutrality, Southern University of Science and Technology, ³ École polytechnique fédérale de Lausanne.
	11:50 AM - 12:10 PM Techno-Economic Optimization of Hybrid PV-CST Plants with Air-Based Thermal Energy Storage for Industrial Heat Decarbonization Salvatore Guccione ¹ . ¹ KTH Royal Institute of Technology.	11:50 AM - 12:10 PM Air-cooled camera-target method for flux evaluation Camilo Alberto Arancibia Bulnes ¹ . ¹ Instituto de Energías Renovables, Universidad Nacional Autónoma de México.	11:50 AM - 12:10 PM Microwave-Driven Accelerated Redox Reactions with Metal Oxides for Thermochemistry Applications Francesco Torre ¹ . ¹ CIC energiGUNE.
	12:10 PM - 12:30 PM Scenario-Based Techno-Economic Analysis of CSP Integrated with Redox-Oxide Thermochemical Storage Ruben Garayoa ¹ . ¹ National Renewable Energy Centre (CENER).	12:10 PM - 12:30 PM High Resolution Flux Measurement using a Thermophotovoltaic Cell Richard Felsberger ¹ . ¹ Institute of Electrical Measurement and Sensor Systems, Graz University of Technology, Austria.	

12:30 PM - 1:45 PM -
Lunch

1:45 PM - 3:45 PM - (A) Großer Saal Thermal Energy Storage 2	1:45 PM - 3:45 PM - (B) Silberberg Analysis and Simulation 2	1:45 PM - 3:05 PM - (C) Johannisberg Digital Tools and AI 1
1:45 PM - 2:05 PM Large scale dynamic corrosion evaluation on high entropy alloys as structural material for high-temperature carbonate molten salts Angel G. Fernandez ¹ . ¹ University of the Basque Country.	1:45 PM - 2:09 PM Techno-Economic and Environmental Assessment of a Novel Tube-Bundle-Cavity Linear Receiver Tanima Sharma ¹ . ¹ KTH Royal Institute of Technology.	1:45 PM - 2:05 PM Modernizing Light Flux Distribution Simulation using dFlux Cord Bleibaum ¹ . ¹ DLR - Institute of Future Fuels.
2:05 PM - 2:25 PM Compatibility of Al-Si Microencapsulated Latent-Heat Pellet in Liquid Lead at 750 °C Takahiro Nomura ¹ . ¹ Faculty of Engineering, Hokkaido University, Japan.	2:09 PM - 2:33 PM Thermomechanical Behavior of a Solar Receiver Tube and Attachment Using Digital Image Correlation (DIC) Technique and Infrared Thermography Antonio Acosta-Iborra ¹ . ¹ Department of Thermal and Fluids Engineering, Universidad Carlos III de Madrid.	2:05 PM - 2:25 PM Multidisciplinary Design Optimisation of a high temperature PCM-Based Innovative Solar-to-Heat-to-Power Approach (SUNSON EU Project) Ignacio Fernández-Pacheco Ruiz ¹ . ¹ Idener Research and Development A.I.E..
2:25 PM - 2:45 PM Design of a hybrid sensible-redox regenerative bed for air-Brayton CSP systems Ignacio Guisasola ¹ . ¹ Tekniker.	2:33 PM - 2:57 PM Raytracing - A Crucial Link of GlassPoint's Development Toolchain Frieder Kehler ¹ . ¹ GlassPoint.	2:25 PM - 2:45 PM Towards an Image Based Heliostat-Calibration Using Differentiable Kinematics Max Pargmann ¹ . ¹ German Aerospace Center (DLR).
2:45 PM - 3:05 PM Comparative Analysis on Thermal Oils in Packed-bed TES for Industrial Process Heat Decarbonization Maria Dolores Guerrero ¹ . ¹ KTH Royal Institute of Technology.	2:57 PM - 3:21 PM Environmental implications of alloy selection for central tower molten salt CSP receivers María Asunción Palmero González ¹ . ¹ Universidad Carlos III de Madrid.	2:45 PM - 3:05 PM AI-orchestrated open-source simulation framework for design and thermal performance analysis of a modular high-concentration linear Fresnel reflector for 150-550°C industrial process heat Shyam Lunagariya ¹ . ¹ School of Computing and Augmented Intelligence, Arizona State University, Tempe, AZ 85287, USA.

3:05 PM - 3:25 PM Densification of high-temperature solid-state phase change materials by cold sintering route Maria Taeño¹. ¹CIC energiGUNE.	3:21 PM - 3:45 PM Critical Analysis of the Wall-to-Particle Heat Transfer in a Fluidized Bed Tubular Solar Receiver Eduardo Oñate Oyaneder^{1, 2}. ¹PROMES-CNRS, ²Université de Perpignan Via Domitia.	
3:25 PM - 3:45 PM Influence of 2D Nanomaterials on the Thermal Properties of Nanofluids for Advanced Thermal Energy Storage in CSP Systems Fabiola Pineda¹. ¹Departamento de Física, Universidad Técnica Federico Santa María, Valparaíso 2390123, Chile.		
1:45 PM - 3:25 PM - (D) Ahrtal Solar Chemistry 2	1:45 PM - 3:45 PM - (E) Eifel Side-Event: Solarize - Workshop on the Preparation of the Strategic Research and Innovation Agenda (SRIA) for Solar Thermal Technologies	
1:45 PM - 2:05 PM Experimental and Numerical Modeling Assessment of a 5-kW Solar Thermochemical Reactor with Additively Manufactured Ceria Structures José Gonzalez-Aguilar¹. ¹IMDEA Energy.		
2:05 PM - 2:25 PM Renewable electricity-fuel cogeneration system based on thermochemical cycles with decoupled solar heating and oxygen carrier reduction Liya Zhu¹. ¹Zhengzhou University.		
2:25 PM - 2:45 PM Comprehensive Modeling and Testing of a Tubular Reactor Prototype for Indirectly Heated Thermochemical Fuel Production Francesco Orsini¹. ¹Politecnico di Torino.		
2:45 PM - 3:05 PM Impact of Oxygen Removal Strategies on the Efficiency of Solar Thermochemical Fuel Production Nicole Neumann¹. ¹German Aerospace Center eV, Institute of Future Fuels, Germany.		

3:05 PM - 3:25 PM Thermo-Electrochemical Activation of LSM Perovskite for Hydrogen Production beyond Conventional Thermochemical Cycling Raúl Peño Mateos ¹ . ¹ Instituto de Catálisis y Petroleoquímica (CSIC), C/ Marie Curie, 2, Madrid, 28049, Spain.	
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3:45 PM - 4:15 PM - Coffee Break

4:15 PM - 6:15 PM - (A) Großer Saal Thermal Energy Storage 3	4:15 PM - 6:15 PM - (B) Silberberg Advanced Materials 1	4:15 PM - 4:55 PM - (C) Johannisberg Digital Tools and AI 2	4:15 PM - 6:15 PM - (D) Ahrtal Solar Chemistry 3
4:15 PM - 4:35 PM Recent Advances in Molten Salt Single-Tank Storage - an Overview of DLR Activities Christian Odenthal ¹ . ¹ German Aerospace Center (DLR).	4:15 PM - 4:35 PM Development of sustainable high temperature stable solar absorber pigment coatings for particles and components Gözde Alkan ¹ . ¹ Institute for Frontier Materials on Earth and in Space, DLR.	4:15 PM - 4:35 PM Autonomous Operation Control Agent for Robust Solar Thermal Tower Plant Operation Mathias Kuhl ¹ . ¹ German Aerospace Center (DLR).	4:15 PM - 4:35 PM Solar-Driven Methane Reforming: Demonstration of Fluidized Bed Reactor for Synthetic Fuel Production Gregory Jackson ¹ . ¹ Colorado School of Mines.
4:35 PM - 4:55 PM Experimental study of thermal ratcheting in dual-media thermocline storage tank Marie Miot ¹ . ¹ Univ. Grenoble Alpes, CEA, LITEN, DTCH, LCST.	4:35 PM - 4:55 PM Design of sustainable spectrally selective surfaces for compact hybrid PV-CST Nicolás Passarelli ¹ . ¹ PROMES-CNRS.	4:35 PM - 4:55 PM Solar Energy Autopilot: A Digital Twin Framework for Autonomous Solar Thermal Plants Inga Miadowicz ¹ . ¹ Deutsches Zentrum für Luft- und Raumfahrt (DLR).	4:35 PM - 4:55 PM Integration of Novel Redox Material Thermodynamics and Reactor Modeling in Two-Step Solar Thermochemical Cycles Matteo Riberi ¹ . ¹ Politecnico di Torino.
4:55 PM - 5:15 PM A Direct Thermocline Storage Concept for Pressurised Gas Solar Receivers based on Finned Concentric Vessels María José Montes ¹ . ¹ National University of Distance Education (UNED).	4:55 PM - 5:15 PM Silver Criticality in CSP: Aluminum-Based Multilayer Dielectric Mirrors as a Sustainable Alternative Antoine Grosjean ^{1, 2} . ¹ EPF, ² PROMES-CNRS.		4:55 PM - 5:15 PM Solar-Driven Syngas Production from Methane Chemical Looping Cycles with γ-Al2O3-Supported Perovskite Catalysts Roberta Russo ¹ . ¹ Consiglio Nazionale delle Ricerche, Istituto di Scienze e Tecnologie per l'Energia e la Mobilità Sostenibili.

5:15 PM - 5:35 PM Laboratory Prototype of Brick-Based Thermal Energy Storage Using Repurposed Ceramic Waste Miguel Sainz-Manas¹. ¹KTH Royal Institute of Technology.	5:15 PM - 5:35 PM Solar ageing of advanced ceramic materials based on zirconia and alumina Diego Martínez¹. ¹CIEMAT-Plataforma Solar de Almería, Tabernas (Almería), Spain.		5:15 PM - 5:35 PM Global Cost Assessment of Hybrid CSP/PV Systems for Solar Fuel Production Andreas Rosenstiel^{1, 2}. ¹Deutsches Zentrum für Luft- und Raumfahrt, Institute of Future Fuels, Germany, ²RWTH Aachen University, Faculty of Mechanical Engineering, Germany.
5:35 PM - 5:55 PM Thermal buckling of molten salt tank floor during uniform temperature preheating Santosh Mishra¹. ¹The University of Melbourne.	5:35 PM - 5:55 PM Perovskites-based thermochemical coatings for protection of molten salt receivers Christos AGRAFIOTIS¹. ¹DLR/German Aerospace Center - Institute for Future Fuels.		5:35 PM - 5:55 PM Solar Thermal Syngas Production via Chemical Looping: REGENLOOP Project Overview Alon Lidor¹. ¹National Laboratory of the Rockies.
5:55 PM - 6:15 PM Structured iron oxide-based catalysts with emphasis on waste-derived materials, for elemental sulphur-based thermochemical energy storage in concentrated solar systems Georgia Skyfta^{1, 2}. ¹Centre for Research & Technology Hellas (CERTH), ²Aristotle University of Thessaloniki (AUTH).	5:55 PM - 6:15 PM Concentrated Solar Thermal Processing for Elaborating Mo₂C-enriched Surface Clads Aristotelis Manousakis¹. ¹Department of Mechanical Engineering, University of West Attica, 250 Thivon & P. Ralli, 122 44 Egaleo, Greece.		5:55 PM - 6:15 PM Utilization of Waste Heat from Solar Thermochemical Fuel Production for Point-Source Carbon Capture Enric Prats-Salvado¹. ¹Institute of Future Fuels, German Aerospace Center (DLR), Germany.

6:15 PM - 6:25 PM - Poster Session 1 - Solar Collectors
6:15 PM - 6:25 PM Advanced Coatings for CSP Mirror Performance Mory Houshmand¹. ¹Nanoveu.
6:15 PM - 6:25 PM Influence of size of Heliostats on LCOE of Solar power plant Sanjoy Chatterjee.

6:15 PM - 6:25 PM **The Significance of Heliostat Canting in Enhancing Solar Tower Performance** José Jimeno Moro¹.

¹Universidad Carlos III de Madrid.

6:15 PM - 6:25 PM **Temperature Distribution Characterization for Solar Thermochemical Applications with Concentrating Heliostats** Juan Pablo González-López.

6:25 PM - 6:35 PM -

Poster Session 1 - Linear Systems

6:25 PM - 6:35 PM **Submicron Chromium as Solar Selective Absorber Surface for Mid- to-High-Temperature Solar Thermal Applications** Levent Güner^{1,2}. ¹ODTÜ-GÜNAM, ²Middle East Technical University.

6:25 PM - 6:35 PM **Thermal performance of a cavity pillow - plate receiver for Linear Fresnel systems** Ana Cánovas Cabrera¹.

¹Carlos III University of Madrid.

6:25 PM - 6:35 PM **Experimental and Numerical Investigation of Internal Glass Baffles for Thermal Loss Reduction in a Non-Evacuated Linear Fresnel Receiver** Salman Brbhan¹, Ahmed Al Mers².

¹Faculty of Mechanical Engineering and Informatics, University of Miskolc, Miskolc, Hungary,

²Abdelmalek Essaâdi University, Tétouan, Morocco.

6:25 PM - 6:35 PM **Application of Solar Preheating of Parabolic Trough Solar Fields with Liquid Salts** Niklas C. Dicke¹.

¹Deutsches Zentrum für Luft- und Raumfahrt (DLR).

6:25 PM - 6:35 PM **Thermal modelling of a hybrid PV-CST Fresnel absorber** Nicolás Passarelli¹.

¹PROMES - CNRS laboratory, Perpignan/Odeillo, France.

6:25 PM - 6:35 PM **Getter Temperature Measurement and Absorption Capacity Assessment in Heat Collecting Elements** Christoph Hilgert¹. ¹DLR.

6:35 PM - 6:45 PM -

Poster Session 1 - Digital Tools and AI

6:35 PM - 6:45 PM **An Integrated Modelling Platform for Hybrid Renewable Power and Decarbonized Heat Systems** Patricia Santamaría Prado¹. ¹RPow Consulting S.L..

6:35 PM - 6:45 PM **Solar 4.0: The Transition to Intelligent CSP** Amaia Mutuberria Larrayoz¹. ¹CENER.

6:35 PM - 6:45 PM **Machine Learning Post-Processing of NWP Simulations for Improved Direct Normal Irradiance Estimation** Francesco Rovense¹. ¹ENEA C.R. Casaccia, Via Anguillarese, 301, 00123 Roma, Italy.

6:35 PM - 6:45 PM **GIS helps Industrial Process Heat Users meet their Decarbonization Targets cost-efficiently** Gerhard Weinrebe¹. ¹GlassPoint.

6:35 PM - 6:45 PM **Deep Reinforcement Learning for Optimal Energy Management of Hybrid CSP-PV Plants with Electric Heater Integration** Rafael Fornés¹. ¹Universidad Nacional de Educación a Distancia (UNED).

6:35 PM - 6:45 PM **How Digital Twin + AI can enhance CSP Operations** Michel Izygon¹. ¹Tietronix.

6:35 PM - 6:45 PM **AI-Driven Fault Detection and Predictive Maintenance in a 1 MWe Fresnel-ORC CSP System** Amine Moulay Taj¹. ¹Green Energy Park research platform (IRESEN/UM6P), BenGuerir, Morocco..

6:35 PM - 6:45 PM **Real-Time Flux Map Generation and Aiming Optimization for Solar Tower Systems Using Interpolation and Fast Optimization Algorithms** José González-Aguilar¹. ¹IMDEA ENERGY.

6:45 PM - 6:55 PM -
Poster Session 1 - Power Cycles

6:45 PM - 6:55 PM **Advancing Cold-Climate s-CO₂ Brayton Cycles: Gas Blends for High-Efficiency and Sustainable Power Generation** Olmo Fierros-Peraza¹. ¹Universidad Politécnica de Madrid.

6:45 PM - 6:55 PM **Impact of location on the optimum design of CO₂ mixture power cycle heat rejection unit in CSP plant** Vladimr Naumov¹. ¹University of Brescia.

6:55 PM - 7:05 PM -
Poster Session 1 - Point Focus Systems

6:55 PM - 7:05 PM **THICAV, test results solar receiver** Alvaro Chomon¹. ¹TEWER.

6:55 PM - 7:05 PM **THIcomb, modular - standard Solar Receiver** Alvaro Chomon¹. ¹TEWER.

6:55 PM - 7:05 PM **Experimental evaluation of a low-cost ceramic foam volumetric solar absorber for high-temperature renewable heat supply** Xavier Rández¹. ¹National Renewable Energy Centre (CENER).

6:55 PM - 7:05 PM **Pore-scale quantification of the “volumetric effect” in porous solar receivers** Leonardo Martins¹.
¹LAETA, IDMEC, Instituto Superior Técnico, Universidade de Lisboa.

6:55 PM - 7:05 PM **A Particle-Based Circulating Fluidised Bed for Continuous Hot Air Production in Solar Thermal Applications** Farid Jalili Jamshidian¹. ¹University of Surrey.

6:55 PM - 7:05 PM **Design, Commissioning and Testing of a Solar Receiver with Particle Heat Carriers for Solar-Driven Pyrolysis Application** Clarisse Lorreyte¹. ¹German Aerospace Center, Institute Future Fuels.

6:55 PM - 7:05 PM **Preliminary Experimental Results on Particle Pneumatic Conveying at 300°C for Application in Third-Generation Solar Tower Power Plants** Alex Le Gal¹. ¹PROMES-CNRS.

6:55 PM - 7:05 PM **Direct heating of a free-falling particle curtain in a high-flux solar furnace** Emiliano Hernández Figueroa¹.

¹Instituto de Energías Renovables, Universidad Nacional Autónoma de México.

6:55 PM - 7:05 PM **A 1D Coupled Thermal Model for the VoCoRec Solar Receiver** Thibault Popa¹. ¹Radiant.

6:55 PM - 7:05 PM **Development of a High Temperature Sodium Receiver for Solar Tower Power Plants** Alexandru Onea¹.

¹Karlsruhe Institute of Technology.

6:55 PM - 7:05 PM **Comparison of Structured and Nonstructured Porous Inserts for Tubular CSP Receivers** Hossein Ebadi¹.

¹Politecnico di Torino.

6:55 PM - 7:05 PM **Hydrothermal synthesis of CuS coatings for enhanced fluidized bed receivers** Guillermo López Quesada¹.

¹Universidad Carlos III de Madrid.

7:05 PM - 7:15 PM - Poster Session 1 - SHIP

7:05 PM - 7:15 PM **Parabolic trough collectors for industrial process heat in Italy** Vladimr Naumov¹. ¹University of Brescia.

7:05 PM - 7:15 PM **Implementing an on-Sun Experimental Platform: Solar Heat for Industrial Process** David D'Souza¹.

¹Universidad Nacional de Educación a Distancia (UNED).

7:05 PM - 7:15 PM **Evaluation of Two Parabolic Trough Pilot Plants and Development of New Assembly Jigs** Navina Konz¹.

¹German Aerospace Center e. V..

7:05 PM - 7:15 PM **Economic Analysis: Minimal Conditions for the Competitiveness and Adoption of CSP Central Tower Plants. A study for the Mexican territory.** Claudio A. Estrada¹. ¹Universidad Nacional Autónoma de México.

7:05 PM - 7:15 PM **Selecting Optimum Row Distance and Field Azimuth Angle of Parabolic Trough Fields** Klaus-Juergen Riffelmann¹. ¹GlassPoint.

7:05 PM - 7:15 PM **Pareto-optimal PTC-SHIP Design for Industrial Decarbonization in Central Asia: A Tashkent Case Study** Azizboy Khaitmukhamedov¹. ¹Physical-Technical Institute of Uzbekistan Academy of Sciences.

7:05 PM - 7:15 PM **Design and Implementation of a Solar Tracking System for Process Heat Applications** Iván Salgado-Tránsito¹.

¹Centro de Investigaciones en Óptica, A.C..

7:05 PM - 7:15 PM **Hybrid Solar Technology for Industrial Process Heat** Luke McLaughlin¹. ¹Sandia National Laboratories.

7:05 PM - 7:15 PM **Design Considerations for the Thermal Energy Storage Testbed (TESBed)** Luke McLaughlin¹.

¹Sandia National Laboratories, USA.

7:15 PM - 11:45 PM -

Gala Dinner

Thursday, 17 September 2026

9:00 AM - 9:30 AM -

Poster Session 2 - Solar Chemistry

9:00 AM - 9:30 AM **A Hybrid-Illuminated Ceria-based Solar Thermochemical Reactor with a Semi-Transparent Porous ZrO₂ Absorber for CO₂ Splitting** Qi Zhang¹. ¹Southern university of science and technology.

9:00 AM - 9:30 AM **Thermochemical H₂ production via MnFe₂O₄-Na₂CO₃ cycle in a lab-scale fixed-bed reactor.** Francesco Torre¹. ¹Centre for Cooperative Research on Alternative Energies (CIC energiGUNE), Basque Research and Technology Alliance (BRTA), Alava Technology Park, Albert Einstein 48, 01510 Vitoria-Gasteiz, Spain.

9:00 AM - 9:30 AM **Optical Design of a High-Flux Solar Furnace for Photo-Thermo-Catalytic Hydrogen Production** Alba Fombona-Pascual¹. ¹TEWER.

9:00 AM - 9:30 AM **Demonstration of a Direct Solar-Heated Solid Oxide Electrolysis Reactor for CO₂ Reduction** Runsen Wang^{1,2}, Meng Lin^{1,2}. ¹Department of Mechanical and Energy Engineering, Southern University of Science and Technology, ²SUSTech Energy Institute for Carbon Neutrality, Southern University of Science and Technology.

9:00 AM - 9:30 AM **Development of a solar particle receiver for ultra-high temperatures required by thermochemical processes** Johannes Grobbel¹. ¹German Aerospace Center (DLR), Institute of Future Fuels, 52428 Jülich, Germany.

9:00 AM - 9:30 AM **Optimization of the Gibbs free energy minimization method for spatial discrete simulation** Constantin Peters¹. ¹Solar-Institute Jülich, FH Aachen University of Applied Sciences, Germany.

9:00 AM - 9:30 AM **Conceptual Design and Experimental Study of Solar Driven Oxygen Permeable Membrane Reactor** Pei Wang¹. ¹Hohai University.

9:00 AM - 9:30 AM **Tail Gas Recirculation from Fischer-Tropsch-Synthesis for Redox-cycle Syngas Production** Nico Kleemeyer¹. ¹DLR, Institute of Future Fuels, Germany.

9:00 AM - 9:30 AM **Solar-Driven Pyrolysis for the Production of Enhanced-Property Biochar from Walnut Shell** N. Aracely Cisneros-Cardenas¹. ¹Departamento de Ingeniería Química y Metalurgia, Facultad Interdisciplinaria de Ingeniería, Universidad de Sonora, Blvd. Luis Encinas Johnson S/N, Hermosillo, 83000, Sonora, México.

9:00 AM - 9:30 AM **Production of synthetic solar fuels using a solar parabolic dish** Judit García-Ferrero¹. ¹Universidad de Salamanca.

9:00 AM - 9:30 AM STCHLab: A User-Friendly Python Framework for the Analysis of Solar Thermochemical Cycles Alberto de la Calle ¹ . ¹ ICP-CSIC.
9:00 AM - 9:30 AM Simulation of heat and mass transfer processes in porous media and on sun experimental investigations of Solar thermochemical reactor for hydrogen generation Jasurjon Akhatov ¹ . ¹ Physical-technical Institute.
9:00 AM - 9:30 AM Integration Strategies of Concentrated Solar Thermal with Green Hydrogen Pathways Luca Turchetti ¹ . ¹ ENEA - Italian National Agency for New Technologies, Energy and Sustainable Economic Development, Italy.
9:00 AM - 9:30 AM Design of Moving Bed Reactors for Solar Thermochemical Fuel Production aided by DEM Marc Petzold ¹ . ¹ German Aerospace Center (DLR).
9:00 AM - 9:30 AM Development of the R2Mx Proof-of-Concept Test Rig Stefan Brendelberger ¹ . ¹ German Aerospace Center DLR.
9:00 AM - 9:30 AM The Role of Agricultural Biomass Residues in Promoting Continuous Solar-Steam Gasification: An Experimental Demonstration Srirat CHUAYBOON ¹ . ¹ King Mongkut'titute of Technology Ladkrabangs Ins.

9:30 AM - 10:00 AM - Poster Session 2 - Thermal Energy Storage
9:30 AM - 10:00 AM Sustainable absorber materials made from secondary raw materials from the steel industry Charlotte Linden ¹ . ¹ Frontier Materials on Earth and in Space, German Aerospace Center, Germany.
9:30 AM - 10:00 AM Thermo-hydraulic performance of packed-bed thermal energy storage with recycled concrete aggregates: An experimental study Lihui Tu ¹ . ¹ The University of Melbourne.
9:30 AM - 10:00 AM Modular Thermal Battery for Process Heat Patricia Santamaría Prado ¹ . ¹ RPow Consulting S.L..
9:30 AM - 10:00 AM Thermal Energy Storage and Heat Transfer Behavior of Gypsum Composites with Microencapsulated PCM and Microcrystalline Cellulose Minseo Park ¹ . ¹ Soongsil University.
9:30 AM - 10:00 AM Design and Optimisation of a Thermocline Packed-Bed Thermal Energy Storage Using Ternary Molten Salts Laia Barrera Arrabal.
9:30 AM - 10:00 AM Thermal energy storage for Natrium small nuclear fast reactor plants Marcel Berz ¹ . ¹ TerraPower, LLC.
9:30 AM - 10:00 AM Pilot-Scale Demonstration of a 350-kWh High-Temperature Thermochemical Heat Storage System Integrated into an Industrial Annealing Furnace Wang Qin ^{1, 2} . ¹ Zhejiang University, ² State Key Laboratory of Clean Energy Utilization.
9:30 AM - 10:00 AM Insights into the commissioning of a high-temperature heat storage with liquid metal Florian Kreißig ¹ . ¹ Karlsruhe Institute of Technology.

9:30 AM - 10:00 AM **Experimental study of hierarchically doped calcium-based particles for high-temperature thermochemical energy storage** Jueyuan Gong¹.

¹State Key Laboratory of Clean Energy Utilization, Zhejiang University, 38 Zheda Road, Hangzhou, 310027, China.

9:30 AM - 10:00 AM **CFD-Based Numerical Analysis of a Shell-and-Tube Latent Heat Thermal Energy Storage System for Medium-Temperature Application** Borja Catalán-Echeverría^{1, 2}.

¹Public University of Navarre (UPNA), at campus Arrosadia, 31006 Pamplona, Navarra, Spain,

²Greendur Technologies S.L., Pol. Areta C/Ripagain 21, 31620 Huarte, Navarra, Spain.

9:30 AM - 10:00 AM **Data-driven optimization of PTES sub-systems** Dominic LaVigne¹, CJ Hyland¹. ¹University of Dayton.

9:30 AM - 10:00 AM **Finite element analysis of hot molten salt storage tanks in central receiver plants** Craig McGregor¹.

¹Stellenbosch University.

9:30 AM - 10:00 AM **Analytical thermal stress model for thermocline molten-salt storage tanks** Julie Van Zele^{1, 2}.

¹Department of Electromechanical, Systems and Metal Engineering - UGent, Ghent, Belgium,

²FlandersMake@UGent - Core lab EEDT-MP, Leuven, Belgium.

9:30 AM - 10:00 AM **Thermal Performance of Single- and Dual-Medium Thermocline Tanks: A Comparative CFD Study for CSP Applications** Pedro Horta¹. ¹Renewable Energies Chair, University of Évora.

9:30 AM - 10:00 AM **JCA Eni-ENEA Project: Realization of a Coupled PCM and Concrete Thermocline TES System with Molten Salt as Heat Transfer Fluid** Stefano Cardamone¹. ¹Eni.

9:30 AM - 10:00 AM **Effect of Sample Mass and Reaction Atmosphere on the Thermochemical Cycling of Strontium Aluminate** Adriana Santamaria Padilla¹. ¹Universidad Autónoma Metropolitana Iztapalapa.

9:30 AM - 10:00 AM **High Temperature Thermochemical Storage in Bubbling Fluidized Bed Systems** Luca TURCHETTI¹. ¹ENEA.

9:30 AM - 10:00 AM **Thermal Stress and Fatigue Life Analysis of Molten Salt Thermal Storage Tank** Chuncheng Zang^{1, 2}.

¹Institute of Electrical Engineering, Chinese Academy of Sciences, ²University of Chinese Academy of Sciences.

9:30 AM - 10:00 AM **Thermal Cycling Tests of Packed-Bed Filler Material in Liquid Pb as Heat Transfer Fluid** Renate Fetzer¹.

¹Karlsruhe Institute of Technology.

9:30 AM - 10:00 AM **Multi-Objective Optimization of an Integrated Solar Particle Receiver-Packed-Bed TES System** Jesús Alberto Moctezuma¹. ¹Universidad de Salamanca.

9:30 AM - 10:00 AM **Preparation and thermal evaluations of molten salt- based nanofluid for enhancing thermophysical properties** Kei Watanabe¹. ¹Niigata University.

9:30 AM - 10:00 AM **Development of a novel underground heat storage for temperatures up to 400 °C** Navina Konz¹.

¹German Aerospace Center e. V..

9:30 AM - 10:00 AM Comparative assessment of thermal energy storage: Metal-wool-enhanced PCM versus metallic PCM systems Cristina Prieto ^{1,2} . ¹ Universidad de Sevilla, ² Build to Zero.
9:30 AM - 10:00 AM Electrified Thermocline TES: A Numerical Study Mattia Cagnoli ¹ . ¹ ENEA.
9:30 AM - 10:00 AM Fabrication and thermal response tests of metallic PCM and sensible/latent storage unit for solar thermal storage Taiki Yonemitsu ¹ . ¹ Niigata University.
9:30 AM - 10:00 AM Effect of Aggregates Type on Thermal Expansion and Microstructural Damage in Concrete Sensible Heat Storage Materials for Concentrated Solar Power Ismail Amarray ^{1,2} . ¹ Green Energy Park, ² Cadi Ayyad University.
9:30 AM - 10:00 AM Industrial-scale modelling of thermal ratcheting in packed-bed thermal energy storage systems Ivan Torrano ¹ . ¹ CIC energiGUNE.
WITHDRAWN 9:30 AM - 10:00 AM Modular hybrid sensible-thermochemical heat storage units made of porous perovskite ceramics Christos AGRAFIOTIS ¹ . ¹ DLR/German Aerospace Center - Institute for Future Fuels.
9:30 AM - 10:00 AM Evaluation of high entropy alloy coatings in carbon steel for high temperature molten salts Angel G. Fernandez ¹ . ¹ University of the Basque Country.
9:30 AM - 10:00 AM Thermo-Mechanical Stability of Oxide Ceramics for High-Temperature Thermal Energy Storage Dipesh Dubey ^{1,2} . ¹ ETH Zurich, ² EMPA.
9:30 AM - 10:00 AM Steam Corrosion Mechanisms in Carbide and Oxide Refractories at High Temperatures Gurdial Blugan ¹ . ¹ EMPA.
9:30 AM - 10:00 AM Role of Grid Location, Placement, and Properties in Layered Packed-Bed TES Systems Onur Taylan ^{1,2} . ¹ ODTÜ Center for Solar Energy Research and Applications, Middle East Technical University, ² Mechanical Engineering Dept., Middle East Technical University (METU).
9:30 AM - 10:00 AM Development of Testing Stand for Hydrostatic Molten Salt Pump Jan Škarohlid ¹ . ¹ Czech Technical University in Prague.
9:30 AM - 10:00 AM New insights into the corrosion mechanism between molten nitrate salts and slags for packed bed thermocline systems Leonard Koch ¹ . ¹ German Aerospace Center Cologne.
9:30 AM - 10:00 AM Molten chloride salts with metal additives for increased energy storage efficiency Daniela Franke ¹ . ¹ Dresden University of Technology.
9:30 AM - 10:00 AM Introducing a reduced order model for the simulation of latent heat thermophotovoltaic batteries Myrto Zeneli ¹ . ¹ Universidad Politécnica de Madrid.
9:30 AM - 10:00 AM State-of-Charge Evaluation Of A Bio-Inspired Latent Thermal Energy Storage Tank Luisa F. Cabeza ¹ . ¹ University of Lleida.

9:30 AM - 10:00 AM **Economic comparison of concrete and stainless-steel molten salt tanks for CSP applications** Luisa F. Cabeza¹. ¹University of Lleida.

9:30 AM - 10:00 AM **Smart Optimization of Sustainable Thermal Storage: Bridging Experiments, Simulation, and Neural Networks.** Andrea Ramayo Muñoz¹. ¹Universidad Carlos III de Madrid.

10:00 AM - 10:30 AM -
Coffee Break

10:30 AM - 12:10 PM - (C) Johannisberg Linear Focus & Power Cycles	10:30 AM - 12:30 PM - (B) Silberberg Point Focus 1	10:30 AM - 12:30 PM - (D) Ahrtal SHIP 1	10:30 AM - 12:30 PM - (A) Großer Saal Thermal Energy Storage 4
10:30 AM - 10:50 AM Startup and Commissioning of the Generation 3 Particle Pilot Plant - G3P3 Luke McLaughlin ¹ . ¹ Sandia National Laboratories, USA.	10:30 AM - 10:50 AM Thermal Stress Analysis of Modular CSP Receivers Equipped with Triply Periodic Minimal Surfaces Hossein Ebadi ¹ . ¹ Politecnico di Torino.	10:30 AM - 10:50 AM Decarbonizing Industry - A Comparison of Attributable Greenhouse Gas Emissions of Industrial Process Heat from PV and Enclosed Parabolic Trough Systems Markus Balz ¹ . ¹ GlassPoint.	10:30 AM - 10:50 AM Investigation of a hybrid sensible/latent thermal energy storage system for medium-temperature applications Francesco Rovense ¹ . ¹ ENEA Casaccia Research Centre.
10:50 AM - 11:10 AM Towards Functionally Graded Tubular Volumetric Absorbers for CSP Applications Rafael Pérez Álvarez ¹ . ¹ Carlos III University of Madrid.	10:50 AM - 11:10 AM Investigation of Particle Flow and Radiative Performance for Repeated Porous Obstructions in Obstructed Flow Receivers Andrew Schrader ^{1, 2} . ¹ University of Dayton, ² University of Dayton Research Institute.	10:50 AM - 11:10 AM Parabolic Troughs for Industrial Process Heat: Current Status, Local Content and Carbon Footprint Dirk Krüger ¹ . ¹ German Aerospace Center.	10:50 AM - 11:10 AM Electrified metallic PCMs strategies to develop controllable high-performance latent heat storage systems Cristina Prieto ¹ . ¹ Universidad de Sevilla.

11:10 AM - 11:30 AM Surrogate-Based Design Optimization of CSP Steam Cycle Eylül Gedik ¹ . ¹ RWTH Aachen University, Institute of Power Plant Technology, Steam and Gas Turbines.	11:10 AM - 11:30 AM Optical-Thermal Modeling and Techno-Economic Optimization of a Rotary Kiln Particle Receiver Marco Colombi ¹ . ¹ Politecnico di Milano.	11:10 AM - 11:30 AM Optimal design of two hybrid solar systems for decarbonized industrial process heat and electricity Raphaël Albert ¹ . ¹ CEA Liten.	11:10 AM - 11:30 AM Pilot-scale validation platform for electrified TES Anton Lopez-Roman ¹ , Cristina Prieto ¹ . ¹ Universidad de Sevilla.
11:30 AM - 11:50 AM Experimental and numerical evaluation of a pillow-plate air receiver for Linear Fresnel Reflectors Ana Cánovas Cabrera ¹ . ¹ Carlos III University of Madrid.	11:30 AM - 11:50 AM Understanding Convective Losses from a Centrifuging Cavity Receiver Under Wind Onur Polat ¹ . ¹ DLR Institute of Solar Research.	11:30 AM - 11:50 AM Hybridization of CST and High Temperature Heat Pumps for Process Steam: High Solar Coverage Rate and Competitive LCOH Lutz Meyer ¹ . ¹ Hochschule Hannover, University of Applied Sciences and Arts, Germany.	11:30 AM - 11:50 AM A Dual Storage - Heat Exchanger Concept for Particle Solar Receivers and Supercritical Cycles María José Montes ¹ . ¹ National University of Distance Education (UNED).
11:50 AM - 12:10 PM Energy analysis-based design of an insulating cover for molten salt parabolic trough collectors Francesco Rovense ¹ . ¹ ENEA Casaccia Research Centre.	11:50 AM - 12:10 PM Experimental Validation of an Air-Cooled Secondary Concentrator Module for High-Flux Applications Maximilian Drexelius ¹ . ¹ German Aerospace Center (DLR), Institute of Solar Research.	11:50 AM - 12:10 PM SPHERE - Solar Process Heat: Extended Regional Exploration Sayra Gomez Garcia ¹ . ¹ Fraunhofer ISE.	11:50 AM - 12:10 PM Test Facility for Long-Term Thermal Ratcheting Measurements in Cylindrical Packed-Bed Thermal Energy Storage Moritz Bitterling ¹ . ¹ Fraunhofer ISE.
	12:10 PM - 12:30 PM Operation results and experience of the 1 MWth quartz tube bundle solid particle solar receiver Fengwu Bai ¹ . ¹ Institute of Electrical Engineering, Chinese Academy of Sciences.	12:10 PM - 12:30 PM Techno-economic assessment of concentrated solar thermal process heat in Germany and Türkiye Shervin Balali ¹ . ¹ German Energy Agency (dena).	12:10 PM - 12:30 PM Charging and Discharging Performance Enhancement and Parametric Optimization of Shell-and-Tube Latent Heat Thermal Energy Storage System with Solid-Solid PCM Niketan Choudhary ¹ . ¹ Mr..

12:30 PM - 1:45 PM -
Lunch

1:45 PM - 3:45 PM - (C) Johannisberg Operation & Maintenance 1	1:45 PM - 3:45 PM - (B) Silberberg Hybrid systems	1:45 PM - 3:25 PM - (D) Ahrtal SHIP 2	1:45 PM - 3:45 PM - (A) Großer Saal Thermal Energy Storage 5
1:45 PM - 2:09 PM Reconstruction and Failure Analysis of a Linear Fresnel Solar Plant After Tornado Impact Miguel Frasset ¹ . ¹ SOLATOM CSP S.L.	1:45 PM - 2:05 PM Hybrid Allam Cycle with perovskite reactor for power generation, O2 recovery, and byproduct refinement Daniel Santos Lopez ¹ , Jacob Brenner ¹ . ¹ University of Dayton.	1:45 PM - 2:05 PM Decarbonization of ceramic kilns through innovative solar-powered energy supply concepts Martin Bolten ¹ . ¹ German Aerospace Center (DLR) Institute of Solar Research, Germany.	1:45 PM - 2:05 PM Aspect Ratio Analyses of a Radial-Flow Packed Brick Thermal Energy Storage System for High-Temperature Industrial Applications Onur Taylan ^{1, 2} . ¹ ODTÜ Center for Solar Energy Research and Applications, Middle East Technical University, Türkiye, ² Mechanical Engineering Dept., Middle East Technical University, Türkiye.
2:09 PM - 2:33 PM Analysis of Molten Salt Quality in Commercial CSP Plants Thomas Bauer ¹ . ¹ German Aerospace Center (DLR) Institute of Engineering Thermodynamics, 51147 Köln, Germany.	2:05 PM - 2:25 PM Techno-Economic and Environmental Assessment of a Hybrid PV-CSP Plant with cascade PCM TES Tanima Sharma ¹ . ¹ KTH Royal Institute of Technology.	2:05 PM - 2:25 PM Solar Tower Integration for Flexible Heat Electrification in the Frit Smelting Industrial Process: A Techno-Economic Assessment Delight Ezech ¹ . ¹ KTH Royal Institute of Technology.	2:05 PM - 2:25 PM Characterizing the Complex Permittivity of Molten Salts for Microwave-Assisted Thermal Storage Mattia Cagnoli ¹ . ¹ ENEA.
2:33 PM - 2:57 PM Thermocline Management Approaches in High Temperature Thermal Energy Storage Systems Jonas Schulte ¹ . ¹ Solar-Institut Jülich of FH Aachen University of Applied Sciences.	2:25 PM - 2:45 PM Annual trade-offs between dispatchability and efficiency in an air-driven hybrid PV-CSP plant Rui Chen ¹ . ¹ IMDEA Energy.	2:25 PM - 2:45 PM Low-Carbon Solar-Driven District Heating Solutions with Seasonal Storage: Parabolic Trough vs. PV with Air Source Heat Pump Matthias Loevenich ¹ . ¹ DLR Institute of Solar Research.	2:25 PM - 2:45 PM Thermal Management of Thermophotovoltaic Cells in High-Temperature Batteries via a 10kW Thermosiphon Juan Manuel Redondo ¹ . ¹ Instituto de Energía Solar - Universidad Politécnica de Madrid.

2:57 PM - 3:21 PM Reflectance Loss Predictions for CST Mirrors: Impact of Reflectometer Choice on Soiling Model Outcomes Giovanni Picotti ¹ . ¹ Queensland University of Technology.	2:45 PM - 3:05 PM Techno-Economic Optimization of Hybrid CSP-PV Systems for Continuous Dimethyl Ether (DME) Production in Northern Chile Nicholas Chandler ¹ . ¹ Fraunhofer Institute for Solar Energy Systems ISE.	2:45 PM - 3:05 PM ATT4 Parabolic trough collector - Low ground requirements Egoitz San Miguel ¹ . ¹ TEWER.	2:45 PM - 3:05 PM Development of a Thermocline Thermal Energy Storage System in the GEN VERDE Project José F. Gallego ¹ . ¹ Empresarios Agrupados Internacional, Spain.
3:21 PM - 3:45 PM Evaluation of Commercial Inclometers for High-Precision and Long-Term Stable Tracking in Parabolic Trough Systems under Cyclic Thermal Loading Benedikt Kölsch ¹ . ¹ German Aerospace Center (DLR), Institute of Solar Research, Linder Höhe, 51147 Cologne, Germany.	3:05 PM - 3:25 PM Techno-economic assessment of a high temperature Stirling heat pump with thermal energy storage integrated with solar technologies for industrial heat generation Mateo Sanclemente ¹ . ¹ KTH Royal Institute of Technology.	3:05 PM - 3:25 PM Experimental Investigation of Heat Transfer in Direct Steam Generation Solar Receivers Samuel Mer ^{1, 2} . ¹ PROMES laboratory, ² University of Perpignan Via Domitia.	3:05 PM - 3:25 PM Demonstration of TES Brayton Battery Frikkie Botha ¹ . ¹ University of Pretoria.
	3:25 PM - 3:45 PM Experimental validation of a MW-scale molten-salt power-to-heat unit for hybrid CSP applications Stéphane Boulanger ¹ . ¹ John Cockerill S.A..		3:25 PM - 3:45 PM Experimental evaluation of steel slags as solid filler in a double layered radial-flow high-temperature packed bed TES Konstantinos Apostolopoulos-Kalkavouras ¹ . ¹ KTH - Royal Institute of Technology.

3:45 PM - 4:15 PM - Coffee Break
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4:15 PM - 5:55 PM - (C) Johannisberg Operation & Maintenance 2 / Solar Resource Analysis	4:15 PM - 5:55 PM - (B) Silberberg Emerging Concepts	4:15 PM - 5:55 PM - (D) Ahrtal Solar Collectors	4:15 PM - 5:55 PM - (A) Großer Saal Thermal Energy Storage 6
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4:15 PM - 4:35 PM HelioHealth - Development and Experimental Validation of a Cost-Efficient Condition Monitoring System for Heliostat Drive Units Benedikt Kölsch¹. ¹German Aerospace Center (DLR).	4:15 PM - 4:35 PM Conversion of Solar Radiation Spillage with Concentrating Photovoltaics: Solar Tests of Receiver-Integrated CPV Modules Eckhard Lüpfer¹. ¹DLR Institute of Solar Research.	4:15 PM - 4:35 PM Wind Loads on Heliostats: Determining Dynamic Amplification using Artificial Intelligence Lukas Jäger¹. ¹DLR - Institute of Solar Research.	4:15 PM - 4:35 PM Steam as an Alternative to Nitrogen Purge in Continuous High-Temperature Thermochemical Energy Storage Systems Juve Ortiz Ulloa^{1, 2}. ¹ETH Zurich, ²Oregon State University.
4:35 PM - 4:55 PM High-Temperature Creep Performance of Stainless Steel Exposed to Solar Salt Sergio Ardila-Parra¹. ¹Universitat de Barcelona.	4:35 PM - 4:55 PM Receiver Design Optimization for Passive Flow Regulation in an Open Volumetric Air Receiver Laura C. Alonso-Pardo¹. ¹CIEMAT.	4:35 PM - 4:55 PM Injection Molded Components for Most Cost-Effective Heliostats Andreas Pfahl¹. ¹German Aerospace Center (DLR).	4:35 PM - 4:55 PM Improved performance and operation strategy of a Directly Irradiated Fluidized Bed Autothermal Reactor Stefano Padula¹. ¹Consiglio Nazionale delle Ricerche, Istituto di Scienze e Tecnologie per l'Energia e la Mobilità Sostenibili.
4:55 PM - 5:15 PM Microscopic Corrosion Spot Evolution on Solar Reflectors Johannes Wette¹. ¹CIEMAT-PSA.	4:55 PM - 5:15 PM A Combined Photon-Enhanced Thermionic Emission and Thermodynamic Solar Power System Hao Qiu^{1, 2}. ¹Shandong University, ²Imperial College London.	4:55 PM - 5:15 PM Design and Optimization of the Optical Systems for a Beam-Down Concentrated Solar Power Plant Integrating Secondary Concentrators Alan Giocoli¹. ¹CIEMAT-PSA.	4:55 PM - 5:15 PM Microstructure-Stabilized Cu-Doped SrCO₃ for High-Performance Thermochemical Energy Storage in CSP José Miguel Berrio-Sánchez¹. ¹Postgraduate in Energy and Environment, Universidad Autónoma Metropolitana - Unidad Iztapalapa.

5:15 PM - 5:35 PM Task-aware latent-space coupling for generative intra-hour solar forecasting Milon Miah ^{1,2} . ¹ German Aerospace Center (DLR), ² RWTH Aachen University.	5:15 PM - 5:35 PM Decentralized BDLFR Technology: From Design to Experimental Testing in SOLATOM Demonstrator Maider González-González ¹ . ¹ Energy Systems Engineering Group (ISE). Dpt. of Fluids and Thermal Eng., University Carlos III of Madrid..	5:15 PM - 5:35 PM Beam Splitter for Modular Prototype Receiver Testing in a Solar Furnace Thorsten Denk ¹ . ¹ Ciemat-PSA.	5:15 PM - 5:35 PM Experimental validation of thermochemical energy storage unit based on perovskite 3D-structures Mathias Pein ¹ . ¹ German Aerospace Center (DLR) - Institute of Future Fuels.
5:35 PM - 5:55 PM Reinforcement Learning-Based Dispatch of a Hybrid CSP+BESS Plant Under Extreme Price Volatility in Chile Cristóbal Parrado ¹ . ¹ universidad andrés bello.	5:35 PM - 5:55 PM Hybridizing CSP Tower Plants with Cold Thermal Storage to Enhance Power Block Efficiency Castelnau Benjamin ¹ . ¹ EDF R&D.	5:35 PM - 5:55 PM Experimental and Numerical Study on Tower Solar Heat Collection Using Calcium-based Particles in a Modified Sliding-bed Receiver Xiangyu Xie ¹ . ¹ State Key Laboratory of Clean Energy Utilization, Zhejiang University, China.	5:35 PM - 5:55 PM Experimental Study on Particle Residence Time Characteristics in a Continuous-Feeding Bubbling Fluidized Bed Huixin Zhang ¹ . ¹ Xi'an Jiaotong University.

6:35 PM - 6:40 PM - Poster Session 3 - Advanced Materials
6:35 PM - 6:40 PM Sandwich facet - resilience solar reflector Egoitz San Miguel ¹ . ¹ TEWER.
6:35 PM - 6:40 PM Floor Fabrication Alternatives to Minimize Residual Stress and Distortion in Molten Salt Storage Tanks Julian Osorio ¹ . ¹ National Laboratory of the Rockies.
6:35 PM - 6:40 PM New Generation of Anti-soiling Coatings Cured by UV radiation for Solar Reflectors Naia Barandica ^{1,2} . ¹ Universidad Autónoma de Madrid. Escuela de Doctorado, ² CIEMAT.
6:35 PM - 6:40 PM Exploring Highly Transparent Anti-Soiling Coatings for Solar Applications GEMA SAN VICENTE DOMINGO ¹ , NAIA BARANDICA ^{1,2} . ¹ CIEMAT-PSA, ² Universidad Autónoma de Madrid. Escuela de Doctorado.
6:35 PM - 6:40 PM Experimental investigation of a single-column vertical electric heater for preheated olivine particles in CSP: effect of annular gap and flow rate Salvatore Guccione ¹ . ¹ KTH Royal Institute of Technology.
6:35 PM - 6:40 PM Airfoil-enhanced gravity moving bed electric heater for olivine particles in CSP: extended cold-flow experiments and flow-based heat-transfer assessment Salvatore Guccione ¹ . ¹ KTH Royal Institute of Technology.

6:35 PM - 6:40 PM Design and analysis of a novel moving packed bed shell and tube particle to supercritical CO2 heat exchanger for the Generation 3 Particle Pilot Plant Hendrik Laubscher ¹ . ¹ Sandia National Labs.
6:35 PM - 6:40 PM Numerical Characterization of Optimized Cellular Absorbers for High-Temperature OVR Based on Experimental Down-Selection Antonio Avila-Marin ¹ . ¹ CIEMAT.
6:35 PM - 6:40 PM Solar hydrothermal carbonization of Sargassum spp. of the Mexican Caribbean for water remediation Camilo A. Arancibia-Bulnes ¹ . ¹ Instituto de Energías Renovables, Universidad Nacional Autónoma de México.
6:35 PM - 6:40 PM Durability of novel solar reflector materials under UV radiation Daniela Molina Hernandez ¹ . ¹ CIEMAT (Centre for Energy, Environmental and Technological Research).
6:35 PM - 6:40 PM Collector Ring Material Erosion Caused by Ceramic Particles Ana Cleia González Alves ¹ . ¹ German Aerospace Center.
6:35 PM - 6:40 PM Angular Robust Optimization of Spectral-Splitting Coatings for PV-CST hybridization Antoine Grosjean ^{1,2} . ¹ EPF, ² PROMES-CNRS.
6:35 PM - 6:40 PM Molten nitrate corrosion of 310N stainless steel under accelerated condition Srinivasan Swaminathan ¹ . ¹ Bundesanstalt für Materialforschung und -prüfung (BAM).

6:40 PM - 6:45 PM - Poster Session 3 - Emerging Concepts
6:40 PM - 6:45 PM Expanding the BDLFR concept: A study of multifocality and decentralization Maider González-González ¹ . ¹ Energy Systems Engineering Group (ISE). Dpt. Fluids and Thermal Eng., University Carlos III of Madrid..
6:40 PM - 6:45 PM Multifocal concept for BDLFR new solar fields Maider González-González ¹ . ¹ Energy Systems Engineering Group (ISE). Dpt. Fluids and Thermal Eng., University Carlos III of Madrid..
6:40 PM - 6:45 PM Concept Design of CO2-MeOH Dual Cargo Carrier with Optimized Cargo Operation Euichan Lee ¹ . ¹ Korea Advanced Institute of Science and Technology.
6:40 PM - 6:45 PM Solar Collector and Concentrator System Lance Macklin ¹ . ¹ Southampton University.
6:40 PM - 6:45 PM CFD simulations of carbon dioxide as heat transfer fluid in parabolic trough collectors; investigation of the convective heat transfer coefficient Joakim Byström ¹ . ¹ Absolicon.
6:40 PM - 6:45 PM Solar one-step Invar alloy production Bastien Sanglard ¹ . ¹ Max-Planck-Institut for sustainable materials.
6:40 PM - 6:45 PM Towards The Next Generation Power Cycles Coupling Concentrated Solar Technologies & Hybrid Thermal Energy Storage (COOPERANT EU project) Patricia Royo ¹ . ¹ IDENER Research and Development AIE, C. Early Ovington 24-8, E-41300, Seville, Spain.

6:40 PM - 6:45 PM Corrosion resistance of sol-gel YSZ-coated alloy 230 in a molten quaternary chloride mixture for CSP applications at 750 °C. Francisco Javier Pérez.
6:40 PM - 6:45 PM Comparative Oxidation Behavior of AISI 304L in Li- Eutectic and Ca-Eutectic Ternary Nitrate Salts at 550°C. Francisco Javier Pérez.
6:40 PM - 6:45 PM Development of Materials and Processes for In-Situ Refurbishment of Receiver Coatings Thanks & Regards Yaniv Binyamin.
6:40 PM - 6:45 PM Fabrication and On-Sun Performance Evaluation of an Additively Manufactured High Operating Temperature SiC Solar-Thermal Air Receiver (HOTSSTAR) Test Module Kenneth Armijo ¹ . ¹ Sandia National Laboratories.
6:40 PM - 6:45 PM Forensics Assessment of an Industrial Scale Molten Salt Test Loop (MSTL) Kenneth Armijo.

6:45 PM - 6:50 PM - Poster Session 3 - Measurement Systems
6:45 PM - 6:50 PM Laboratory test on an optical system for solar collection and fiber transport Daniela Fontani ¹ . ¹ CNR Istituto Nazionale di Ottica.
6:45 PM - 6:50 PM Application of ISO 24194 normative in solar field performance contracting for linear-focus CSP plants Egoitz San Miguel ¹ . ¹ TEWER.
6:45 PM - 6:50 PM Validation of HelioscharPlus Performed on a Commercial Heliostat at Medium Range Kontxi.I Aginaga Etxamendi ¹ . ¹ National Renewable Energy Centre of Spain.
6:45 PM - 6:50 PM Gas solubility in Heat Transfer Fluids Jung Christian ¹ . ¹ Deutsches Zentrum für Luft- und Raumfahrt e. V. (DLR).
6:45 PM - 6:50 PM Geometric Calibration of a Solar Furnace using Distance Meter Laser, MATLAB Modelling and Tonatiuh Ray-Tracing Javier García Borja ¹ . ¹ Universidad de Sevilla (US).
6:45 PM - 6:50 PM Design and Validation of a Water-Cooled Calorimeter for Concentrated Solar Power at 50 kW Lucas Jonath ¹ . ¹ Deutsches Zentrum für Luft- und Raumfahrt e.V..
6:45 PM - 6:50 PM Insights from testing a heliostat according to the IEC PT 62862-4-3 heliostat design and test standard Stephanie Meyen ¹ . ¹ National Laboratory of the Rockies.
6:45 PM - 6:50 PM Improved Flux Density Measurement for a Solar Thermochemical Receiver-Reactor Using FMAS-II Fabio Pierno ¹ . ¹ German Aerospace Center, Germany (DLR).
6:45 PM - 6:50 PM HelioLIMPIO: Drone Based Cleanliness Monitoring for Solar Fields Maitane Ferreres Eceiza ¹ . ¹ Fraunhofer Institute for Solar Energy Systems ISE.

6:45 PM - 6:50 PM **Thermal conductivity measurement of molten Salt-Metal-Systems using the transient hot-wire method** Johannes Winter¹. ¹Technische Universität Dresden.

6:45 PM - 6:50 PM **The Formation of Nitrogen Oxides from Molten Salts** Christian Jung¹.
¹Deutsches Zentrum für Luft- und Raumfahrt e. V..

6:45 PM - 6:50 PM **OcuPHLUX: An accessible GUI tool for estimating reflected irradiance and ocular hazard.** Aaron Spieles¹.
¹Sandia National Laboratories.

6:50 PM - 6:55 PM -
Poster Session 3 - Operations and Maintenance

6:50 PM - 6:55 PM **Comparative Structural Analysis of Molten Salt Thermal Energy Storage Tank Sizing** Julian Osorio¹.
¹National Laboratory of the Rockies.

6:50 PM - 6:55 PM **ProSolNetz - Yield monitoring of CST-Plants** Stefan Mehnert¹. ¹Fraunhofer Institut for Solar Energy Systems (ISE).

6:50 PM - 6:55 PM **Real-Time Heliostat Aiming under DNI Forecasts and Creep Damage Constraints** Chiara Lupi^{1, 2}.
¹Politecnico di Milano, ²Queensland University of Technology.

6:50 PM - 6:55 PM **Automated Assessment of Rain Impact on the Reflectance of Soiled Mirrors** Giovanni Picotti¹.
¹Queensland University of Technology.

6:50 PM - 6:55 PM **Solar Absorber Coating under Extensive Thermal Cycling** Florian Wiesinger¹. ¹German Aerospace Center (DLR).

6:50 PM - 6:55 PM **A Greedy Algorithm for Cleaning Pathways in CSP** Cody B. Anderson¹. ¹Politecnico di Milano.

6:50 PM - 6:55 PM **Preliminary Framework for a Structural Health Monitoring Digital Twin of Molten-Salt External Tubular Receivers** Rafael Pérez-Álvarez¹. ¹Carlos III University of Madrid.

6:55 PM - 7:00 PM -
Poster Sessions 3 - Hybrid Systems

6:55 PM - 7:00 PM **Upgrading a Central Receiver CSP plant to a Pumped Thermal Energy Storage System** José Rubén Pérez-Domínguez^{1, 2}. ¹Rafael Mariño Chair on New Energy Technology, Comillas-ICAI, Spain,
²Institute for Research in Technology, Comillas-ICAI, Spain.

6:55 PM - 7:00 PM **Economic evaluation of MW scale particle hybrid CSP-PV plant** Bo LIU¹. ¹EDF R&D.

6:55 PM - 7:00 PM **Techno-economic assessment of solar-assisted industrial heat pumps for process heat in copper heap leaching** Carlos Felbol¹. ¹Fraunhofer Chile Research.

6:55 PM - 7:00 PM **Bi-level optimization for hybrid energy system combined with concentrated solar power plant** Keqin Wang¹.
¹Zhejiang University.

6:55 PM - 7:00 PM **Modeling Hybrid CST Systems for Industrial Heat: Enhancements in the greenius Simulation Tool** Matthias Loevenich¹. ¹DLR e.V..

6:55 PM - 7:00 PM **Management Strategy and Dynamic Validation of a Thermocline-Based Hybrid CST-EH-TES Plant in the GEN VERDE Project** José F. Gallego¹. ¹Empresarios Agrupados Internacional, Spain.

7:00 PM - 7:05 PM -
Poster Session 3 - Analysis and Simulation

7:00 PM - 7:05 PM **Daily and Annual Energy Dynamics in the eLLO Concentrated Solar Power Plant** Valentine Grange¹.
¹CNRS - PROMES.

7:00 PM - 7:05 PM **Integration Layouts and Techno-economic Performance Evaluation for an Innovative TES Based on Recycled Ceramic Materials for CSP** Patricia Santamaría Prado¹. ¹RPow Consulting S.L..

7:00 PM - 7:05 PM **Numerical and Experimental Investigation on Multi-Stage Heat Transfer Characteristics of a Solid Particle Receiver** Qiang Yu¹. ¹China Agricultural University.

7:00 PM - 7:05 PM **Modelling the Effect of Tracking Error on Multifaceted Dish System Performance for High-Temperature Applications** Abhinav Rajan¹. ¹University of Pretoria, Pretoria 0028, South Africa.

7:00 PM - 7:05 PM **Direct and indirect parameter influences on key performance indicators of concentrated solar power systems** Falko Schneider¹. ¹Solar-Institut Jülich of FH Aachen University of Applied Sciences.

7:00 PM - 7:05 PM **Techno-Economic Optimization of Hybrid PV-CST-TES Systems for Industrial Process Heat: Assessing Power-to-Heat Integration** Salvatore Guccione¹. ¹KTH Royal Institute of Technology.

7:00 PM - 7:05 PM **Optimization of Cleaning Capacity for Cleaning Vehicle in CSP Plants Based on Heliostat Field Cleaning Scheduling** Dutang Yang¹. ¹COSIN SOLAR TECHNOLOGY CO., LTD.

7:00 PM - 7:05 PM **Preliminary assessment of compressed-air storage for heliostat cleaning in a solar-driven closed-cycle micro gas turbine power plant** Francesco Rovenese¹. ¹ENEA Casaccia Research Centre.

7:00 PM - 7:05 PM **Benchmarking Modelica-based numerical models for the thermal performance assessment of parabolic trough collector plants** Mattia Cagnoli¹. ¹ENEA Casaccia Research Centre.

7:00 PM - 7:05 PM **Reinforcement Learning-Based Adaptive Aperture and Flow Control for Concentrated Solar Power Systems Under Transient Conditions** Ahmed Mohamed¹. ¹The University of New Mexico.

7:00 PM - 7:05 PM **A novel solar receiver design based on pillow-plate technology** Ángel Gonzalo López¹.

¹University Carlos III of Madrid.

7:05 PM - 7:15 PM -

Poster Session 3 - CSP Integration, Markets, and Policy

7:05 PM - 7:15 PM **Impact of location and market design on hybrid PV-CSP performance under stacked market revenues** Ana Sanchez Sanz¹. ¹KTH.

7:05 PM - 7:15 PM **CSP/CST industrials: what are your needs in standards?** Damien Jaffré¹. ¹PROMES-CNRS.

7:05 PM - 7:15 PM **Economic Potential of CSP in Mexico: Spatially Resolved TOD Factors from Five Years of Locational Marginal Price** Iván Salgado-Transito¹. ¹Centro de Investigaciones en Optica AC..

7:15 PM - 8:15 PM -

Women+ in CS event

8:15 PM - 10:15 PM -

Young Professionals Dinner

Friday, 18 September 2026

8:30 AM - 9:30 AM - (B)
Silberberg
Advanced Materials 2

8:30 AM - 10:10 AM - (D)
Ahrtal
**CSP Integration /
Commercial Systems**

8:30 AM - 10:10 AM - (C)
Johannisberg
Measurement 2

8:30 AM - 10:10 AM - (A)
Großer Saal
Point Focus 2

8:30 AM - 8:50 AM Development and Experimental Assessment of Low-Impact SiC and High-Temperature FeCrAl Absorbers for OVAR Applications Antonio Avila-Marin¹. ¹CIEMAT.	8:30 AM - 8:50 AM A Governance Model Proposal for Dissemination of Solar Heat for Industrial Processes Application: Mixed Method Approach for Designing Industrial Decarbonization Policies in Türkiye Onur Taylan^{1,2}. ¹METU, Middle East Technical University, ²ODTU GUNAM, Center for Solar Research and Applications.	8:30 AM - 8:50 AM Heliostat Calibration Test Campaign and Adaptation of SHORT for its Installation in a Real Solar Field Juan Miguel Serrano¹. ¹CENER.	8:30 AM - 8:50 AM CFD Study of a Dual-Temperature Receiver Joachim Fuchs¹. ¹Karlsruhe Institute of Technology.
8:50 AM - 9:10 AM Design and Experimental Validation of Advanced Cellular Absorbers for High-Temperature OVR systems Antonio L. Avila-Marin¹. ¹CIEMAT.	8:50 AM - 9:10 AM Critical Materials Value Chain and Domestic Manufacturing of CST Technologies for Accelerating SHIP Deployment in the U.S. Parthiv Kurup¹. ¹National Laboratory of the Rockies.	8:50 AM - 9:10 AM Integration of STRAL software into experiment analysis using OFIP Christian Raeder¹. ¹DLR.	8:50 AM - 9:10 AM Modular multi-tower concept with molten salt receiver Adrien Farinelle¹. ¹John Cockerill.
9:10 AM - 9:30 AM Thermo-fluid dynamic design and thermo-mechanical assessment of a TPMS heat exchanger for CSP applications Hossein Ebadi¹. ¹Politecnico di Torino.	9:10 AM - 9:30 AM Reframing CSP as a System Stabilization Asset Frank Dinter¹. ¹Fraunhofer Chile.	9:10 AM - 9:30 AM Closed-Loop Heliostat Control: Test Results Bernhard Adams¹. ¹Heliosync OÜ.	9:10 AM - 9:30 AM Soiling-Aware Predictive Aiming for External Receivers Using a Digital Twin Maitane Ferreres Eceiza¹. ¹Fraunhofer Institute for Solar Energy Systems ISE.
	9:30 AM - 9:50 AM HelioHelix: The Greek-Turkish Solar Energy Excellence Hub Hande Eryılmaz¹. ¹ODTÜ-GÜNAM, Türkiye.	9:30 AM - 9:50 AM Plug detection in molten salt plants using gamma ray spectroscopy Markus Reichart¹. ¹DLR.	9:30 AM - 9:50 AM Initial experimental testing of a hybrid solar-dish gas turbine for power generation, water heating and aluminium sintering Evan Humphries¹. ¹University of Pretoria.

	9:50 AM - 10:10 AM The Belenos Pilot Plant for OVR-based Solar High-Temperature Process Heat Thibault Popa ¹ . ¹ Radiant.	9:50 AM - 10:10 AM Impact of spectroradiometer measurement data on the optical efficiency of solar concentrators estimated with ray-tracing Fabienne Sallaberry ¹ . ¹ CENER, National Renewable energy center, Spain.	9:50 AM - 10:10 AM Numerical Characterization of Voronoi-Based Volumetric Absorbers for High-Temperature OVR Antonio L. Avila-Marin ¹ . ¹ CIEMAT.
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10:30 AM - 11:00 AM - **Coffee Break**

11:00 AM - 1:00 PM - (A) Großer Saal
Closing Session

1:00 PM - 2:00 PM - **Farewell Lunch**

Saturday, 19 September 2026

8:00 AM - 3:00 PM - **Technical Tour**