5th September 2023

SolDAC
FULL SPECTRUM SOLAR DIRECT AIR CAPTURE & CONVERSION

Heat Powered Cycles Conference

University of Edinburgh School of Engineering

Edinburgh, Scotland

WORKSHOP AGENDA

Hours	Event	Chair
10:30 - 12:30	Open to HPC2023 and Workshop Delegates Lecture *Theatre 2* Air Capture, Storage and Utilization Research Projects Spotlight presentations Room Lead: Isabella Quaranta; Room Support: Marwan Mohammed #90. Unlocking the scalable potential for sorbent-based DAC technologies (USorb-DAC). Jin-Yu Wang*, Johannes Schilling, Elias Moubarak, Eva Sanchez-Fernandez, Laura Herraiz, Charithea Charalambous, Fergus Mcilwaine, John Young, Mijndert van der Spek, Shaohan Chen, Vincent Dufour-Décieux, Sauradeep Majumdar, Kevin Jablonka, Joren van Herck, André Bardow, Berend Smit, Susana Garcia 1. Research Centre for Carbon Solutions, Heriot-Watt University; 2. Energy and Process Systems Engineering (EPSE); 3. ETH Zürich; 4. Laboratory of Molecular Simulation (LSMO); 5. Institut des Sciences et Ingénierie Chimiques, École Polytechnique Fédérale de Lausanne (EPFL) 6. Solverlo Limited; 7. RMI #117. SolDAC: Full Spectrum Solar-Powered Direct CO2 Capture from Air and Conversion in Ethylene. Núria Mañes, Vincenza Brancato, Stefano Brandani, Nina M. Carretero, Edgar Contreras*, Daniel Chemisana, Andrea Frazzica, Marisa Gracia, Isaac Herraiz, Harpreet Kaur, Eduard Loscos, Jaime Madrid, Santiago Maestro, Marwan Mohammed, Álex Moreno, Sebastian Murcia-Lopez, Luis Navarro-Tovar, Joan Núñez, Valeria Palomba, Isabella Cavalcante Quaranta, Alejandro Solans, Gisela Soley, Venkata Tandava, Oriol Teixidó, Mayra Tovar-Oliva, Ignacio Tudela-Montes, Paul Wright, Zhenye Xu, Giulio Santori 1. Comet Global Innovation S.L.; 2. Istituto di Tecnologie Avanzate per l'Energia "Nicola Giordano" – CNR ITAE; 3. The University Of Edinburgh; 4. Catalonia Institute for Energy Research (IREC); 5. LOMARTOV; 6. University of Lleida; 7. University of St Andrews; 8. European Innovation Marketplace #72. DACCS Roadmap to 2050: Achieving a safe, scalable, and low-cost implementation. Silvan Aeschlimann*, Charithea Charalambous, Lukas Kueng, Mijndert van der Spek, Susana Garcia, Daniel Pike #19. Demand-Side Management for Direct Air Carbon Capture and Storage: An Enabler for Low-Cost Negative Emissions? Patrik Postweiler, Mirko Engelpracht, Daniel Rezo*, Benedikt Nilges, Niklas von der Assen Long Jiang* #22. Mapping the Global Carbon Capture Efficiency of DAC. Daniel Rezo*, Patrik Postweiler, Mirko Engelpracht, Niklas von der Assen #135. Adsorption heat and mass conversion cycles for direct air capture. #52. Innovative Process Integrating Waste Heat Source Heat Pumps and Direct Air Capture Processes. Bingyao Ge*, Man Zhang, Xuancan Zhu	Mauro Luberti, *The University of Manchester, UK*

https://soldac-project.eu/

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