8th High Temperature Solid Looping Cycles Network Meeting Workshop

20-21 January 2020, Geleen, The Netherlands
Chemelot Industrial Park, room Pellinore

AGENDA

Monday, January 20, 2020

Time	Event
08:30 - 09:00	Registration & coffee
09:00 - 09:10	Welcome
	Session 1: Chemical Looping
09:10 - 09:40	The CLARA project: Chemical Looping Gasification for the Production of Biofuels Falko Marx (Institute for Energy Systems and Technology, Darmstadt)
09:40 - 10:10	Evaluation of Natural Ores and Industrial Wastes for Chemical Looping Gasification in Circulating Fluidized Bed Mode Ali Hedayati (Chalmers University of Technology)
10:10 - 10:30	Coffee break
10:30 - 11:00	The Integration of Pumped Thermal Energy Storage Fuelled by Chemical Looping with Open Cycle Gas Turbine for Power Generation and Storage Husain Bahzad (Imperial College London)
11:00 - 11:30	Chemical Looping Reforming with packed bed reactor for the production of NH3: techno-economic assessment and reactor heat management Alexandros Argyris (University of Manchester)
11:30 - 12:00	STEPWISE project Jurriaan Boon (TNO Energy Transition)
12:00 - 13:00	Lunch break
	Session 2: Carbonate Looping
13:00 - 13:30	HyPER (Bulk Hydrogen Production by Sorbent Enhanced Steam Reforming) Project Peter Clough (Cranfield University)
13:30 - 14:00	BREIN-STORM: Exploring high temperature looping in the steel industry Paul Hodgson (University of Cambridge)
14:00 - 14:30	Testing the flexibility of a circulating fluidized carbonator against flue gas load changes in a 1.7 MWth calcium looping pilot plant Borja Arias (CSIC-INCAR, Hunosa)
14:30 - 15:00	Coffee break
15:00 - 15:30	Economic optimization of Calcium Looping systems for CO2 capture in coal power plants, with thermochemical energy storage Edoardo De Lena (Politecnico di Milano)
15:30 - 16:00	Advanced CO2 capture from lime and cement plants by integration of an indirectly heated carbonate looping process Carina Hofmann (Institute for Energy Systems and Technology, Darmstadt)
16:00 - 16:30	Pilot-Scale Investigation on the Utilization of Waste Derived Fuels in the Carbonate Looping Process for CO2 Capture from Waste-to-Energy Plants Jochen Ströhle (Energy Systems and Technology, SUEZ)
16:30 - 17:00	Wrap up & Discussion
19:00 - 22:30	Dinner at Landgoed Schinvelder Hoeve

8th High Temperature Solid Looping
Cycles Network Meeting Workshop

20-21 January 2020, Geleen, The Netherlands
Chemelot Industrial Park, room Pellinore

AGENDA

Tuesday, January 21, 2020

	Session 3: CLEAN clinKER production by calcium looping process
09:00 - 9:30	**CLEANKER: overview** Stefano Consonni (LEAP/Politecnico di Milano) and Matteo Romano (Politecnico di Milano)
9:30 - 10:00	**Characterization of cement raw meal as CO2 sorbent in an entrained flow calcium looping CO2 capture system for cement plants** Matthias Hornberger (University of Stuttgart)
10:00 - 10:30	**Determination of intrinsic calcination kinetics of limestone-containing materials under rich atmospheres of CO_2** Carlos Abanades (Spanish Research Council INCAR-CSIC)
10:30 - 10:50	Coffee break
10:50 - 11:20	**Simulation of CLEANKER demonstrator reactors with versatile modelling tools** Kari Myöhänen (LUT University) and Maurizio Spinelli (LEAP)
11:20 - 11:50	**Design of the CLEANKER demonstrator: engineering and construction** Joerg Hammerich (IKN GmbH)
12:00 - 13:00	Lunch break
13:30 - 14:00	**Bus leaves for optional visit to LEILAC Demonstration Plant**
14:00 - 14:45	**Visit LEILAC Demonstration Plant**
15:00 - 15:30	**Bus leaves for Hotel Stein-Urmond**