

Program of the 7th SOLLAB Doctoral Colloquium

Monday, 21 March 2011		
08:30	Registration	
08:50	Welcoming	
	CSP	
09:00	Optical design of a solar trough concentrating system for medium- and high-concentration photovoltaics	Thomas Cooper
09:15	Linear Fresnel Reflector based Concentrating Solar Power plant: Influence of the optical accuracy of the concentrator's components	Francois Veynandt
09:40	Determination of circumsolar radiation and its effect on focusing collectors	Stefan Wilbert
10:05	Experimental characterization of 3-D heat flux distribution of a 7 kW _e solar simulator	Fabrisio Gomez
10:20	Coffee Break	
10:50	Methods to analyze the durability of solar reflectors	Florian Sutter
11:15	Study of solar materials accelerated aging to perform durability predictions	Antoine Boubault
11:40	Parametric analysis of receiver durability and efficiency at high solar flux	Eneko Setien
12:05	Lunch	
	Solar Thermochemistry	
14:00	Optical and thermodynamic considerations for a solar water splitting model	Matthias Lange
14:25	Thermal dissociation of ZnO using concentrated solar power - Reactor modeling, optimization and scale-up	Willy Villasmil
14:50	Syngas production from H ₂ O and CO ₂ over Zn particles in a packed bed reactor	Anastasia Stamatiou
15:15	Two-step solar thermochemical cycle for splitting H ₂ O and CO ₂ via ceria redox reactions	Philipp Furler
15:30	Coffee Break	
	CSP	
16:00	A solar cavity receiver packed with an array of thermoelectric converter modules-Experimentation, modeling and optimization	Clemens Suter
16:25	High temperature heat storage for thermal protection of solar power plants	David Bellard
16:50	Simulation of combined parabolic-trough solar power plants and desalination facilities in arid regions	Patricia Palenzuela
17:15	Design and implementation of a new 5 kW _e Solar ORC pilot plant at the PSA	Mercedes Ibarra
17:40	Break	
19:15	Dinner	

Tuesday, 22 March 2011		
	CO₂ capturing and Decontamination	
09:00	CO ₂ capture from air	Christoph Gebald
09:25	Temperature vacuum swing regeneration of amine functionalized solid sorbents for CO ₂ capture from air	Jan Andre Wurzbacher
09:50	Air decontamination by heterogeneous photocatalysis	Maria Muñoz-Vicente
10:15	Optimization of Solar Photo-Fenton treatment for WWTP effluents containing emerging contaminants	Lucia Prieto Rodriguez
10:40	Coffee Break	
	Modeling	
11:10	Tomography based determination of permeability and Dupuit Forchheimer coefficient of characteristic snow samples	Emilie Zermatten
11:25	Dynamic wind loads on heliostats	Felipe Vasquez
11:40	High temperature thermal storage for concentrating solar power: Model and experimental results	Giw Zanganeh
11:55	Lunch	
13:15	Outdoor Activity	
	Solar Thermochemistry	
17:15	Fuel production by reduction of CO ₂ using concentrated sunlight - A material study	Friedemann Call
17:40	Solar driven gasification of micro algal biomass in a two zone reactor- Thermodynamic analysis and reactor design	Michael Kruesi
17:55	Assessment of the hybrid sulfur cycle	Nicolas Bayer Botero
18:20	Vacuum distillation of aluminum via carbothermal reduction of Al ₂ O ₃ with concentrated solar energy	Enrico Guglielmini
18:35	Doped ceria materials for hydrogen production via two step thermochemical water splitting cycles	Alex Le Gal
19:00	Break	
19:30	Dinner	

Wednesday, 23 March 2011

CSP		
09:00	A solar particle receiver for small gas turbine systems	Wei Wu
09:25	Modeling and Characterizing a Solar Particle Receiver	Birgit Gobereit
09:50	Determination of an internal geometry for a ceramic high temperature pressurized-air solar receiver	Xavier Daguinet
10:15	Modeling and conception of a solar receiver carrying pressurized air for the PEGASE project	Benjamin Grange
10:40	Coffee Break	
11:00	An air based cavity receiver for solar trough concentrators	Roman Bader
11:25	Improved high-temperature solar receiver design for parabolic trough concentrators	Men Wirz
11:40	Experimental study of a ceramic solar receiver	Arnaud Colleoni
12:05	Theoretical proof of concept of an optimal solar receiver to produce low temperature cooling using a thermoacoustic trithermal machine	Sophie Cordillet
12:30	Closing Session	
12:50	Lunch	