

8th IIR Conference on Phase Change Materials and Slurries for Refrigeration and Air Conditioning - PCM 2009 -

Wednesday 3 June 2009			
Time	Author	Title	Room
10:30 - 12:00		Opening session	LI-HE
10:30 - 11:00	Meisel, K.-H.; Coulomb, D.; Fournaison, L.; Kauffeld, M.	Welcome	LI-HE
11:00 - 11:30	Nestler, B.	Crystallisation	LI-HE
11:30 - 12:00	Curtius, J.	Nucleation sites in atmospheric ice formation	LI-HE
12:00 - 13:20		Lunch break	Canteen
13:20 - 15:00		Overview of PCM applications around the world	LI-HE
13:20 - 13:45	Rivet, P.; Dötsch, C.	Regional overview Europe	LI-HE
13:45 - 14:10	Kawaji, M.	Regional overview Japan	LI-HE
14:10 - 14:35	Kasza, K.	Development of Ice Slurry Coolants for Industrial and Medical Applications in the USA	LI-HE
14:35 - 15:00	M.J. Wang, S. Sugiura, V. Goldstein	Regional overview rest of the world - Latest developments	LI-HE
15:00 - 15:40		Coffee break	Lab
15:40 - 17:00		Fundamental properties of ice slurry	LI-HE
15:40 - 16:00	Å. Melinder	Properties and other aspects of aqueous solutions used for single-phase and ice slurry applications	LI-HE
16:00 - 16:20	T. El Rhafiki, T. Kousksou, Y. Zeraouli, E. Schall, A. Mimet	Effect of the supercooling phenomena on the forced convective heat transfer of phase change slurry flows	LI-HE
16:20 - 16:40	S. Frank, M. Kind, M. Kauffeld	Ice slurry Generation Process: Apparatus for an experimental investigation	LI-HE
16:40 - 17:00	V. Chegnimonhan, C. Josset, H Perrhossaini	Ice slurry crystallisation based on a kinetic phase change modelisation	LI-HE
18:00 - 20:00		Welcome Reception by the Mayor of Karlsruhe	City Hall

Thursday 4 June 2009			
Time	Author	Title	Room
08:30 - 09:50		Fundamental properties of PCMs	LI-HE
08:30 - 08:50	S. Gschwander, P. Schossig	Phase change slurries as heat transfer and storage fluids for cooling applications	LI-HE
08:50 - 09:10	E. Günther, T. Schmid, H. Mehling, S. Hiebler, L. Huang	Subcooling in hexadecane emulsions	LI-HE
09:10 - 09:30	L. Huang, C. Doetsch, C. Pollerberg, P. Noeres	Low temperature paraffin phase change media	LI-HE
09:30 - 09:50	M. Delgado, A. Lázaro, J. Marín, B. Zalba	Study of the commercial PCM slurries and emulsions properties	LI-HE
09:50 - 10:20		Coffee Break	Hall
10:20 - 12:00		Ice Slurries	LI-HE
10:20 - 10:40	A. Arid, T. Kousksou, Y. Zeraoui, J.-P. Dumas, A. Mimet	Storage tank ice slurry: numerical simulation of the melting process	LI-HE
10:40 - 11:00	C.Y. Qing, Z.P. Feng, W.J. Song, R. Xiao	Study of ice mass fraction in ice slurry storage tank	LI-HE
11:00 - 11:20	V. Langlois, J. Laurent, X. Jia, W. Gautherin, L. Fournaison, A. Delahaye, L. Royon	Ice fraction measurement by using an ultrasonic method	LI-HE
11:20 - 11:40	M. Grozdek, R. Khodabandeh, P. Lundqvist	Performance comparison of a static ice-bank and dynamic ice slurry cool thermal energy storage systems	LI-HE
11:40 - 12:00	I. El Abbassi, J. Castaing-Lasvignottes, J.-P. Bedecarrats, J.-P. Dumas, A. Mimet	Energetic performance evaluation and comparison between a liquid binary mixture and an ice slurry loop for refrigeration application	LI-HE
12:00 - 13:40		Lunch break (lunch boxes provided on bus including drinks)	in bus
13:40 - 15:40		Technical visits to Fraunhofer ISE (PCM) in Freiburg and Stuttgart Hospital (ice slurry) + possibly TWK (general refrigeration research)	Stuttgart (IS) and Freiburg (PCM)
15:40 - 17:30		Coffee break (cake/cookie boxes provided on bus including iced coffee)	in bus
17:30 - 18:30		Working group meeting for members - rest can stroll through Karlsruhe	Kübler Saal West
19:00 - 23:00		Conference Dinner in Badisch Brauhaus	Badisch Brauhaus

Friday 5 June 2009			
Time	Author	Title	Room
08:30 - 09:50		PCMs in building materials	LI-HE
08:30 - 08:50	T. Haussmann, P. Schossig, L. Grossmann	Experiences with lowEX PCM chilled ceilings in demonstration buildings	LI-HE
08:50 - 09:10	P. W. Egolf, C. Muriset, D. Vuarnoz, P. Haas	Lowering and phase shifting of temperature profiles with phase change materials in Minergy houses	LI-HE
09:10 - 09:30	M. Ostry, D. Beckovsky	Influence of panels with phase change materials on the thermal stability of attic spaces	LI-HE
09:30 - 09:50	U. Stritih, V. Butala	Experimental Investigation of energy savings in buildings with PCM cold storage	LI-HE
09:50 - 10:20		Coffee Break	Hall
10:20 - 12:00		Hydrates	LI-HE
10:20 - 10:40	Y. Xie, G. Li, D. Liu, N. Liu, Y. Qi	Formation kinetics of isobutane hydrate as cool storage medium	LI-HE
10:40 - 11:00	H. Suzuki, S. Tateishi, Y. Komoda	Effect of molar ratio of counter-ions to surfactants treating trimethyloethane hydrate slurries	LI-HE
11:00 - 11:20	S. Jerbi, A. Delahaye, L. Fournaison	Characterization of CO ₂ hydrate formation	LI-HE
11:20 - 11:40	S. Wenji ¹ , X. Rui ¹ , H. Chong ¹ , H. Shihui ¹ , D. Kaijun ¹ , F. Ziping ¹	Study on sonocrystallisation of TBAB aqueous solution	LI-HE
11:40 - 12:00	S. Sekiya, T. Fujii, M. Uchida, T. Inuma	An isothermal container using phase changing material and vacuum insulation panels	LI-HE
12:00 - 13:40		Lunch break	Canteen
13:40 - 15:00		PCM and PCEmulsions	LI-HE
13:40 - 14:00	P. Schalbart, M. Kawaji	Formation of tetradecane nano-emulsions by low energy emulsification methods	LI-HE
14:00 - 14:20	T. Kousksou, P. Bruel	Encapsulated phase change material under cyclic pulsed heat load	LI-HE
14:20 - 14:40	K. Fumoto, M. Kawaji, T. Kawanami	Long term stability of phase change nano-emulsions	LI-HE
14:40 - 15:00	A. Kitanovski, P. W. Egolf	Magnetocaloric slurries with magnetic and structural phase changes and their assessment	LI-HE
15:00 - 15:30		Coffee Break	Hall
15:30 - 16:00		Closing session	LI-HE
15:30 - 16:00	L. Fournaison, M. Kauffeld	Summary of Working Group Meeting, 9 th IIR PCM Conference, Good bye	LI-HE