

CONV-09 PROGRAM

	Sunday 26 April	Monday 27 April	Tuesday 28 April	Wednesday 29 April	Thursday 30 April	Friday 1 Mai			
8.30 – 9		Registration	Keynote Lecture Kakaç	Keynote Lecture Cotta		1 day and 3 days tours	8.30 – 9		
9 – 9.30					Keynote Lecture Guo			9 – 9.30	
9.30 – 10		Opening session	Session 3	Session 5	Session 7		9.30 – 10		
10 – 10.30		Keynote Lecture Muller-Steinhagen							10 – 10.30
10.30 – 11									10.30 – 11
11 – 11.30		Session 1							11 – 11.30
11.30 – 12									11.30 – 12
12 – 12.30						12 – 12.30			
12.30 – 1							12.30 – 1		
1 – 1.30		Lunch Break	Lunch Break	Lunch Break	Lunch Break		1 – 1.30		
1.30 – 2							1.30 – 2		
2 – 2.30	Registration	Keynote Lecture El Genk	Keynote Lecture Ménézo	Session 6	Keynote Lecture Van-Gunechten		2 – 2.30		
2.30 – 3								2.30 – 3	
3 – 3.30			Session 2 + Recent Work Poster Session		Session 4	Session 8			3 – 3.30
3.30 – 4									3.30 – 4
4 – 4.30									4 – 4.30
4.30 – 5								4.30 – 5	
5 – 5.30					Keynote Lecture Vasiliev	Closing session		5 – 5.30	
5.30 – 6							5.30 – 6		
6 – 6.30							6 – 6.30		
6.30 – 7	Welcome Reception						6.30 – 7		
7 – 7.30							7 – 7.30		
7.30 – 8				Gala Dinner (to 11pm)			7.30 – 8		

International Symposium on Convective Heat and Mass Transfer in Sustainable Energy

April 26 – Mai 1, 2009, Hammamet, Tunisia

CONV-09 DETAILED PROGRAM

Sunday April 26, 2009

14h – 18h	<i>Registration</i>
18h15 – 19h15	<i>Welcome Reception</i>

Monday April 27, 2009

8h00 – 9h30	<i>Registration</i>	
9h30 – 10h	Opening Session	
10h – 10h50	Keynote lecture 1 (Chair: Sadik Kakaç) Sustainable Electricity and Water for Europe, Middle East and North Africa <i>Hans Müller-Steinhagen* and Franz Trieb</i>	
10h50 – 11h15	Coffee Break	
Session 1 : Heat and mass transfer in Building		
11h15 – 12h10	7 mn ORAL Presentations (Chair:)	
	68	Convective and Long Wavelength Radiative Transfers Modeling Inside a Closed Greenhouse During Night P.-E. Bournet , V. Winiarek
	70	Simulation of Climate Inside Tunnel Greenhouses With Vertical Walls C. Labaal, S. Zeroual, S. Bougoul
	82	Laminar Natural Convection in a Square Cavity With a Partition on the Heated Vertical Wall W. Wu , C. Y. Ching
	139	Buoyancy Induced Heat Transfer and Fluid Flow Inside a Prismatic Cavity W. Aich , A. Omri, S. B. Nasrallah
	140	Using a Zonal Model To Assess the Effect of a Heated Floor on Thermal Comfort Quality Y. Boukhris , L. Gharbi, N. Ghrab-Morcos
	151	Numerical Simulation of Natural Convection Heat Transfer in a Window With a Between-Panes Venetian Blind V. A. F. Costa

12h10 – 14h	Lunch Break	
Session 2 : Phase Change, Two-Phases Flow		
14h – 14h50	Keynote lecture 2 (Chair:) Advances an Methods of Electronics Cooling <i>Mohamed El Genk*</i>	
14h50 – 15h40	7 mn ORAL Presentations (Chair:)	
	83	Effect of the Geometry of Heat Storage Unit on Heat Transfer Characteristics W. Mohmoud, S. Khalil , H. Abdel Aziz
	102	A Fixed-Grid Two-Phase Numerical Model For Convection Dominated Solidification of the Alloy A. I. N. Korti
	107	Numerical Modelling of Heat Flow in the Continuous Casting Steel H. Saib, A. Illah N. Korti , Y. Khadraoui
	161	Heat Transfer Enhancement in Mini Channels With Nano Particules Deposit on the Heat Loaded Wall L. L. Vasiliev , A. S. Zhuravlyov, A. Shapovalov
	260	Laminar Film Condensation Heat Transfer on a Vertical, Non Isothermal, Semi-Infinite Plate J. J. Shu
15h40 – 16h	Coffee Break	
16h – 18h15	POSTER Presentations	
	66	Use of a Phase Change Material (Pcm)-Based Heat Sink For Transient Thermal Management of Electronic Components M. Faraji, H. El Qarnia , E. K. Lakhal
	83	Effect of the Geometry of Heat Storage Unit on Heat Transfer Characteristics W. Mohmoud, S. Khalil , H. Abdel Aziz
	102	A Fixed-Grid Two-Phase Numerical Model For Convection Dominated Solidification of the Alloy A. I. N. Korti
	104	Numerical Simulation of the Interaction of a Dusty Flow With an Obstacle T. V. Ershova , D. S. Mikhatulin , D. L. Reviznikov, A. V. Sposobin, V. V. Vinnikov
	107	Numerical Modelling of Heat Flow in the Continuous Casting Steel H. Saib, A. Illah N. Korti , Y. Khadraoui
	136	Numerical Investigation For Predicting the Onset of Flow Instability Under Research Reactor's Condition N. Rassoul , E. K. Si Ahmed, T. Hamidouche
	144	Critical Heat Flux Prediction in Subcooled Boiling Region Using Artificial Neural Network K. Rabah , B. Abdelkader
	161	Heat Transfer Enhancement in Mini Channels With Nano Particules Deposit on the Heat Loaded Wall L. L. Vasiliev , A. S. Zhuravlyov, A. Shapovalov
	209	Heat Transfer and Hysteresis Phenomena in Sintered Copper Fibrous Porous Coverings T. M. Wojcik

	216	Performance Characteristics of Cooler Controlled Capacity Using Hot-Gas Bypass J.-H. Choi , S.-M. Baek, B.J. Jin, W.J. Choi, C.G. Moon, H.S. Lee, J.I. Yoon
	223	Nucleate Boiling Heat Transfer on the Fin With Laser Beam Modified Surface T. Orzechowski
	226	Numerical Simulation of Thermal Protection With Water Liquid Film along an Insulated Vertical Channel M. Feddaoui , Y. El Hammami, S. Senhaji, T. Mediouni, A. Mir
	227	Numerical Study in Condensing a Liquid Refrigerant (R134A) Film Along a Vertical Channel Y. El Hammami, M. Feddaoui , T. Mediouni, A. Mir
	234	Pool Boiling on Micro-Fin Structures Limited With Wire Net R. Pastuszko
	260	Laminar Film Condensation Heat Transfer on a Vertical, Non Isothermal, Semi-Infinite Plate J. J. Shu
16h – 18h15	Recent Work Poster Session	
	112	Cfd Prediction of the Reynolds Number Effect on the Choice of Rushton Turbines System W. Chtourou , M. Ammar, Z. Driss, M. S. Abid
	154	A Numerical Study of Flow Parallel To Tube Bundles Using Different Rans Models A. Merzoug, F. Billard, A. Sabeur-Bendehina, Y. Addad
	225	Simulation of the Thermohydraulics Parameters in Vaporizer Tubes by Kandlikar Model A. Benretem, D. Khalfa , I. Meghlaoui, N. Zirari
	249	Numerical Investigation on Natural Convection in Convergentvertical Channels With Porous Media B. Buonomo, O. Manca, S. Nardini
	257	Experimental Study of a Solar Plan Distiller M. Abdelkarim , B. Bounegta
	258	Sudy of Energy Balance for a Horicultural Greenhouse With the Use of SIMULINK B. Bounegta , M. Abdelkarim

Tuesday April 28, 2009

Session 3 : Heat exchangers, Jets		
8h30 – 9h20	Keynote lecture 3 (Chair: Jacques Padet) Analysis of Two-Phase Flow Dynamic Instabilities in Vertical and Horizontal In-Tube Boiling Systems Sadik Kakaç	
9h20 – 9h55	7 mn ORAL Presentations (Chair: Jacques Padet)	
	127	Thermal Convexity of Heat Exchangers M.-A. Abdelghani-Idrissi , F. Kadour, D. Seguin, N. Mouhab

	132	Algorithm For Calculation and Realization of Generalized Method For Comparison of Effectiveness of Different Types of Compact Heat Exchangers With Enhancement of Convective Heat Exchange in Ducts V. Vasilyev, S. Vinokurova
	210	Minimum Mass Polymer Seawater Heat Exchanger For Lng Application A. Bar-Cohen , P. Luckow, P. Rodgers
	218	New Measuring Method For the Local Heat Transfer in Micro-Structured Heat Exchanger Channels Ch. Klein
9h55 – 10h15	Coffee Break	
10h15 – 11h05	7 mn ORAL Presentations (Chair:)	
	72	Numerical Investigation of Inlet Condition Effect on Thermo-Fluid Characteristics of Turbulent Plane Jet E. Faghani , H.A. Ardakani, S.A.Niaki, N.S. Vaghefi, B. Farhanieh
	126	On the Numerical Modeling of Impinging Jets Heat Transfer M. Bovo , S. Etemad, L. Davidson
	180	Experimental Study of Heat Transfer Intensification Using Microjets D. Mikielewicz , T. Muszynski
	214	Cfd Modeling of a Synthetic Jet Actuator M. Dghim, M. Ben Chiekh
	233	Heat Transfer Characteristics of a Horizontal Cylinder Under impingment of Laminar Upward-Directed Slot Jet Flow S. Amiri , K. Habibi, M. Ashjaee
	259	Impact of The Temperature Gradient Between Twin Inclined Jets and an Oncoming Crossflow on Their Resulting Heat Transfer A. Radhouane, N. Mahjoub, H. Mhiri, G. Le Palec, P. Bournet
11h05 – 12h30	POSTER Presentations	
	72	Numerical Investigation of Inlet Condition Effect on Thermo-Fluid Characteristics of Turbulent Plane Jet E. Faghani , H.A. Ardakani, S.A.Niaki, N.S. Vaghefi, B. Farhanieh
	73	Numerical Investigation of Flow and Heat Transfer Characteristics From an Impinging Jet on a Circular Cylinder E. Faghani , H.A. Ardakani, N.S. Vaghefi, S.A.Niaki, B. Farhanieh
	126	On the Numerical Modeling of Impinging Jets Heat Transfer M. Bovo , S. Etemad, L. Davidson
	127	Thermal Convexity of Heat Exchangers M.-A. Abdelghani-Idrissi , F. Kadour, D. Seguin, N. Mouhab
	132	Algorithm For Calculation and Realization of Generalized Method For Comparison of Effectiveness of Different Types of Compact Heat Exchangers With Enhancement of Convective Heat Exchange in Ducts V. Vasilyev, S. Vinokurova
	179	Theoretical and Experimental Investigations of Heat Transfer Between a Liquid Layer Formed by an Impinging Gas Liquid Jet And a Solid Surface D. Mikielewicz , , S. Gumkowski, J. Mikielewicz

	180	Experimental Study of Heat Transfer Intensification Using Microjets D. Mikielwicz , T. Muszynski
	183	Experimental Study of Heat Transfer in a Heat Exchanger With Rectangular Mini Channels M. Hammami , A. Ben Said , R. Ben Maad , M. Rebay
	186	Use of Genetique Algorithm To Identify Thermophysical Properties of Deposited Fouling in Heat Exchanger Tubes A. Adili , M. Ben Salah, C. Kerkeni, S. Ben Nasrallah
	205	Interaction of Three Converging Heated Jets N. Nouali , A. Mataoui, F. Bentarzi
	210	Minimum Mass Polymer Seawater Heat Exchanger For Lng Applications A. Bar-Cohen , P. Luckow, P. Rodgers
	214	Cfd Modeling of a Synthetic Jet Actuator M. Dghim , M. Ben Chiekh
	218	New Measuring Method For the Local Heat Transfer in Micro-Structured Heat Exchanger Channels Ch. Klein
	233	Heat Transfer Characteristics of a Horizontal Cylinder Under impingment of Laminar Upward-Directed Slot Jet Flow S. Amiri , K. Habibi, M. Ashjaee
	252	Numerical Simulation of Heat Transfer in Two turbulent Plane Jets Impinging on a Flat Plate F. Bentarzi , A. Mataoui, N. Nassira, A. Terfous
	259	Impact of The Temperature Gradient Between Twin Inclined Jets and an Oncoming Crossflow on Their Resulting Heat Transfer A. Radhouane, N. Mahjoub, H. Mhiri, G. Le Palec, P. Bournet
12h30 – 14h	Lunch Break	
Session 4 : Natural Convection, Mixed Convection		
14h – 14h50	Keynote lecture 4 (Chair:) Convective heat transfer enhancement for Building Integrated Photovoltaic applications and new solar PV-T collector design Christophe Ménézo	
14h50 – 15h55	7 mn ORAL Presentations (Chair:)	
	69	Minimization of Entropy Production in Fully Developed Mixed Thermal Convection C. Padet , E. Mladin , J. Padet , A. Dobrovicescu
	128	Natural Convection Heat Transfer From Constrained Horizontal Plate C. Oleskowicz-Popiel , J. Wojtkowiak
	137	Heat Convection in a Vertical and in a Tilted Channel J. C. Tisserand , M. Creyssels, M. Gibert, B. Castaing, F. Chillà
	166	Heat Transfer Processes Under an Infant Radiant Warmer- development of Numerical Model A. M. Fic , D. B. Ingham, M. K. Ginalski

	195	Effect of a Magnetic Field on Thermomagnetic Convection in a Ferrofluid A. Bouhrour, M. Gheraba, D. Kalache
	208	Entropy Generation in Natural Convection Under an Evanescent Magnetic Field M. Magherbi, A. El Jery, A. Ben Brahim
	236	Mixed-Convective Cooling of a Vertical Hot Plate by Semi-Confined Low-Speed Slot Jet Impingement K. Habibi, S. Amiri, M. Ashjaee
15h55 – 16h15	Coffee Break	
16h15 – 18h15	POSTER Presentations	
	57	Experimental Simulation of the Fire Plumes: Effects of an Air Entrainment Mode on the Self-Similarity Zone A. O. M. Mahmoud, J. Bouslimi, R. Ben Maad
	69	Minimization of Entropy Production in Fully Developed Mixed Thermal Convection C. Padet, E. Mladin, J. Padet, A. Dobrovicescu
	88	Naturel Convection Heat Transfer From Staggered Discrete Thermal Sources: State of the Art G. Tanda, M. Fossa, E. Leonardi, C. Menezo
	128	Natural Convection Heat Transfer From Constrained Horizontal Plate C. Oleskowicz-Popiel, J. Wojtkowiak
	137	Heat Convection in a Vertical and in a Tilted Channel J. C. Tisserand, M. Creyssels, M. Gibert, B. Castaing, F. Chillà
	157	Molten Steel Flow Behaviour in a One-Strand Continuous Casting Tundish A. F. Boudjabi, A. Bellaouar, M. Lachi, N. El Wakil
	166	Heat Transfer Processes Under an Infant Radiant Warmer- development of Numerical Model A. M. Fic, D. B. Ingham, M. K. Ginalski
	174	Transient Thermal and Viscous Irreversibilities Through a Poiseuille-Benard Channel in Presence of a Magnetic Field N. Hidouri, A. Ben Brahim
	177	Natural Convection in a Finned Rayleigh-Benard Cubical Enclosure N. Ben Cheikh, A. Campo, N. Ouertatani, B. Ben Beya, Taieb Lili
	191	Natural Convection Heat Transfer Near a Vertical Wall With Finite Capacity D. David, F. Kuznik, J.-J. Roux
	193	Experimental Study of a Thermal Plume Evolving in a Free and in a Semi-Confined Environment: Application To Fires H. Saafi, T. Naffouti, R. Ben Maad
	195	Effect of a Magnetic Field on Thermomagnetic Convection in a Ferrofluid A. Bouhrour, M. Gheraba, D. Kalache
	199	Pitchfork Bifurcation of the Mixed Convection in a Vertical Channel O. Kholai, S. Boudebous, Z. Nemouchi
	207	Laminar Natural Convection in Square Enclosure Under an Externally Evanescent Magnetic Field

		A. El Jery, M. Magherbi, A. Ben Brahim
	208	Entropy Generation in Natural Convection Under an Evanescent Magnetic Field M. Magherbi, A. El Jery, A. Ben Brahim
	229	Thermal Plume in a Vertical Canal: Effect of the Vertical Source Canal Spacing B. Jouini, M. Bouterra, O. Vauquelin, A. El Cafsi, A. Belghith, P. Bournot
	236	Mixed-Convective Cooling of a Vertical Hot Plate by Semi-Confined Low-Speed Slot Jet Impingement K. Habibi, S. Amiri, M. Ashjaee
	242	Experimental Study of Natural Convection Between Asymmetrically Heated Parallel Plates With Open Or Closed Side Gaps and Chimney R. Karwa, S. Gupta

Wednesday April 29, 2009

Session 5 : Forced Convection		
8h30 – 9h20	Keynote lecture 5 (Chair: Emilia Mladin) Heat Transfer Enhancement in Laminar Forced Convection: Nanofluids, Microchannels, Structured Surfaces <i>Renato M. Cotta*</i> , Carlos A. A. Mota, Carolina P. Naveira-Cotta, Helcio R.B. Orlande, Jeziel S. Nunes, Mila R. Avelino, Fernando V. Castellões, and João N.N. Quaresma	
9h20 – 9h55	7 mn ORAL Presentations (Chair: Emilia Mladin)	
	53	Method For Estimating Parameters of Gas Flows Loaded by Solid Particles and Interacted With Solids A. V. Nenarokomov, O. M. Alifanov, E. A. Artiukhine, I. V. Repin, D. M. Titov
	85	Comparison of Experiments and Hybrid Simulations of Transient Conjugated Conduction-Convection Radiation C. P. Naveira-Cotta, M. Lachi, M. Rebay, R. M. Cotta
	164	Visualisation of Heat Transfer in Laminar Flows M. F. M. Speetjens, A. A. van Steenhoven
	202	Numerical Analysis of Effects of Transversal Baffles on Forced Convection in a Circular Tube O. Manca, S. Nardini, D. Ricci
9h55 – 10h15	Coffee Break	
10h15 – 12h30	POSTER Presentations	
	52	Application of the Finite Elements Method in the Thermal Analysis of Indoor Telecommunications Central Considering Forced Convection A.J. de Oliveira, A. T. Pascoalini, E. G. de Souza, M. A. Bazani, R. R. de Souza, F. S. Mazzer, N. A. Fakhoury, J. Gulineli
	53	Method For Estimating Parameters of Gas Flows Loaded by Solid Particles and Interacted With Solids A. V. Nenarokomov, O. M. Alifanov, E. A. Artiukhine, I. V. Repin, D. M. Titov
	54	A Numerical and Experimental Study of Transient Conjugate Heat Transfer in a Flat Plate M. P. Errera, B. Baqué, M. Rebay

	85	Comparison of Experiments and Hybrid Simulations of Transient Conjugated Conduction-Convection Radiation C. P. Naveira-Cotta, M. Lachi, M. Rebay, R. M. Cotta
	111	Combined Forced Convection and Surface Radiation in Concentric Annuli F. G. Al-Amri, M. A. I. El-Shaarawi
	150	Heat Transfer Modes in Complex Internal Flows M. Khaled, F. Harambat, H. Peerhossaini
	164	Visualisation of Heat Transfer in Laminar Flows M. F. M. Speetjens, A. A. van Steenhoven
	184	Protection of Rotary Type Wind Aggregates in Unfavorable Climatic Condition A. Yershina, C. Yershin
	196	Experimental and Numerical Study of the Effects of Flow Deflection in Electronic Air-Cooling A. Arfaoui, M. Rebay, R. Ben Maad, M. Hammami, J. Padet
	197	Numerical Resolution of Conjugate Heat Transfer Problem in Parallel-Plate Micro-Channel Y. Kabar, M. Rebay, M. Kadja, C. Padet
	198	Numerical Investigations of Transient Conjugated conduction – convection Problem over a Flat Plate G. Mebarki, M. Rebay, S. Rahal
	202	Numerical Analysis of Effects of Transversal Baffles on Forced Convection in a Circular Tube O. Manca, S. Nardini, D. Ricci
	206	Les-Based Prediction of Deposit Formation on a Wall-Bounded Short Cylinder P. Venturini, D. Borello, F. Rispoli, K. Hanjalić
	212	Heat Transfer Behavior of Non-Newtonian Carreau Fluid Between rotating Concentric Vertical Cylinders N. Zeraibi, M. Amoura
	222	Analytical and Numerical Study of Heat Exchange Between a Heated Cylinder and Pulsatile Flow Y. Benakcha, R. Hadj-Ali, A. Ghezal, J.C. Loraud
	230	Numerical Study of the Effect of Wind on the Extraction and Propagation Smoke of a Fire in a Road Tunnel B. Kalech, M. Bouterra, O. Vauquelin, A. El Cafsi, A. Belghith, P. Bournot
	256	Prediction of Heat Transfer Near Stagnation Point of a Blunt Body By integral Method Yu.D. Shevelev, N.G. Syzranova
12h30 – 14h	Lunch Break	
Session 6 : Conversion of solar energy, Thermal Process		
14h – 15h10	7 mn ORAL Presentations (Chair:)	
	64	Energetic and Exergy Efficiency of a Heat Storage Unit for Building Heating M. Hazami, S. Kooli, M. Lazâar, A. Farhat, A. Belghith
	77	Thermodynamic Heat Water by The Condenser of Refrigerator R. Ben Slama
	115	Numerical Modelling of Wood Particle Pyrolysis U. Sand, R. Bel Fdhila

	130	Hydration and Dehydration of Sorption Materials: Experiments in a Small-Scale Reactor E. Brouwer, C. Rindt, M. Van Essen, W. Van Helden, A. Van Steenhoven
	133	Laser-Induced Incandescence As a Diagnostic For Soot Particulate Measurements K. P. Geigle, R. Hedef, M. Aigner
	188	Theoretical and Experimental Study of a Water-Phase Change Solar Collector A. Thiam, Y. Mandiang, D. Azilinson, V. Sambou, M. Adj
	238	Minimum of Exergy Consumption in Horizontal Fluidized Heat Exchanger A. Poswiata, Z. Szwasz
	241	Mixed Convection Heat Transfer in an Horizontal Duct Heated From Below by a High Heat Flux From a Solar Concentrator: Radiative Effects S. Blancher
15h10 – 15h30	Coffee Break	
15h30 – 17h10	POSTER Presentations	
	43	Optimisation of Heat Transfer in Solar Collectors V. P. Motulevich
	64	Energetic and Exergy Efficiency of a Heat Storage Unit for Building Heating M. Hazami, S. Kooli, M. Lazâar, A. Farhat, A. Belghith
	67	Horizontal Parallel Pipe Ground Heat Exchanger : Analytical Conception and Experimental Study N. Naili, M. R. Jemli, A. H. Farhat, S. Ben Nasrallah
	76	Experimental Investigation of Solar Drying for Orange Peels by Forced Convection R. Ben Slama, F. Mechlouh, H. Ben Daoud
	77	Thermodynamic Heat Water by The Condenser of Refrigerator R. Ben Slama
	87	Modeling and Experimental Studies for the Thermal Performance of a Ground Heat Storage System Integrated with a Greenhouse S. Koôli, M. Lazâar, M. Hazami, A. Farhat, A. Belghith
	89	Electromagnetic Energy Absorption and Related Heating Effects in Chiral Based Microwave Shields With Application in Energy Harvesting R. Ciobanu, C. Schreiner, R. Damian
	113	Experimentation of a Solar Water Heater with Integrated Storage Tank I. Elhmidi, N. Frikha, B. Chaouachi, S. Gabsi
	114	Design and Realisation of a Parabolic Solar Cooker M. Ouannene, B. Chaouachi, S. Gabsi
	115	Numerical Modelling of Wood Particle Pyrolysis U. Sand, R. Bel Fdhila
	116	Comparison Between Neuronal and Experimental Characterization of Integrated Collector-Storage Solar Water Heaters T. Omari, S. Hanini, H. Abdi, C. Si Moussa, , D. Hassani
	130	Hydration and Dehydration of Sorption Materials: Experiments in a Small-Scale Reactor E. Brouwer, C. Rindt, M. Van Essen, W. Van Helden, A. Van Steenhoven
	133	Laser-Induced Incandescence As a Diagnostic For Soot Particulate Measurements K. P. Geigle, R. Hedef, M. Aigner

	163	Numerical Modelling and Parametric Studies of Steam Reformers C. Ventura, J. L. T. Azevedo
	178	Thermovisual Investigation of Dryout Process in Annular Flow D. Mikielwicz , J. Wajs , M. Glinski, J. Mikielwicz
	188	Theoretical and Experimental Study of a Water-Phase Change Solar Collector A. Thiam , Y. Mandiang, D. Azilnon, V. Sambou, M. Adj
	217	Thermal Losses Effect on the Performance of an Intermittent Solar Refrigeration Cycle for Generation Phase Y. Boukhchana , A. Fellah, A. Ben Brahim
	220	Combustion Modelling in a Biomass-Fed Furnace C. V. Iossa , D. Lentini, F. Rispoli, P. Venturini
	237	Power Production Limits in Static and Dynamical Systems S. Sieniutycz
	238	Minimum of Exergy Consumption in Horizontal Fluidized Heat Exchanger A. Poswiata , Z. Szwasz
	241	Mixed Convection Heat Transfer in an Horizontal Duct Heated From Below by a High Heat Flux From a Solar Concentrator: Radiative Effects S. Blancher
	255	Developement of a Non-Intrusive Diagnosis Technique for Gas Lifted Oil Wells T. Abidi, M. S. Guellouz , M. Harbaoui; M. Ellejmi
17h10 – 18h	Keynote lecture 6 (Chair:) Heat Pipes – Good Tool for Fuel Cells Thermal Management L. L. Vasiliev , O. S. Filatova , L.L. Vasiliev Jr.	
19h30 – 23h00	Gala Dinner	

Thursday April 30, 2009

Session 7 : Thermo-solutal convection, Mass transfer		
8h45 – 9h35	Keynote lecture 7 (Chair : Renato Cotta) Study of Thermal Management in PEM Fuel Cells with Numerical Modeling and in-situ Diagnosis Approaches Liejin Guo* , Guangsheng Zhang , Chengjie Xu , Lizhong Ma , Shuanglin Shen , Hongtan Liu , Ying Yang , and Hong Sun	
9h35 – 10h40	7 mn ORAL Presentations (Chair: Renato Cotta)	
	118	A Cfd Analysis on the Effect of Ambient Conditions on the Temperature Distribution in a Tubular-Shaped Ambient Air-Breathing Pem Micro Fuel Cell M. A. R. S. Al-Baghdadi
	134	Bayesian Estimation of Hydraulic and Solute Transport Parameters From Laboratory Soil Column Experiments H. R. B. Orlande , M.Th. Van Genuchten , R. M. Cotta , P. H. Moreira
	135	Study of the Transient Hygrothermal Behaviour of Multi-Layer Hemp Concrete Wall A. D. Tran Le, C. Maalouf , T. H. Mai

	142	Dynamic Characterization of Absorption in Metal Hydrides C. Sobrinho, N. Santos, J. L. T. Azevedo
	147	Transient Thermosolutal Natural Convection in Cavities: Effects of Initial Conditions and Density Variations H. Sun, G. Lauriat
	173	Natural Convection Heat and Mass Transfer in Non-Darcy Porous Medium Effects of Combined Double Dispersion, Chemical Reaction, And Thermal Radiation H. A. Agha, M. Bouaziz, R. Alauaoui
	250	A Numerical Research on Solid Particles Penetration Through Buildings Envelope Cracks L. O. Popescu, K. Limam, I. Colda
10h40 – 11h	Coffee Break	
11h – 12h30	POSTER Presentations	
	105	Modeling and Simulation of Mass Transfer in an Anisotropic Medium M. Laidi, S. Hanini, C. Si-Moussa, T. Kermezli
	118	A Cfd Analysis on the Effect of Ambient Conditions on the Temperature Distribution in a Tubular-Shaped Ambient Air-Breathing Pem Micro Fuel Cell M. A. R. S. Al-Baghdadi
	134	Bayesian Estimation of Hydraulic and Solute Transport Parameters From Laboratory Soil Column Experiments H. R. B. Orlande, M.Th. Van Genuchten, R. M. Cotta, P. H. Moreira
	135	Study of the Transient Hygrothermal Behaviour of Multi-Layer Hemp Concrete Wall A. D. Tran Le, C. Maalouf, T. H. Mai
	142	Dynamic Characterization of Absorption in Metal Hydrides C. Sobrinho, N. Santos, J. L. T. Azevedo
	147	Transient Thermosolutal Natural Convection in Cavities: Effects of Initial Conditions and Density Variations H. Sun, G. Lauriat
	165	Thermo-Solutal Convection in Horizontal Bridgman Growth of Si _{0.25} Ge _{0.75} in the Presence of Magnetic Field M. M. Shemirani, M. Z. Saghir, D. Labrie, H. Sheibani
	173	Natural Convection Heat and Mass Transfer in Non-Darcy Porous Medium Effects of Combined Double Dispersion, Chemical Reaction, And Thermal Radiation H. A. Agha, M. Bouaziz, R. Alauaoui
	175	Three-Dimensional Simulation of Double Diffusive Convection in A Porous Medium: Heat and Mass Transfers D. Akrouf, D. Kalache
	192	Analysis of the Cathode Flooding in a Proton Exchange Membrane Fuel F. Khemili, M. Najjari, S. Ben Nasrallah
	203	Thermodiffusion in Cavity Filled With a Binary Mixture M. A. Rahman, M. Z. Saghir
	250	A Numerical Research on Solid Particles Penetration Through Buildings Envelope Cracks L. O. Popescu, K. Limam, I. Colda

12h30 – 14h	Lunch Break	
Session 8 : Fluid mechanics, Turbulence		
14h – 14h50	Keynote lecture 8 (Chair:) Modeling Nonequilibrium Contaminant Transport Processes in Soils and Groundwater <i>Martinus Th. Van Genuchten*</i> , Elizabeth M. Pontedeiro, and Renato M. Cotta	
14h50 – 15h15	7 mn ORAL Presentations (Chair:)	
	129	Experimental Study on Thermal Conductivity and Viscosity of Water Based Nanofluids I. Tavman, A. Turgut, M. Chirtoc, K. Hadjov, O. Fudym, S. Tavman
	153	The Effect of Different Grids and Different Les Models on Turbulence Statistics in the Near Wall Region R. J. A. Howard, Y. Addad
	189	Influence of Coherent Structures on the Wall Shear Stress in Axial Flow Between a Cylinder and a Plane Wall I. Khabbouchi, M. S. Guellouz, S. Tavoularis
	247	Computational Study of Irregular Acoustic Streaming Flows in an Enclosure Subject To a Transverse Temperature Gradient M. K. Aktas, T. Ozgumus
15h15 – 15h35	Coffee Break	
15h35 – 17h	POSTER Presentations	
	109	Effect of the Modified Pitched Blade Turbines on the Flow Pattern in Stirred Tanks G. Bouzgarrou, Z. Driss, W. Chtourou, M. S. Abid
	129	Experimental Study on Thermal Conductivity and Viscosity of Water Based Nanofluids I. Tavman, A. Turgut, M. Chirtoc, K. Hadjov, O. Fudym, S. Tavman
	131	Water Entry and Exit of Horizontal Cylinder in Free Surface Flow Z. Hafsia, C. Mnasri, O. Mohamed, K. Maalel
	153	The Effect of Different Grids and Different Les Models on Turbulence Statistics in the Near Wall Region R. J. A. Howard, Y. Addad
	160	Aeroelastic Behaviour of Bridges Subjected To Wind Flows R. Belakroum, T. H. Mai, M. Kadja, K. Zibouche
	176	Wind Characteristics and Wind Energy Potential in the Golf of Tunis A. W. Dahmouni, M. Ben Salah, F. Askri, C. Kerkeni, S. Ben Nasrallah
	189	Influence of Coherent Structures on the Wall Shear Stress in Axial Flow Between a Cylinder and a Plane Wall I. Khabbouchi, M. S. Guellouz, S. Tavoularis
	200	Prediction of Equilibrium States of Kinematic and Thermal Fields in Homogeneous Turbulence Submitted To the Rotation B. Chebbi, M. Bouzaiane, T. Lili
	247	Computational Study of Irregular Acoustic Streaming Flows in an Enclosure Subject To a Transverse Temperature Gradient M. K. Aktas, T. Ozgumus
Closing Session		

