International Symposium on

Convective Heat and Mass Transfer

CONV-14

Kusadasi, June 8-13, 2014

PROGRAM

	Sunday, 8 June	Monday, 9 June	Tuesday, 10 June	Wednesday, 11 June	Thursday, 12 June	Friday, 13 June	
07:30 - 08:00		-					07:30 - 08:00
08:00 - 08:30		Registration					08:00 - 08:30
08:30 - 09:00		Opening Session		V	V		08:30 - 09:00
09:00 - 09:30		Keynote 1: Cotta	Dedication Lecture: Padet	Keynote 4: Mohamad	Keynote 5: Sherif	400000000000000000000000000000000000000	09:00 - 09:30
09.30 - 10:00		Session 1: Phase Change 1	Dedication Lecture: Kakaç	Session 9: Fluid Mechanics 1	Session 11: Natural Convection 2	Session 15: Phase Change 4 Session 16: Porous Media 2 / Mass Transfer 2	09.30 - 10:00
10:00 - 10:30		Session 2: Forced Convection 1	Group Photo	Session 10: Forced Convection 2	Session 12: Microscale 2	Wass Transfer 2	10:00 - 10:30
10:30 - 11:00		Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	10:30 - 11:00
11:00 - 11:30						Session 17: Forced Convection 3 Session 18: Porous Media 3 /	11:00 - 11:30
11:30 - 12:00		Session 1: Phase Change 1 Session 2: Forced Convection 1	Session 5: Porous Media 1 Session 6: Mass Transfer 1	Session 9: Fluid Mechanics 1 Session 10: Forced Convection 2	Session 11: Natural Convection 2 Session 12: Microscale 2		11:30 - 12:00
12:00 - 12:30						Closing Session	12:00 - 12:30
12:30 — 14:00		Lunch Break	Lunch Break	Lunch Break	Lunch Break		12:30 — 14:00
14:00 — 14:45		Keynote 2: Tao & He	Keynote 3: Morini		Keynote 6: Jaluria		14:00 — 14:45
14:45 — 15:00			The state of the s				14:45 - 15:00
15:00 - 15:30		Session 3: Thermal Systems 1 Session 4: Natural Convection 1	Session 7: Microscale 1 Session 8: Phase Change 2		Session 13: Phase Change 3 Session 14: Thermal Systems 2		15:00 - 15:30
15:30 - 16:00							15:30 - 16:00
16:00 - 16:30	Registration	Coffee Break	Coffee Break	Free Afternoon	Coffee Break		16:00 - 16:30
16:30 - 17:00							16:30 - 17:00
17:00 - 17:30		Session 3: Thermal Systems 1	Poster Session A		Poster Session B		17:00 - 17:30
17:30 - 18:00		Session 4: Natural Convection 1					17:30 - 18:00
18:00 - 18:30	6		10 m				18:00 - 18:30
18:30 - 19:00		Welcome Reception					18:30 — 19:00
		18:40 - 19:40			Gala Dinner 20:00 - 23:00		

Sunday, June 8, 2014

14:30 – 18:00	Registration
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Monday, June 9, 2014

07:30 - 08:30	R	egistration
08:45 – 09:10	Opening Session	
		MILETUS
09:10 – 09:55	Unified Integral Transforms Algorithm for Convection- Renato Chair	ARY SESSION Diffusion in Irregular Geometries and Complex Configurations M. Cotta (Brazil)) Sadik Kakaç
	MILETUS	LEL SESSIONS PIRENE
	Session 1: Phase Change 1	Session 2: Forced Convection 1
	Chair: Nilanjan Chakraborty	Chair: Mehmet Arik
10:00 – 10:20	133 Investigations of Heat Transfer in Composite Phase Material in a Shell and Tube Storage Device	239 Conjugate Heat Transfer in The Preheating Region of Pipes for Laminar Flows with Axial Heat Conduction
	Aditya Atal, Yuping Wang, Mayur Harsha and Subrata Sengupta	<u>Stefano Piva</u>
10:20 – 10:40	42 CFD Simulation of Spray Dehumidification Process in Moist Air	137 Experimental Investigation of Heat Transfer and Pressure Drop over Rectangular Profile Fins Placed in a Square Channel
	Ali Farnoud, <u>Semra Gümrük</u> and <u>Murat K. Aktaş</u>	Ece Ayli, Fırat Kıyıc, Özgür Bayer and Selin Aradağ
10:40 – 11:00	Coffee Break	

11:00 – 11:20	181 Influence of Internal Natural Convection on Water Droplets Freezing on Cold Surfaces	110 Entry Flows for FENE-P Fluids in a Plane Passage for Constant Heat Flux & Wall Temperature Boundary Conditions
	Linn Karlsson, Anna-Lena Ljung and T. Staffan Lundström	A. Filali, L. Khezzar and Z. Nemouchi
11:20 – 11:40	90 The Study of the Heated Air Flow Patterns from the Condensing Unit Effecting on the Air Conditioning Efficiency and the Drying Application	108 Meshed Infrared Thermography for Determining Temperature Distribution in Air Flows
	A. Pramuanjaroenkij, S. Phondeechareon, D. Pakotanang, A. Aryusom, S. Phankhoksoong, W. Pensiriwan, S. Namprakai, and <u>S. Kakaç</u>	Z. Haktan Karadeniz, Dilek Kumlutaş and Özgün Özer
11:40 – 12:00	50 Numerical Simulation of Evaporation in Minichannels Using Multiphase VOF Model	136 On Convective Heat Transfer in Channels (New Approach)
	<u>Ghazali Mebarki,</u> <u>Mourad Rebay</u> , Nadim Elwakil, Anis Hamza and Samir Rahal	<u>Mikhail I. Davidzon</u>
12:00 – 12:20	118 Boiling of Oil-in-Water Emulsions in a Square Capillary	
	<u>Hao-Hsian Fan</u> and <u>Chen-li Sun</u>	
12:20 – 14:00	L	unch Break
		MILETUS
	PLE	NARY SESSION
14:00 – 14:45		: Mechanism, Evaluation and Applications
		nd <u>Wenquan Tao</u> <i>(China)</i> ir: Yogesh Jaluria
	PARA	ALLEL SESSIONS
	MILETUS	PIRENE
	Session 3: Thermal Systems 1	Session 4: Natural Convection 1
	Chair: Helcio Orlande	Chair: Ziad Saghir
14:50 – 15:10		203 On the Stability of Natural Convection Flow Induced by Time-Varying Radiative Thermal Forcing
		<u>Tae Hattori</u> , John C. Patterson and <u>Chengwang Lei</u>

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15:10 – 15:30	149 Flow Boiling Heat Transfer of R-600a/Oil Inside a Horizontal Smooth Tube	152 Effects of Aspect Ratio on Natural Convection of Bingham Fluids in Rectangular Enclosures with Differentially Heated Horizontal Walls Heated from Below
	M.A. Akhavan-Behabadi, M. Nasr, M.R Momenifar and P.Hanafizadeh	Şahin Yiğit, Robert J. Poole and Nilanjan Chakraborty
15:30 – 15:50	160 Theoretical Approach of a Cylindrical Solar Water Heater	
15.50 – 15.50	Mohammadreza Momenifar, Hosein Shokohmand,, <u>Kasra Karimizad</u> and Mohammadreza Saffarian	
15:50 – 16:10		
16:10 – 16:30	C	Coffee Break
16:30 – 16:50	124 One-Dimensional Heat Transfer Analysis and Experimental Investigation of a Gas Turbine Combustor	54 Numerical Comparison of Passive and Active Cooling Strategies on LEDs with Optical Concerns: Natural, Forced and Immersion Cooling
	Ahmet Topal, Coşku Çatori, Lütfiye Çağan, Sıtkı Uslu, Önder Turan and Altuğ Pişkin	Enes Tandoğan and Mehmet Arık
16:50 – 17:10	207 Heat and Mass Transfer in Cross-Flow Air-to-Air Membrane Heat Exhanger	128 Investigation of Aerodynamic Forces on Two Tandem Cars
	Valerii I. Deshko, Anton Ya. Karvatskii and Iryna O. Sukhodub	Reza Bahoosh Kazerooni, Mohammadreza Momenifar, Kasra Karimizad and M. Afshar
17:10 – 17:30	256 3-D Numerical Simulation of Heat Transfer Enhancement in a Receiver Tube of Solar Parabolic Trough Collector with Twisted-tape Inserts	
	Shahrzad Ghadiri Jafarbeigloo, Mohammad Hossein Abedini-Saniji, Amir Hosein Zamzamian and Mahmood Yaghoubi	
17:30 – 17:50	176 Simulation of Thermal Characteristics of Radiators Using a Porous Model	
	Kadir Gökhan Güler, Barbaros Çetin and M. Haluk Aksel	
18:40 – 19:40	We	Icome Cocktail

Tuesday, June 10, 2014

	М	ILETUS
08:30 - 09:15	Regards on Jacques	ON (Dedication Lecture) Mixed Convection Padet (France) Renato Cotta
		ON (Dedication Lecture)
09:15 – 10:00	Sadık K	Dependent Thermal Conductivity of Nanofluids and Thermal Dispersion akaç (Turkey) Renato Cotta
10:00 – 10:40	Cof	fee Break
	PARALL	EL SESSIONS
	MILETUS	PIRENE
	Session 5: Porous Media 1	Session 6: Mass Transfer 1
	Chair: Renato Cotta	Chair: Gian Luca Morini
10:40 – 11:00	58 A Numerical Study on the Determination of the Effects of Pore to Throat Size Ratio on the Thermal Dispersion in Porous Media	36 A Nuclear Quantum Effect on the Transport Properties of Liquid Hydrogen
	<u>Türküler Özgümüş, Moghtada Mobedi</u> and Ünver Özkol	<u>Hiroki Nagashima</u> , Shin-ichi Tsuda, Nobuyuki Tsuboi, Mituso Koshi, Koichi A. Hayashi and Takashi Tokumasu
11:00 – 11:20	83 Lattice Boltzmann Simulation of Thermal Non-Equilibrium Forced Convective Flow and Energy Storage in a Porous Channel	150 Boundary Discretization of Light Propagation in Skin Tissue: Problem and Countermeasure
	Bayçain Amami, Hussein El Abrach, Hacen Dhahri and Abdallah Mhimid	<u>Hao Jia,</u> Dong Li, Yong Zhang and <u>Bin Chen</u>
11:20 – 11:40	140 Nanofluids Flow Simulation as the Flow Through the Porous Media	84 Numerical Study of the Heat and Mass Transfer Conditions at the Surface of a Heated Droplet
	Amarin Tongkratoke, Anchasa Pramuanjaroenkij, Apichart Chaengbamrung and <u>Sadık Kakaç</u>	Anna-Lena Ljung and T. Staffan Lundström

11:40 – 12:00	200 Liquid Flow in Packed Spheres of Equal Diameters: Regimes, Permeability and Forchheimer Coefficient	319 Simulation and Theoretical Analyses of Energy Use of a Building in Varying Climates
	Özer Bağcı, Nihad Dukhan andMustafa Özdemir	<u>Serdar Çelik</u> and Swetha Atluri
12:00 – 12.20	180 The Microstructural Effects of Randomly Generated Porous Media on Interfacial Convective Heat Transfer	
	Eren Uçar, <u>Moghtada Mobedi</u> andAzita Ahmadi	
12:20 – 14:00	Lui	nch Break
	M	IILETUS
	PLENA	RY SESSION
14:00 – 14:45	Gian Lu	Single-phase Forced Convection in Microchannels ca Morini (Italy) Ilmajeed Mohamad
	PARALL	EL SESSIONS
	MILETUS	PIRENE
	Session 7. Microscale 1	Session 8: Phase Change 2
	Chair: Almila Yazıcıoğlu	Chair: Leonard Vasiliev
14:50 – 15:10	31 Experimental and Theoretical Analysis of a Microchannel Heat Exchanger for High Concentraion Photovoltaic Cells	172 Control of Effective Oxygen Transfer Characteristics in Gas Diffusion Layer with Moisture for PEFC
	Dadui C. Guerrieri and Carolina P. Naveira-Cotta	Ryo Koresawa and Yoshio Utaka
15:10 – 15:30	33 Entrance Effects on the Gaseous Flow in Microchannels	
	Colette Padet, Rachid Bessaih, Yassine Kabar and Mourad Rebay	
15:30 – 15:50	79 Multiphysics Simulation of Microfluidic Reactor for Polymerase Chain Reaction	
	Barbaros Çetin and Ilbey Karakurt	
15:50 – 16:10	310	

	Numerical Study on Nanofluid Based Single Phase Natural Circulation Mini Loops	
	Z. Haktan Karadeniz, Serkan Doğanay and Alpaslan Turgut	
16:10 – 16:30	Coff	ree Break
16:30 – 18:30	POSTEI	R SESSION A

Wednesday, June 11, 2014

		MILETUS
08:30 – 09:15	Simulation of Blood Flo Abdulmajeed.	ARY SESSION w with Lattice Boltzmann Method A. Mohamad (Canada) Jacques Padet
	PARAL	LEL SESSIONS
	MILETUS	PIRENE
	Session 9: Fluid Mechanics 1	Session 10: Forced Convection 2
	Chair: Jacques Padet	Chair: Hassan Soliman
09:20 – 09:40	89 Effect of Radial Inner Cylinder Vibration on Taylor-Couette Flow with Free Surface	63 CFD Simulations and Experimental Validation for Gasketed Plate Heat Exchangers
	Hamid Oualli, M. Mekadem, Ali Abdelali and A. Bouabdallah	Ece Özkaya, Çağın Gülenoğlu, Selin Aradağ and Sadık Kakaç
09:40 – 10:00	112 Experimental and Numerical Study on an Axial Compressor of a Turboshaft Engine	49 Control of Heat Trensfer in a Water Filled Enclosure with a Vibrating Side Wall
	E. Nadir Kaçar and Volkan Tatar	<u>Cihat Duru</u> and <u>Murat K. Aktaş</u>
10:00 – 10:20	195 Use of Particle Filters to Estimate Air Speed in a Pitot Tube	222 Influence of Internal Swirl Flow on Heat Transfer
	Gino J. A. de Andrade, <u>Helcio R. B. Orlande</u> and <u>Renato M. Cotta</u>	Christian Scherhag, Martin Bruschewski and Heinz-Peter Schiffer
10:20 – 10:40	С	offee Break
	Chair: Subrata Sengupta	
10:40 – 11:00	A-priori DNS Assessment of the Effects of Lewis Number on the Performances of Sub-grid Scalar Flux Models for Large Eddy Simulation of Premixed Flames	97 Flow and Heat Transfer of Air Round Jet Flowing Inside a Hot Cylindrical Cavity
	Nilanjan Chakraborty and Markus Klein	Yacine Halouane and <u>Amina Mataoui</u>
11:00 – 11:20	86 Design and Analysis of a Ducted Contra-rotating Axial Flow Fan	188 Aero-Thermal Investigation of Turbulator Cross Section Shape on Turbine Cooling Channels

	Ali Mohammadi, Masoud Boromand and Hamzeh Eshraghi	Yavuzer Karakuş, <u>Isa Kavas</u> and Tolga Yasa
11:20 – 11:40	308 Sensitivity to Pumping Back-pressure in a Bulk Acoustic Wave Piezoelectric Positive-displacement Micropump	55 Control of Boundary Layer Transition over a Flat Plate Using Discrete Heater Strips
	Ersin Sayar and Bakhtier Farouk	Abdussamet Subaşı and Hasan Güneş
11:40 – 12:00	221 Heat Transfer Enhancement Behind a Backward Facing Step Using Localized Suction and Blowing	154 Numerical Study of High-Pressurized Water Mixing in a T-junction with an Elbow
	Umut Can Coşkun, Sertaç Çadırcı and Hasan Güneş	Nabil Bessanane, Mohamed Si-Ameur and Mourad Rebay
12:00 – 12:20	209 Effect of a Moving Wall Proximity on the Near Wake of a Circular Cylinder	
	M. S. Khabbouchi, M. S. Guellouz and S. Tavoularis	
12:20	L	unch Break
<u>'</u>		

FREE AFTERNOON

Thursday, June 12, 2014

		MILETUS
08:30 – 09:15	PLENARY SESSION Heat and Mass Transfer in Microchannels S. A. Sherif (USA) Chair: Gian Luca Morini	
	PARA	LLEL SESSIONS
	MILETUS	PIRENE
	Session 11: Natural Convection 2 / Forced Convection 3	Session 12: Microscale 2
	Chair: Said Abboudi	Chair: Carolina Naveira-Cotta
09:20 – 09:40	161 On the K-type Transition in Natural Convection Boundary Layers	104 Performance of Cold Sprayed Near-net Pyramidal Shaped Arrays under Forced Convection
	Yongling Zhao, Chengwang Lei and John C. Patterson	Philippe Dupuis, Yannick Cormier, Antoine Corbeil and Bertrand Jodoin
09:40 – 10:00	255 Numerical Investigation of Heat Transfer from Eye to the Thermal Plume around a Human Body	179 Numerical Analysis of Nanofluids Convective Heat Transfer with Mixture Model Approaches
	Farnaz Feyli, Omid Abouali, Mahmood Yaghoubi and Goodarz Ahmadi	İsmail Ozan Sert, Nilay Sezer-Uzol and <u>Sadık Kakaç</u>
10:00 – 10:20	216 Interaction of Rayleigh-Benard Convection and Oscillatory Flows	244 Effect of Nanoparticles on Pool Boiling Characteristics
10.00 - 10.20	Semih Çetindağ and Murat K. Aktaş	<u>Artem Nikulin, Andrii V. Melnyk,</u> Yury V. Semenyuk, Mykola Lukianov and Vitaly P. Zhelezny
10:20 – 10:40	C	Coffee Break
10:40 – 11:00	254 3D Conjugate Natural Convection with Surface Radiation in an Enclosure	314 Stability of Nanofluids – A Critical Review
	Semen G. Martyushev, Igor V. Miroshnichenko and Mikhail A. Sheremet	Eylül Şimşek, Elif Begüm Elçioğlu and Tuba Okutucu-Özyurt
11:00 – 11:20	220 Fluid Flow Mixing for Heat Transfer Enhancement in Communicating Converging and Diverging Channels	315 Turbulent Flow of Nanofluids through a Rectanguar Cavity
	Tuncay Yılmaz and <u>Mehmet Tahir Erdinç</u>	Chahra Abdellahoum and <u>Amina Mataoui</u>

12:20 – 11:40	76 Experimental Investigation on Convective Heat Transfer Enhancement by EHD	317 An Experimental Study on Performance Enhancement of CMOS Compatible Monolithic Microchannel Heat Sinks
	Merouane Hamdi, Michel Havet, Olivier Rouaud and Dominique Tarlet	Aziz Koyuncuoğlu, Göker Türkakar, Matthew Redmond, Tuba Okutucu-Özyurt, Haluk Külah and Satish Kumar
11:40 – 14:00		Lunch Break
14:00 – 14:45	Combined Experimental and Nu <u>Yoges</u>	IARY SESSION merical Simulation of Convective Transport in Jaluria (USA) ir: S.A. Sherif
	PARAI	LLEL SESSIONS
	MILETUS	PIRENE
	Session 13: Phase Change 3	Session 14: Thermal Systems 2
	Chair: Murat Aktaş	Chair: S. A. Sherif
14:50 – 15:10	185 Innovative Heat pipes and Nanotechnologies	27 Inverse Method Determination of Heat Transfer Coefficient and Ceramic Mold Material Parameters in Investment Casting Process
	L. Leonard Vasiliev, L. P. Grakovich, M. I. Rabetsky and L. L. Vasiliev Jr.	Nicolas Viens, Mohammed Lachi, Christian Bissieux, Patrick Priot, Christophe Leclet, Stéphane Sicot and Antoine Gaucher
15:10 – 15:30	Experimental Investigation of Flow Boling Characteristics of Siloxanes and Siloxane Mixtures in an Horizontal Tube	
15:10 – 15:30	Experimental Investigation of Flow Boling Characteristics of Siloxanes and	
15:10 – 15:30 15:30 – 15.50	Experimental Investigation of Flow Boling Characteristics of Siloxanes and Siloxane Mixtures in an Horizontal Tube	
	Experimental Investigation of Flow Boling Characteristics of Siloxanes and Siloxane Mixtures in an Horizontal Tube <u>Theresa Weith</u> , Florian Heberle and Dieter Brüggemann 202 Thermoeconomic Analysis of Heat Recovery Steam Generators for Steam	
	Experimental Investigation of Flow Boling Characteristics of Siloxanes and Siloxane Mixtures in an Horizontal Tube Theresa Weith, Florian Heberle and Dieter Brüggemann 202 Thermoeconomic Analysis of Heat Recovery Steam Generators for Steam Injected Gas Turbine Cycles	

Coffee Break

16:10 - 16:30

16:30 – 18:30	POSTER SESSION B
20:00 – 23:00	Gala Dinner

Friday, June 13, 2014

	PARALLEL SESSIONS		
	MILETUS	PIRENE	
	Session 15: Phase Change 4	Session 16. Porous Media 2 / Mass Transfer 2	
	Chair: Leonad Vasiliev	Chair: Jacques Padet	
09:00 – 09:20	224 CFD Modeling on Flow Characteristics of Two Phase Flow in Solenoid Valves	226 Numerical Investigation of a 5 kW Power Porous Medium Burner	
	<u>Nuray Kayakol</u>	<u>Tanju Ergen</u> , Onur Tuncer and A. Cihat Baytaş	
09:20 – 09:40	95 CFD Calculation of Evaporation Rate with Account for Volume Condensation	304 Double Diffusive Convection and Thermodiffusion of Nanofluid in a Square Cavity with Different Configurations	
	Nikolay Vinnichenko, Alexander Uvarov, Yulia Plaksina and Olga Yakimchuk	Amirhossein Ahadi and <u>M. Ziad Saghir</u>	
09:40 – 10:00	243 The Local Heat Transfer Coefficient Variation at the Boiling of the Isobutane/Compressor Oil Solution Flow in the Pipe	143 Analytical Approximation and Numerical Solution of Electrically Conducting Fluid Flow over a Stretched with the Nonlinear Velocity in a Porous Medium Filled by a Nanofluid	
	Andrii V. Melnyk, Artem Nikulin and Vitaly P. Zhelezny	Habib-Olah. Sayehvand, <u>Amir Basiri Parsa</u> and Leila Shamekhi	
10:00 – 10:20	94 Wavelet Galerkin and Wavelet Collocation Method in Moving Boundary Problem with Temperature Dependent Thermal Physical Properties	286 Numerical and Experimental Investigation of a Porous Medium Burner	
	Sarita Yadav, Subrahmanayam Upadhyay and Kabindra Nath Rai	Yusuf Ata and A. Cihat Baytaş	
10:20 – 10:40	Coffee Break		
	MILETUS		
	Session 17: Forced Convection 3		
	Chair: Mohammed Lachi		
10:40 – 11:00	288 Swirl Flow Formations in Cooling Ducts		
10.40 - 11.00	<u>Martin Bruschewski, Christian Scherhag,</u> Sven Grundmann and Heinz-Peter Schiffer		

11:00 – 11:20	70 1D Simulation for the Temperature Distribution Inside a Hot Water Storage Tank on the Condition of Having Temperature Gradient Around Horizontal Buoyant Jet	
	Masaki Toyoshima and Seiji Okawa	
	MILETUS	
11:30 – 12:00 Closing Session		sing Session

Poster Session A Tuesday, June 10 16:30 – 18:30

Р	32	Yassine Kabar, Mourad Rebay, Rachid Bessaih and Yassine Demagh	Numerical Study of Single-Phase Forced Convection in Microchannels with Wall Effects
Р	35	Draco Iyi, <u>Reaz Hasan</u> and Roger Penlington	Effects of Blockages on Natural Convection Turbulent Airflow and Heat Transfer in a Cavity
Р	114	El Abrach Hussein, <u>Amami Bayçain</u> , Dhahri Hacen and Mhimid Abdallah	Hydrodynamic Behaviours of an Isotropic Deformable Porous Media Using the Lattice Boltzmann Method
Р	127	<u>Dong-Hyeog Yoon</u> , Ae-Ju Cheong, Young Suk Bang and Sweng Woong Woo	Evaluation of Turbulence and Mass Transfer Models on Scalar Dispersion in Turbulent Annular Flow
Р	131	Syham Kadri, Mohammed Elmir and Razli Mehdaoui	Effect of the Inclination Angle of the Vibratory Excitation and the Magnetic Field on the Convection in Nanofluids
Р	139	M. N. Bouaziz and A. Aziz	An Improved Approximate Method for Determining the Efficiency of the Convective-Radiative-Generating Fin with Temperature Dependent Thermal Conductivity and Internal Heat Generation
Р	142	Abdelhakim Settar, R. Nebbali, B. Madani and S. Abboudi	Improved Steam Methane Reforming Reaction over a Catalyst Surface Using a Metal Foam Support
Р	145	Brahim Mahfoud and Rachid Bessaïh	Three-dimensional Swirling Flows with Heat Transfer in a Cylindrical Enclosure under Axial Magnetic Field
Р	167	Najla El Gharbi and M. El Ganaoui	Optimization Study of Tube Bundle Cross-Flow for Different Tube Shapes in a Boiler
Р	194	A. Filali and L. Khezzar	Finite element simulation of the Graetz problem in an elliptic duct for a viscoelastic fluid
Р	199	Ziyaddin Recebli and Selçuk Selimli	Convectional Heat Transfer Numerical Analysis of MHD Steady State Laminar Lithium Pipe Flow
Р	204	A. N. Lumpova, E. E. Son and P. T. Zubkov	Numerical Simulation of Turbilent Flows of Thermoviscous Fluids in Channels with Different Temperature Dependence of Viscosity
Р	209	M. S. Khabbouchi, M. S. Guellouz and S. Tavoularis	Effect of a Moving Wall Proximity on the Near Wake of a Circular Cylinder (presented as oral)
Р	223	A. N. Doludenko, S. V. Fortova and E. E. Son	Numerical Simulation of the Rayleigh-Taylor Instability of Invicid and Viscous Fluid
RWP	34	A. N. Doludenko and E. E. Son	DNS Simulation of Viscous Plastic Turbulent Flows
RWP	40	Nabil Bessanane, Mohamed Si-Ameur, Anis Hamza, Jean-Pierre Daguerre and Mourad Rebay	Numerical and Experimental Study of the Fluid Flow in Diamond Shaped Heat Sink
RWP	41	Selçuk Selimli and Ziyaddin Recebli	MHD Steady State Turbulent Liquid Metal Duct Flow Convective Heat Transfer Aanalysis
RWP	48	Nabil Benyahia, Mohamed Aksouh and <u>Amina</u> <u>Mataoui</u>	Effect of Surface Radiation on the Turbulent Natural Convection Flow
RWP	57	Alberto E. Quintero and Marcos Vera	Wall Conduction Effects in Laminar Counterflow Parallel-plate Heat Exchangers with Small Scale Wall Corrugations
RWP	87	Noureddine Hadidi and Yacine Ould-Amer	The Study of the Double Diffusive Convection Two-dimensional in a Bi-layered Porous Enclosure

RWP	126	Wenjuan Wu, Bin Chen, Dong Li, Guoxiang Wang, and Linzhuang Xing	Dynamic Characteristics of Vascular Morphological After a 1064nm Laser Pulse Exposures
RWP	130	Razli Mehdaoui, Mohammed Elmir, Syham Kadri and Abdelkrim Missoum	Effect of the Inclined Porous-Fluid Interface on the Natural Convection in Partially Porous Enclosure
RWP	138	M. N. Bouaziz and Z. Benharkat	Heat and Mass Convection for MHD Rotating Fluid Past a Semi-infinite Vertical Moving Plate with Hall Effect
RWP	144	Djedid Taloub and <u>Abdelhadi Beghidja</u>	Effect of Heat Flow on the Turbulent Structures in a Cavity Differentially Heated
RWP	156	Ahmed Zineddine Dellil and A. Azzi	Numerical Investigation of the Impact of a Radiative Wall in an Annular Space
RWP	159	Mohamed Kherief Nacereddine, S. Benissaad, F. Berrahil and K. Talbi	Effect of Magneto-Hydrodynamic on Natural Convection Flows in a Tri-Dimensional Rectangular Enclosure
RWP	326	Changwoo Kang and Kyung-Soo Yang	Heat Transfer Enhancement in Turbulent Ribbed-pipe Flow

Poster Session B Thursday, June 12 16:30 – 18:30

Р	67	Maryem Dahmeni, Maher Ben Chiekh, Anis Hamza and Mourad Rebay	Numerical Analysis of Convective Heat Transfer in a Pin Fin Heat Sink under Non Uniform Heat Flux Conditions
Р	82	Benitha Sandrine Umurigirwa, Chadi Maalouf and Ton Hoang Mai	Hygric Performances of Hemp-starch Concrete
Р	88	Ahmed Kouidri, B. Madani, B. Roubi and A. Hamadouche	Experimental Study of the Upward Forced Convection between Two Heated Plates
Р	98	Nadim El Wakil, <u>Jacques Padet</u> and <u>Renato M. Cotta</u>	Transient Mixed Convection in a Plane Vertical Channel
Р	129	Ali Alhelfi and Bengt Sunden	Fluid Dynamics and Thermal Transport of a Gas Bubble in Varying Sound Fields
Р	230	Abderrahim Bourouis, Abdeslam Omara and Said Abboudi	Conjugate Mixed Convection Heat Transfer in a Lid-driven Cavity Partially Occupied by a Vertical or Horizontal Porous Medium
Р	258	E. Victorovna Korobko, A. A. Makhanek and N. A. Bedik	Simulation of Hydromechanics and Heat Transfer of Electrocontrolled Fluids in Narrow Channels- Capacitors of Special Heat Exchanger Devices
Р	260	Victor Vasilyev, Svetlana Vinokurova and Svetlana Kotova	Control in Scale of Generated Vortexes at an Input in Not Round Interrupted Ducts with the Purpose of Realization of a Rational Enhancement of Convective Heat Exchanger
Р	266	Leon Bogusławski	Influence of the Flow Turbulence on Heat Convection on a Sphere
Р	267	Fariborz Ahmadi, M. H. Abedini-saniji, M. Yaghoubi and E. Goshtasbirad	Three Dimensional Numerical Study of AL ₂ O ₃ -Therminol VP1 Oil Nano-fluid on Heat Transfer Enhancement from an Absorber Tube of a Parabolic Trough Collector
Р	277	Naim Akkouche, Mourad Balistrou and Mohand Tazerout	Experimental and Kinetic Study of Syngas Produced by Pyrolysis
Р	301	Sung Wan Son, Man Yeong Ha and Hyung Rak Kim	A Numarical Study on the Behaviour of the Water Meniscus Formed between A Flat Surface and a Flat or Circular Tip
Р	307	Ersin Sayar and Bakhtier Farouk	A computational study on transducer material selection in Bulk Acoustic Wave piezoelectric valveless micropumps
Р	323	Nahla Bouaziz, Dorra Lounissi and Ridha Ben Iffa	Energy and exergy analysis of a double stage hybrid heat pump operating with water ammonia
Р	329	Fatiha Bentarzi, <u>Mourad Rebay</u> and <u>Amina Mataoui</u>	Modelling of Hydrodynamic and Thermal Behaviours in Impinging Twin-Jets
RWP	93	Abdelkarim Maamar and Bounegta Bachir	The Inverse Problem in the Identification of a Heat Flux
RWP	168	S. Khaldi, A. N. Korti and <u>Said Abboudi</u>	Numerical Study of the Dynamic and Thermal Behaviour of a Solar Dryer Having a Reverse Absorber and a Porous Bed for Storage
RWP	170	Amr Elazhary and <u>Hassan Soliman</u>	Entropy Generation in Parallel-plate Micro-channels with an Applied Electric Field
RWP	198	Abdelkrim Missoum, M. Elmir, A. Belkacem, B. Draoui, A. Slimani and R. Belarbi	Numerical Simulation of Coupled Heat Transfer through Building Facades in the Arid Zone
RWP	208	Zellagui Redouane and Bellaouar Ahmed	Influence of Temperature on the Crack Propagation
RWP	211	Seok Ho Yoon, Jae Hyun Lim, Jang Min Park, Dong Wook Oh and Sang Jin Park	Experimental Study on the Thermal Performance of Polymer Primary Surface Heat Exchanger with Various Surface Shape

RWP	249	<u>Taehoon Kim, Kyu Hyung Do,</u> Byung-il Choi, Yong-Shik Han and Myungbae Kim	Numerical Study for Leakage Flow Characteristics of a Valve System
RWP	292	Ouahiba Benouared and Mahmoud Mamou	Numerical Study of Subcritical Thermal Convections in Non-Newtonian Fluids
RWP	299	Kyu Hyung Do and Yogendra Joshi	A Comparative Investigation of Data Centers with Different Cooling Schemes for Energy Efficient Thermal Management
RWP	302	Rahim Jafari and Tuba Okutucu-Özyurt	Numerical Simulation of the Surface Roughness Effect on Flow Boiling in Microchannels