

ESNf2017 Full Program	
8-Oct-17	
17:00	Symposium Check-in [@Lobby of Salão Nobre]
Session 1 [Hall: Salão Nobre]	
18:15	Welcome & Opening
18:30	Invited Speaker: José Enrique Juliá [Current trends in nanofluids reasearch] (Chair: Carlos Nieto de Castro)
19:00	Welcome drinks
9-Oct-17	
8:45	Symposium Check-in [@Lobby of Sala de Conferência]
Session 2 [Hall: Sala de Conferência] (Chair: José Enrique Juliá)	
9:15	Plenary Speaker: Paul Luckham [The interactions between nanoparticles: Direct measurement and simplified theories]
10:00	Invited Speaker: Carlos Nieto de Castro [Understanding the influence of nanotubes and graphene interactions with ionic liquids on heat transfer]
10:30	Tea-coffee
	Session 3A [Sala de Conferência] (Chair: Luis Lugo)
11:00	Invited Speaker: Oronzio Manca [Numerical investigation on heat transfer enhancement of Fe ₃ O ₄ /water nanofluids in presence of a magnetic field]
11:30	Transport properties of water-based nanofluids with dispersion of graphene-oxide nanoparticles [L. Fedele, S. Bobbo]
	Rheological properties and surface tension of stable graphene oxide and reduced graphene oxide aqueous nanofluids [D. Cabaleiro, P. Estellé, H. Navas, A. Desforges, B. Vigolo]
	Nanofluids analysis model - Basis for comparison and prediction [E.W. Marcelino, D. de O. Silva, R.R. Riehl]
	A new analytical model for the effective thermal conductivity of nanofluids [T.M. Koller, K.N. Shukla, M.H. Rausch, A.P. Fröba]
	Metal oxide nanofluids for enhancing thermal properties through an experimental and theoretical perspective [A.S. Coronilla, J. Navas, E.I. Martín, T. Aguilar, R.G. Villarejo, J.J. Gallardo, P.M. Merino, R. Alcántara, C.F. Lorenzo]
	Measurement of electrokinetic mobility of colloidal particles close to solid-liquid interface using evanescent waves [K. Shirai, S. Kaji, T. Kawanami, S. Hirasawa]
	Session 3B [Sala de Doutoramentos] (Chair: Bengt Sundén)
11:00	Invited Speaker: S M Sohel Murshed [Superior cooling with nanofluids: Hype and reality]
11:30	Assessing the flow characteristics of nanofluids during turbulent natural convection [K. Kouloulias, A. Sergis, Y. Hardalupas]
	An experimental setup for flow heat transfer investigation of nanofluids [A. Nikulin, A.L.N. Moreira]
	Natural convection from a pair of differentially-heated horizontal cylinders aligned side by side in a nanofluid-filled inclined square enclosure [A. Quintino, E. Ricci, E. Habib, M. Corcione]
	Nanoengineered wettability for heat transfer enhancement in spray cooling [A.S Moita, M. Maly, A. L. N. Moreira]
	Magnetic nanofluids for electric power engineering applications [M. Rajnak, M. Timko, P. Kopcansky, T. Tobias, K. Paulovicova, J. Kuchta, M. Franko, J. Kurimsky, B. Dolnik, R. Cimbala]
	Possible application of nanofluids to improve performance of wet cooling towers [V. Mijakovski, T. Geramitcioski, V. Mitrevski]
13:00-14:30	Lunch
	Session 4A [Sala de Conferência] (Chair: Paul Luckham)
14:30	Invited Speaker: William A. Wakeham [Heat transfer in nanofluids: An appraisal]
15:00	Thermophysical characteristics of nanofluids and transport processes mechanisms [V. Rudyak]
	Experimental study on rheological properties, thermal conductivity and dielectric properties of TiN-EG nanofuids [G. Żyta , J. Fal, P. Estellé]
	Temperature-compensated 3w hot wire for quasi-isothermal thermophysical properties measurement of inhomogeneous fluids [M. Chirtoc, J.-F. Henry, N. Horny]
	Experimental characterization and theoretical modelling of Cu, Ni and Ag-nanofluids: a comparative study of their thermal properties [R.G. Villarejo, E.I. Martín, J. Navas, A.S. Coronilla, M. Teruel, T. Aguilar, J.J. Gallardo, R. Alcántara, D. de los Santos, C.F. Lorenzo]
	Preparation of performant copper-based nanolubricant for automotive application [A. Gondolini, E. Mercadelli, V. Zin, S. Barison, A. Sanson]
	Ferronematics- a special class of nanofluids [P. Kopcansky, N. Tomasovicova, V. Gdovinova, J. Majorosova, M. Timko, N. Eber, T. Toth-Katona, J. Jadzyn]
	Session 4B [Sala de Doutoramentos] (Chair: S M Sohel Murshed)
14:30	Invited Speaker: Sawako Nakamae [MAGENTA: Magnetic nanoparticle based liquid energy materials for thermoelectric applications]
15:00	Thermophysical profile and heat transfer performance of dispersions of functionalized graphene nanoplatelets in an industrial coolant [J.P. Vallejo, E. Á. Regueiro, D. Cabaleiro, J. Fernández-Seara, J. Fernández, L. Lugo]
	Performance investigation of a miniature plate heat exchanger with graphene nanoplatelet based EG/water nanofluids [Z. Wang, Z. Wu, B. Sundén]
	Laminar forced convection in flat tubes with Al ₂ O ₃ -water mixture for automotive applications [B. Buonomo, D. Ercole, O. Manca, A. Minea, S. Nardini]
	Thermal performance of suspensions of graphene nanoplatelets in plate heat exchanger [F.E.B. Bioucas, M.L.M. Lopes, S.M.S. Murshed, C.A. Nieto de Castro]
	Aspect ratio effect on the effectiveness of a single phase natural circulation mini loop [S. Doğanay, M. Alaboud, Z.H. Karadeniz, A. Turgut]
	Thermal enhancement using nanofluids on high heat dissipation electronic components [R.R. Riehl]
16:30-17:00	Tea-coffee
17:00-18:30	NanoUptake-WG1 Meeting [Sala de Conferência] Chair: Oronzio Manca (WG1 Leader)
17:00-18:30	NanoUptake-WG2 Meeting [Sala de Doutoramentos] Chair: S M Sohel Murshed (WG2 Leader)

10-Oct-17		
Session 5A [Sala de Conferência] (Chair: Carlos Nieto de Castro)		Session 5B [Sala de Doutoramentos] (Chair: Elisa Sani)
9:15	Invited Speaker: Yulong Ding [Thermal energy storage using composite phase change materials– the role of nanofluids in performance enhancement]	Invited Speaker: Matthias Buschmann [State of the art of heat transfer of Heat Pipes and Thermosyphons employing nanofluids as working fluid]
9:45	On the use of nano-encapsulated phase change materials for thermal-oil and molten salt-based nanofluids [N. Navarrete , A. Gimeno-Furio, R. Mondragon, L. Hernandez, L. Cabedo, E. Cordoncillo, J.E. Julia]	An experimental study of heat transfer coefficient and internal characteristics of nucleate pool boiling of nanaofluid R141b/TiO ₂ [O. Khliyeva, A. Nikulin, T. Gordeychuk, N. Lukianov , S. Yu]
	The influence of Al ₂ O ₃ nanoparticles on the heat capacity of isopropanol [I. Motovoy , V. Zhelezny, T. Lozovsky]	Experimental study of pool boiling heat transfer on nanoparticle-deposited surfaces [Z. Cao, Z. Wu , S. Abood, B. Sunden]
	An influence of Al ₂ O ₃ nanoparticles on the heat capacity of isopropyl alcohol in metastable and solid phase [I. Motovoy , V. Zhelezny, T. Lozovsky]	Nanofluids as working fluid in thermosyphon [A. Wlazlak , B. Zajackowski, S. Barison, F. Agresti, L.M. Wilde, M.H. Buschmann]
	Solar salt with SiO ₂ nanoparticles for thermal energy storage high temperature applications: scale up of the synthesis procedure [A. Solé , M. Liu, F. Bruno, E. Julià, L. F. Cabeza]	Nanoparticulate deposition during Cu-water nanofluid poolboiling on roughened copper surfaces [S. Mancin , L. Doretti, T. P. Allred, J. A. Weibel]
10:45-11:15	Tea-coffee	
11:15	Session 6A [Sala de Conferência] (Chair: Manuel Matos Lopes)	Session 6B [Sala de Doutoramentos] (Chair: Matthias Buschmann)
	Paraffin-based nano-encapsulated PCM prepared from solvent-assisted emulsions in water [F. Agresti, S. Barison , L. Fedele, S. Rossi, S. Mancin]	Molten salt-based nanofluids with ceramic nanoparticles for concentrated solar power application [A. Palacios , Z. Jiang, E. Mura, M.E. Navarro, G. Qiao, Y. Ding]
	Nonlinear optical properties of carbon nanohorn-based aqueous nanofluids [E. Sani , N. Papi, L. Mercatelli, S. Barison, F. Agresti, C. Pagura, S. Bobbo, S. Rossi]	Mouromtseff number analysis on nanofluid based systems: Flat plate solar collector [A.M. Genc , M.A. Ezan, A. Turgut]
	Effect of nanoparticles on fluid transport in ultraconfined capillary [X. Wang, S. Xiao, Z. Zhang, J. He]	Nanofluids as direct solar energy absorbers [A. Gimeno-Furió , J.E. Juliá, S. Barison, F. Agresti, M.H. Buschmann, C. Friebe]
	Dielectric properties of graphite/diamonds mixture nanoparticles suspended in ethylene glycol [J. Fal , G. Żyła]	Nanofluids with enhanced thermal properties based on metallic nanoparticles for Concentrating Solar Power: a theoretical and experimental perspective [J. Navas , A.S. Coronilla, R.G. Villarejo, E.I. Martin, P.M. Merino, T. Aguilar, J. J. Gallardo, R. Alcántara, C.F. Lorenzo]
	Linear and nonlinear optical properties of graphite/diamond nanosuspensions [E. Sani , N. Papi, L. Mercatelli, G. Żyła]	Influence of high temperature exposure in thermal and optical properties of thermal oil-based solar nanofluid [A. Gimeno-Furio, N. Navarrete, R. Martínez-Cuenca , J.E. Julia, L. Hernandez]
	Optical properties of functionalized graphene nanoplatelet-nanofluids [E. Sani , N. Papi, J.P. Vallejo, D. Cabaleiro, L. Lugo]	Synthesis of Tin/Ethylene Glycol solar nanofluid by a femtosecond laser-assisted technique [R.T. Mendieta, R. Mondragón, V.P. Belda , O.M. Yero, J. Lancis, G.M. Vega, J. E. Juliá]
12:45-14:15	Lunch	
14:15	Session 7A [Sala de Conferência] (Chair: William Wakeham)	Session 7B [Sala de Doutoramentos] (Chair: Antonio Moreira)
	Invited Speaker: Maria J.V. Lourenço [How to validate nanofluids?]	Invited Speaker: Gennady Ziskind [Issues in convection modeling of pure and enhanced PCM]
14:45	Aqueous based Boron Nitride nanofluids for thermal management applications: formulation, stabilization and characterization [G. Zhang , M.E. Navarro, Y. Ding]	NANOROUND – a proposal for a numerical round robin test for simulation of nanofluids [A.A. Minea , A. Huminic, G. Huminic, J. Tibaut, J. Ravnik]
	Effects of agitation and sonication on dispersion and thermal conductivity of aqueous TiO ₂ nanofluids [K. Cacua, F.E.B. Bioucas , S.M.S. Murshed, M.J.V. Lourenço, F. J.V. Santos, C.A. Nieto de Castro]	Development of the boundary element method for simulation of nanofluids [J. Ravnik , J. Taibaut]
	Re-dispersion ability of MWCNT within oils [A. Alasli, A. Turgut]	Nanofluid thermal boundary layer [J.T.C. Liu , D. Hopper, D. Jaganathan, J.L. Orr, J. Shi, F. Simeski, M. Yin]
	The preparation of Cu@A ₁₂ O ₃ nanofiber by organometallic technique and its application in the nanofluid systems [A. Bulut, M Yurderi, I. E. Ertas, M. Zahmakiran]	Tailoring the properties of nanoparticles by ALD nanocoatings [D. Valdesueiro , A. Goulas, B. van Limpt]
	Effect of manufacturing processes on thermophysical properties and characteristics of water/ethylene glycol-based Al ₂ O ₃ nanofluids [T.J. Choi, M.S Park, S.P. Jang]	Environmental assessment of advanced heat management solutions [J. Krupane , B. Michaliszyn, Ł. Lelek, J. Kulczycka]
	Comparison of thermal conductivity measurement techniques of metallic nanocolloids [S. Puupponen, S. Feja, M. H. Buschmann , A. Seppälä] (Flash)	Graphene nanofluids – new and interesting results in a solar thermal collector [F.E.B. Bioucas , S.I. Vieira, M.J. Lourenço, F.J.V. Santos, C.A. Nieto de Castro](Flash)
16:10-16:30	Session 8: Closing of ESNf2017 [Sala de Conferência]	
16:30-17:00	Tea-coffee	
17:00-18:30	NanoUptake-WG3 Meeting [Sala de Conferência] Chair: Yulong Ding (WG3 Leader)	NanoUptake-WG4 Meeting [Sala de Doutoramentos] Chair: Matthias Buschmann (WG4 Leader)
20:00-23:30	Gala Dinner [Clube Militar Naval, Av. Defensores de Chaves Nº 26, 1000-117 Lisboa]	
	Notes: -Presenting author is indicated in bold; -Presentation time (including Q&A): Plenary: 45 min; Invited: 30 min; Regular: 15 min; Flash: 8 min.	