

**Location: Edifici Centre de Postgrau i Consell Social. Campus de Riu Sec. Universitat Jaume I
 12071-Castellon de la Plana. Spain**

All WGs. 25th October 9:30-11:00. Room: FF0008CC.

Title	Authors and Affiliation
Welcome Lecture NANOUP TAKE COST ACTION EVENT#1	J. E. Juliá Dept. de Ingenieria Mecanica y Construcccion, Universitat Jaume I, Castellon, Spain
Plenary Lecture Recent Trends in Nanofluid Heat Transfer	K. V. Sharma Jawaharlal Nehru Technological University, Hyderabad, India

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Collaborators:



WG3: Storage. WG Leader: Prof. Yulong Ding, WG Vice-Leader: Prof. Carlos Nieto de Castro. 25th October 11:20-18:30. Room: FF0105AA.

#	Title	Authors and Affiliation
1	Innovative solutions for geothermal heat exchangers with nanofluids	L. R. Silviu ^{1,2} , M. T. Dorin ¹ , P. G. Catalin ^{1,3} , C. Ionela ¹ , B. A. Irina ¹ ¹ Department of Building Services Engineering, "Gheorghe Asachi" Technical University of Iasi, 700050, Iasi, Romania ² Department of Research, SC AIR-PROJECTS SRL IASI, 700697, Iasi, ROMANIA ³ Department of Research, SC CLIMA THERM CENTER SRL IASI, 700545, Iasi, ROMANIA
2	Nano-PCMs characterization and modelling	P. Bison ¹ , S. Bobbo ¹ , L. Fedele ^{1,*} , S. Rossi ¹ , S. Mancin ² , D. Ercole ³ , O. Manca ³ ¹ Istituto per le Tecnologie della Costruzione, Consiglio Nazionale delle Ricerche, 35127 Padova, Italy ² Dept. of Management and Engineering, University of Padova, 36100, Vicenza, Italy ³ Dipartimento di Ingegneria Industriale e dell'Informazione, Seconda Università degli Studi di Napoli, 81031 Aversa, Italy
3	Graphene/PEG400 Nanostructured Materials for Thermal Energy Storage and Lubrication. Thermal Analysis and Thermophysical Profile	D. Cabaleiro ^{1*} , M. A. Marcos ¹ , M. J. G. Guimarey ² , M. J.P. Comuñas ² , J. Fernández ² , L. Lugo ¹ ¹ Departamento de Física Aplicada, Universidade de Vigo, E-36310, Vigo, Spain ² Laboratorio de Propiedades Termofísicas, Departamento de Física Aplicada, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain
4	Specific Heat increment of nitrate salts	M. E. Navarro ¹ , G. Qiao ² , Y. Ding ¹ ¹ Birmingham Centre of Energy Storage (BCES), School of Chemical Engineering, University of Birmingham, B152TT, Birmingham, UK ² Global Energy Interconnection Research Institute (GEIRI), 10117, Berlin, Germany

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#	Title	Authors and Affiliation
5	Investigation of specific heat capacity of solar salt-based nanofluids	Y. Hu ^{1,2} , Y. He ² , D. Wen ^{1,*} ¹ School of Chemical and Process Engineering, University of Leeds, LS2 9JT, Leeds, United Kingdom ² School of Energy Science and Engineering, Harbin Institute of Technology, 150001, Harbin, China
6	Effect of silica nanoparticles in the specific heat of Solar Salt	R. Mondragon ¹ , N. Navarrete ¹ , L. Hernandez ¹ , L. Cabedo ² , R. Martinez-Cuenca ¹ , S. Torro ¹ , J. E. Julia ^{1*} ¹ Dept. de Ingenieria Mecanica y Construccin, Universitat Jaume I, Castellon, Spain ² Dept. Ingenieria de Sistemas Industriales y Diseño. Universitat Jaume I. Castellon, Spain
7	Development of novel nanofluids based on solar salt and ceramic nanoparticles for sensible thermal storage applications	B. Muñoz-Sánchez ^{1,2} , J. Nieto-Maestre ^{1,*} , A. García-Romero ² ¹ Tecnalia Research and Innovation, 20009 - San Sebastián (Gipúzcoa). Spain.+34 671 729 012; ² Department of Mining Engineering, Metallurgy and Materials Science, University of the Basque Country (UPV/EHU), 48013 - Bilbao (Vizcaya). Spain.
8	Overview of nano research for thermal energy storage at the University of Lleida	Aran Solé ¹ , Camila Barreneche ^{1,2} , Luisa F. Cabeza ¹ ¹ GREA Investigació Concurrent. University of Lleida, Spain ² Department of Materials Science and Physical Chemistry. University of Barcelona. Spain

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WG4: Boiling, Solar and Others. WG Leader: Dr. Matthias Buschmann, WG Vice-Leader: Dr. Elisa Sani. 25th October 11:20-18:30. Room: FF0104AA.

#	Title	Authors and Affiliation
1	Experimental Analysis of Nanofluid Pool Boiling in Plain and Nanostructured Surfaces	S. Mancin ¹ , L. Doretto ² ¹ Dept. of Management and Engineering, University of Padova, 36100, Vicenza, Italy. ² Dipartimento Ingegneria Civile Edile ed Ambientale, Università degli Studi di Padova, 35131, Padova, Italy.
2	Pool Boiling Heat Transfer and Critical Heat Flux of Nanofluids	Z. Wu, B. Sunden Department of Energy Sciences, Lund University, SE-22100, Lund, Sweden
3	Nanofluids Influence on the Thermal Behaviour of Loop Heat Pipes and Pulsating Heat Pipes	R. Riehl Space Mechanics and Control Division – DMC, National Institute for Space Research - INPE São José dos Campos, SP, Brazil
4	Carbon nanohorn-based nanofluids for solar thermal harvesting applications	S. Barison ¹ , L. Fedele ² , F. Agresti ¹ , S. Rossi ² , S. Bobbo ² , C. Pagura ¹ ¹ Istituto di Chimica della Materia Condensata e di Tecnologie per l'Energia, Consiglio Nazionale delle Ricerche, 35127 Padova, Italy ² Istituto per le Tecnologie della Costruzione, Consiglio Nazionale delle Ricerche, 35127 Padova, Italy
5	Optical properties of nanofluids for direct solar thermal harvesting	E. Sani, L. Mercatelli, M. Meucci Istituto Nazionale di Ottica, Consiglio Nazionale delle Ricerche, 50125 Firenze, Italy

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#	Title	Authors and Affiliation
6	High stable nanofluids produced by Pulsed Laser Ablation in Liquids	O. Torres-Mendieta ^{1*} , R. Mondragón ² , E. Juliá ² , O. Mendoza-Yero ¹ , J. Lancis ¹ , and G. Mínguez-Vega ¹ , M. Meucci ³ , E. Sani ³ ¹ GROC, UJI, Institut de Noves Tecnologies de la Imatge (INIT), Universitat Jaume I., 12080, Castelló, Spain ² Departamento de Ingeniería Mecánica y Construcción, Universitat Jaume I., 12071, Castelló, Spain ³ Istituto Nazionale di Ottica, Consiglio Nazionale delle Ricerche, Largo Fermi 6, 50125 Firenze, Italy
7	IoNanofluids for Thermal Applications	C. Nieto de Castro, S. M. Sohel Murshed, M. J. Lourenço, F. J. V. Santos, M. Matos Lopes, J. M. P. França, S. I. C. Vieira, F. Biucas Centro de Química Estrutural, Faculdade de Ciências, Universidade de Lisboa, Campo Grande, 1749-016 Lisboa, Portugal
8	The Rheological properties of silver nanofluids for enhancing thermal behaviour	T. Parametthanuwat Department of Agricultural Engineering for Industry, King Mongkut's University of Technology 129 Moo 21, Tambon Noenhom, Amphoe Mueang, Prachinburi 25230, Thailand
9	Overview of nanofluid research at MIT	R. Azizian Department of Nuclear Science & Engineering Massachusetts Institute of Technology, Cambridge, MA 02139, USA

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#	Title	Authors and Affiliation
10	Development of numerical methods for simulations of flow and heat transfer by nanofluids	J. Ravnik, J. Tibaut, L. Skerget Faculty of Mechanical Engineering, University of Maribor, SI-2000 Maribor, Slovenia
11	Laser pyrolysis synthesis of Fe-Si-C nanoparticles and their evaluation for water-based nanofluids	I. Morjan ¹ , F. Dumitrache ¹ , C. Fleaca ¹ , G. Huminic ² , A. Huminic ² ¹ National Institute for Laser, Plasma and Radiation Physics, PO Box MG-36, 077125, Magurele, Bucharest, Romania ² Mechanical Engineering Department, Transilvania University of Brasov, 500036, Brasov, Romania

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WG1: Heating. WG Leader: Prof. Oronzio Manca, WG Vice-Leader: Prof. Luis Lugo. 26th October 8:30-13:00. Room: FF0105AA.

#	Title	Authors and Affiliation
1	Experimental heat transfer coefficients and pressure drop of functionalized graphene nanoplatelets/water nanofluids	R. Agromayor ¹ , J. P. Vallejo ^{1,2} , D. Cabaleiro ² , A. A. Pardiñas ¹ , J. Fernandez-Seara ¹ , L. Lugo ^{2*} ¹ Área de Máquinas y Motores Térmicos, Universidade de Vigo, 36310, Vigo, Spain ² Departamento de Física Aplicada, Facultade de Ciencias, Universidade de Vigo, 36310, Vigo, Spain
2	Nanofluids characterization for HVACR and heat exchange applications	S. Barison ¹ , L. Fedele ² , F. Agresti ¹ , V. Zin ¹ , S. Rossi ² , S. Bobbo ² , M. Fabrizio ¹ ¹ Istituto di Chimica della Materia Condensata e di Tecnologie per l'Energia, Consiglio Nazionale delle Ricerche, 35127 Padova, Italy ² Istituto per le Tecnologie della Costruzione, Consiglio Nazionale delle Ricerche, 35127 Padova, Italy
3	Hybrid nanofluids behavior in turbulent flow: numerical techniques applied to studied fluids	A. A. Minea ¹ , O. Manca ² , M. G. Moldoveanu ¹ , S. Bacaita ¹ , J. E. Julia ³ ¹ Technical University "Gheorghe Asachi" from Iasi, Faculty of Materials Science and Engineering, 700050, Iasi, Romania ² Seconda Università degli Studi di Napoli, 81031 Aversa (CE), Italy ³ Universitat Jaume I, 12071 Castellon de la Plana, Spain
4	Mixed convection boundary layer flow past a vertical flat plate embedded in a porous medium saturated by a nanofluid: Darcy-Ergun model	N. C. Roşca ¹ , A. V. Roşca ² , T. Groşan ¹ , I. Pop ^{1*} ¹ Department of Statistics–Forecasts–Mathematics, Babeş–Bolyai University, 400084 Cluj–Napoca, Romania ² Department of Mathematics and Statistics, Sultan Qaboos University, P.O. Box 36, P.C. 123 Al-Khod, Muscat, Sultanate of Oman

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5	Semi-analytical solution for the flow of a nanofluid over a permeable stretching/shrinking sheet with velocity slip using Buongiorno's mathematical model	N. C. Roşca ^{1*} , I. Pop ¹ , E. H. Aly ^{2,3} ¹ Department of Mathematics, Babeş–Bolyai University, 400084 Cluj–Napoca, Romania ² Department of Mathematics, University of Jeddah, Jeddah 21589, Saudi Arabia ³ Department of Mathematics, Ain Shams University, Roxy 11757, Egypt
6	Modeling and ω hot wire measurement of effective thermophysical properties of inhomogeneous media	M. Chirtoc, J-F. Henry, N. Horny GRESPI Lab., Université de Reims Champagne Ardenne URCA, 51687, Reims, France
7	Development of a heat exchanger with nanofluids by application of CFD	S. Bikic Faculty of Technical Sciences, University of Novi Sad, 21000 Novi Sad, Serbia

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WG2: Cooling. WG Leader: Prof. Sohel Murshed, WG Vice-Leader: Prof. Bengt Sundén. 26th October 8:30-13:00. Room: FF0104AA.

#	Title	Authors and Affiliation
1	Application of Nanofluids in Heat Exchangers: Performance and Challenges	Bengt Sunden Department of Energy Sciences, Lund University, SE-22100, Lund, Sweden
2	Numerical study of the heat transfer characteristics in double tube helical heat exchangers using hybrid nanofluids	G. Humnic ¹ , A. Humnic ¹ , F. Dumitrache ² , C. Fleaca ² , I. Morjan ² ¹ Mechanical Engineering Department, Transilvania University of Brasov, 500036, Brasov, Romania ² National Institute for Laser, Plasma and Radiation Physics, PO Box MG-36, 077125, Magurele, Bucharest, Romania
3	Characterization of the wettability of complex nanofluids using 3D Laser Scanning Confocal Fluorescence Microscopy	V. Silvério ¹ , A. S. Moita ¹ , A. L. N. Moreira ^{1*} , R. Lima ² , N. Pereira ¹ ¹ Instituto Superior Técnico, University of Lisbon, Center on Innovation, Technology and Policy Research, 1049 – 001 Lisboa, Portugal ² University of Minho, Department of Mechanical Engineering, 4804 – 533 Guimarães, Portugal
4	Transformer oil based magnetic fluid for effective cooling medium in power transformers	M. Timko ¹ , P. Kopcansk ¹ , M. Rajnak ¹ , M. Molcan ¹ , B. Dolnik ² , J. Kurimsky ² ¹ Institute of Experimental Physics, Slovak Academy of Sciences, 040 01 Kosice, Slovakia ² Faculty of Electrical Engineering and Informatics, TU in Košice, Letna 9, 040 01 Kosice, Slovakia
5	Thermophysical properties of ethylene glycol based yttrium aluminum garnet (Y3Al5O12–EG) nanofluids	Gawel Żyła Department of Physics and Medical Engineering, Rzeszow University of Technology, Rzeszow, 35-905, Poland

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#	Title	Authors and Affiliation
6	Carbon nanotubes nanofluids: Thermophysical properties and applications to heat exchange	P. Estellé Laboratoire de Génie Civil et Génie Mécanique, Matériaux et Thermo-Rhéologie, Université Rennes 1, 35704 Rennes, France

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