Detailed Program

	Sunday, September 27, 2015		
14:00 – 18:00	Registration Open		
18:00 – 22:00	Meet and Greet		
	Monday, September 28, 2015		
08:00 – 18:00	Registration Open		
10:00 – 10:30	Opening		
10:30 – 12:00	Multiphase Modeling and Large-Scale Simulations on GPU Platforms (Prof. Khinast) A review on uncertainties on thermophysical properties for few metallic oxide water based nanofluids (Prof. Minea) The Extended Discrete Element Method (XDEM) as a Flexible and Advanced Tool in Multi physics Applications (Prof. Peters)		
12:00 – 13:00	Buffet Lunch		
	Session A 1	**Session B 1**	**Session C 1**
13:00 – 14:40	Separation Techniques	Process Engineering	Sustainable & Renewable Energy
	149: Methanol transfer from binary and ternary mixtures by pervaporation Susanne Lux	58: Modelling of Wellbore Heat Transfer for Gas Production Gernot Schwaiger	47: The Energy Capture by the 0.5 kW Class Archimedes Spiral Wind Turbine through the Site Operation Ho Seong Ji
	133: Secondary sedimentation as limiting step in liquid-liquid extraction Jan Bernd Bol	106: Relation and difference between the Optimization of heat transfer processes and heat exchanger networks Qun Chen	74: Study on heat utilization system that uses binary cycle power generation Yusaku Nakagomi
	135: Optimizing selectivity and yield in plant-material extraction Jan Bernd Bol	30: Empirical Investigation on Effect of Cultivation Condition on Yield and Functional Composition of Frill-Lettuce produced Plant Factory Atsumasa Yoshida	6: Feasibility study on lifting of seabed materials using a bubble-jet-type air-lift pump Michio Sadatomi
	101: Effect of a bypass line on the characteristics of density wave oscillations Carlos Dorao	29: Investigation of Light Source Energy and Plant Physiology for Numerical Simulation in Plant Factory Atsumasa Yoshida	139: Heat and mass transport in a new composite material used in a long time thermal energy storage system Daniela Steininger
14:40 – 15:10	Break		
	Session A 2	**Session B 2**	**Session C 2**
15:10– 17.15	Heat Exchanger	Pollution Reduction	Sustainable & Renewable Energy
	76: Heat transfer performance of air-water heat exchanger inserting porous material Tatsuru Okubo	85: Experimental and Numerical Investigation of Pulsating Exhaust Flow in S-shaped Ducts on a Motored Engine Junichi Oki	125: Transient Forced Convection Heat Transfer for Water Flowing in a Small Tube with Exponentially Increasing Heat Inputs Makoto Shibahara

	59: Heat Transfer to a Sheet-type Heat Exchanger placed in running Water Flows Atsushi Yamamoto	134: Inhomogeneous Mixing Behavior of Recirculated Exhaust Gas in a Lean Premixed Flame Masaharu Komiyama	41: Evaluation on Thermal Effect of Sunagoke in Roof Greening Application by Indoor Experiment Muhammad Amir Alsar Bin Khalid
	50: Improvement of the thermo-electricity analogy method for heat exchanger networks analysis and optimization Hao Junhong Hao	124: Charge and Intensity control versus mass transfer control of electrochemical oxidation processes Dieter Woisetschläger	26: Study of the Possibilities of Pelletizing Ecuadorian Cocoa Pod Husk and its use as Biofuel Luis Velazquez-Araque
	132: Design and development of a high performance dryer using waste heat recovery for the highly viscous materials Jong Won Choi	32: Structure of Density Flow in a Sedimentation Basin with Inclined Plate Settler and its Improvement of Water Quality Kazutaka Takata	13: Simulation Studies on Co-firing of Coal and Biomass Blends in A Tangential Boiler Chia-Wei Chang
	119: Melting Process of Phase Change Materials for Waste Heat Recovery Systems Makoto Shibahara	17: Applications of Unstructured mesh method for complicated moving boundary problems Masashi Yamakawa	151: Ion transport in nanoporous carbon supercapacitors tracked by in-situ x-ray methods Christian Prehal
18:00 – 21:00	Dinner Buffet		
	Tuesday, September 29, 2015		
08:00 – 18:00	Registration Open		
	Session A 3	**Session B 3**	**Session C 3**
08:30 – 10:10	Heat Transport Technology	Measurement Systems	Flame Behavior
	152: Experimental investigation on the effect of operating conditions on the Sauter mean diameter of microbubbles for a Venturi type bubble generator Andriy Gordiychuk	138: Simultaneous measurement of concentration and flow fields in CO2 absorption process Toru Saito	33: Approaches to Enhance the Combustion Stability in Meso-scale Cylindrical Tube Combustors Fudhail Bin Abdul Munir
	147: Bubble induced turbulence in two-fluid simulation of bubbly flow Mark Schwarz	57: Real-time internal observation of wooden biomass in transient pyrolysis by using synchrotron X-ray Tadafumi Daitoku	155: Visualization and statistical evaluation of bio emulsified fuel droplets for spray combustion Masatsugu Fujimaki
	51: Analytical and Experimental Study of Heat Pipes Performance to Condense the Vapour Outlet of Process Condensate Strippers Behrooz Fadaee Ayyam	114: Ultra-short-time-resolved visualization of femtosecond-laser-pulse- induced bubble nucleation in water and acetone Takayuki Saito	156:Measurement of lubricating oil from ring crevice on abnormal combustion of boosted SI engine Toshiro Takita
	127: The Effect of Transverse Conduction on the Oscillation Flow and the Termal Performance of a Mircro Flat Plate Pulsating Heat Pipe Aejung Yoon	23: A Compressible, Multiphase Flow Finite Volume Method for Laser Ablation: Influence of Lase Beam Profile Hong Duc Doan	12: Numerical investigation on inner particle effects in Lycopodium/Air dust deflagrations Christoph Johannes Spijker
10:10 – 10:40	Break		

	Session A 4	Session B 4	Session C 4
10:40 – 12:20	Heat Transport Technology	Measurement Systems	Flame Behavior
	39: The Flow Behavior of Bamboo Fiber Suspension in Circular Pipe and Spiral Pipe Yanuar Anwas	146: Development of Temperature Measurement method of Airflow using Ultra-fine Fluorescent Wires and its application to the calorimetry of heat pump system Shumpei Funatani	28: Influence of Fatty Acids Composition on Burning Velocity and Flame Behaviour of Vegetable Oil Premixed Combustion I.N.G. Wardana
	75: Performance of ground source heat pump that use direct expansion method – Characteristics of extracting and releasing heat to the ground Akiko Watanabe	18: Experimental study on two-phase adiabatic expansion for trilateral cycle H. Kanno	154: Numerical investigation on heat transport while the ignition process of a dust/air mixture Werner Pollhammer
	78: Fundamental Study on Sideward Heat Transport by a Loop Thermosypho Yasushi Koito	21: Temperature Distribution of Organic Light Emitting Diode Panel Toshiro Kobayashi	46: Numerical Analysis on the Detailed Behavior of Flame Propagation and Auto-ignition of Premixed Gas in Closed Chamber Kenji Yoshida
	70: Theoretical Study on Thermal Resistance of Fine Wire Placed in Air Stream Toshio Tomimura	81: Measurement of Zeta-Potentials of Colloidal Liquids for Latent Heat Storage Applications Katsuaki Shirai	49: Influence of Reduced Post Combustion Temperature on Co and PSDD/F Concentration in Flue Gas From Incinerators – Demonstrated in Cremation Systems Gebhard Schetter
12:20 – 13:05	Buffet Lunch		
	Session A 5	**Session B 5**	**Session C 5**
13:05 – 14:20	Electro Technology	Measurement Systems	Flame Behavior
	4: Practical application of thermal network method to thermal design of a compact self-ballasted fluorescent lamp Masaru Ishizuka	150: Optimized Finned Heat Sinks for Natural Convection Cooling of Electronics Lian-Tuu Yeh	20: Visualization and Numerical Simulation of Exchange Flow in Unstably Stratified Field Motoo Fumizawa
	92: Investigation of Appropriate Energy Ralacation Time in Electro-Thermal Analysis for Calculation of power SI MOSFET Risako Kibushi	10: Determination of the Mass Transfer Coefficient of Oxygen Adsorption by Sodium Sulfite Droplets Anda Lucia	84: Investigation of Method of Promotion Mixing in Natural Gas Unsteady Jet using Large Eddy Simulation Chihiro Kondo
	80: Experimental Study on the Complex Flow in a Transparent Model of Hard Disk Drive Katsuaki Shirai	86: Analysis on Ionic Reaction and Diffusion in Electrolyte Solutions by using NIR Absorption Imaging Technique Daisuke Kawashima	
14:30 – 21:00	Reception with the Governor in Graz		

	Wednesday, September 30, 2015		
08:00 – 18:00	Registration Open		
	Session A 6	**Session B 6**	**Session C 6**
08:30 – 10:10	Cooling Technology	Fluid Dynamic	Micro- and Nanoscale Transport
	89: Superior Heat Transfer Characteristics in Boiling of Immiscible Mixtures Haruhiko Ohta	123: Flow visualization studies in a cylindrical container with a rotating bottom end wall. Justin Joshua	37: Local Heat Transfer Measurements from Convex and Concave Surfaces at a Uniform Wall Temperature with a Laminar Confined Slot Impinging Jet Yeong Hwan Kim
	100: Subcooled boiling pressure drop in a small diameter horizontal tube Maria Fernandino	136: Evaluation of radiation effect to the heat and fluid flow characteristics in the turbulent natural convection of square cavity Takuma Kogawa	16: Measuring the Thermal Contact Resistance without Surface Roughness Koji Takahashi
	121: Dependence of Thermal Performance of Horizontal Pulsating Heat Pipes on Operating Temperature – An Experimental Observation Jae Min Lee	31: Analytical Study of Falling Film Adsorption on a Partially Wetted Horizontal Tube Niccolo Giannetti	118: Modeling of Two-Phase Nanofluid-Fluid Flow with Heat Transfer Yit Fatt Yap
	104: Study on the mixing flow field of shaped film cooling holes with high film cooling effectiveness Kenichiro Takeishi	68: Flow Separation and Hydraulic Jump in Run-down Motion of Solitary Wave over 1:5 Sloping Bottom Cheng Lin	67: Evaluation of wicking performance with heat transfer on nanopillar surface Namkyu Lee
10:10 – 10:40	Break		
	Session A 7	**Session B 7**	**Session C 7**
10:40 – 12:20	Cooling Technology	Fluid Dynamic	Micro- and Nanoscale Transport
	115: Vaporization of a cold water drop impinging against hot porous substrates June Woo Kee	65: Numerical Simulation of Free Surface Flow with Submerged Object Using Moving-Grid Finite-Volume Method Sadanori Ishihara	137: Heat Transfer of Nanofluids in Microsystems Sohel Murshed
	7: Subcooled Boiling with Microbubble Emission ; Contribution toward analyzing the mechanism of Microbubble Emission Boiling Koichi Suzuki	82: Enhancement of film Boiling Heat Transfer with Ultrasonic Vibration Kentarou Tsutsui	53: Tomography Based Analysis Of Anisotropic Conduction In Fibrous Insulation Anupam Akolkar
	43: The thermal performance of a louvered fin heat exchanger under wet and frosting/defrosting conditions Min-Hwan Kim	66: Flow boiling heat transfer on nanowires surface using FC-72 and water Geehong Choi	64: Void fraction investigation in a microchannel with nanoparticles coating Mikhail Shustov
	22: Oil Separation Enhancement with New Cyclone Oil Separator Design Seongil Jang		111: Flow resistance values for wire net in a wide range of Reynolds number for the thermal design of electronic equipment Masaru Ishizuka
12:20 – 13:30	Buffet Lunch		

	Session A 8	Session B 8	Session C 8
13:30 – 15:10	Cooling Technology	Fluid Dynamic	Simulation Study
	69: Development of high heat flux removal device with metal porous media for an enlarged heat transfer surface Kazuhisa Yuki	113: Influences of bubble-surface contamination on mass transfer based on consideration of the bubble and the surrounding-liquid motions Takayuki Saito	94: Comparison of Numerical Schemes for Solving Body-Force Type Immersed Boundary Method Kenya Kuwagi
	117: Preliminary thermal sizing of an air-cooled heat exchanger for integral reactors Joo Hyung Moon	108: An experimental study on the drift velocity of gas bubble in highly viscous liquids Gianluca Losi	72: Wake Structures of Heaving Elastic Airfoils covered with walls Masaki Fuchiwaki
	79: Effect of Heat Transfer Rate on Effective Partition Coefficient of Solution in Progressive Freeze-Concentration Takaharu Tsuruta	35: A Moving Mesh Method with Sliding Mesh Approach for Incompressible Flows Shinichi Asao	87: Experimental and numerical investigation on mixed convection in horizontal channels partially filled with aluminium foam and heated from below Oronzio Manca
	45: Analysis of heat removal accidents during the wet storage phase in Ignalina Nuclear Power Plant Algirdas Kaliatka	77: Numerical Study on Hypersonic Flow over a Fore-body with Shallow Cavity Pei-Yuan Tzeng	
15:10 – 15:40	Break		
	Session A 9	**Session B 9**	**Session C 9**
15:40 – 17:20	Raw Material	Fluid Dynamic	Nuclear Power Technology
	157: The RECOPHOS PROCESS – Recovery of Phosphorus from sewage sludge ashes with an inductive heated packed bed Reactor Andreas Schönberg	116: Numerical Simulation of Flow Patterns in a Horizontal junction Pipe Using OpenFOAM Hongying Li	27: Preliminary Study on Evaluating of Effectiveness of the Hybrid SIT in Nuclear Power Plant Sung Uk Ryu
	153: Solute transport in age-hadenable aluminum alloys Stefan Pogatscher	130: Peristaltic Transport of Physiological Fluids: a Numerical Study Keyvan Sadeghy	88: A numerical investigation on laminar forced convection with nanofluid in heated flat tubes Oronzio Manca
	158: Kinetic characteristics of calcium oxide dissolution in Steelmaking slags Elizaveta Cheremisina	112: Thermal-hydraulic performance evaluation of a printed circuit steam generator for integral reactors Hun Sik Han	71: Effect of nanowire height on boiling heat transfer Dong Il Shim
	141: Modeling of Heat Treatment and Re-peeing effects on Severe Shot Peened Nanostructured Low-alloy Steel Using Artificial Neural Network Erfan Maleki		96: Fundamental study of ultrasonic measurement for leakage from reactor vessel and debris inspection Tomonori Ihara
19:00 – 23:00	Conference Dinner		
	Thursday, October 1, 2015		
08:00 – 17:00	Excursion		