

TUESDAY, SEPTEMBER 13 - 2016

Session 1		Fuel Applications 1	
		Session Co Chairs: R. Brewster (WEC, USA) 10:30 a.m. - 12:15 p.m. – Wong Auditorium	
Presentation:	1.1		
Paper Title:	<u>New Insights Into The Flow Inside Nuclear Reactor Fuel Bundles Using Magnetic Resonance Velocimetry</u>		
Authors:	M. Bruschewski, D. Freudenhammer, M.H.A. Piro, C. Tropea and S. Grundmann		
Presentation:	1.2		
Paper Title:	<u>Demonstration of Advanced Hydraulic Benchmark Data for PWR Mixing Vane Grid</u>		
Authors:	M. E. Conner, C. E. Estrada Perez, E. Dominguez-Ontiveros and Y. Hassan		
Presentation:	1.3		
Paper Title:	<u>CFD Simulation of Flow Mixing and Heat Transfer in 4x4 Rod Bundle with Twist-Vane Grid</u>		
Authors:	W.-K. In, C.-H. Shin, C. Lee, K.-G. Lee and C-Y.. Lee		
Presentation:	1.4		
Paper Title:	<u>Experimental and Computational Investigations of Flow By-Pass in a 37-Element CANDU Fuel Bundle in a Crept Pressure Tube</u>		
Authors:	M. H. A. Piro, F. Wassermann, M. Bruschewski, D. Fruedenhammer, S. Grundmann, S.J. Kim, M. Christon, M. Berndt, C. Azih and C. Tropea		
Session 2		Containment 1	
		Session Co Chairs: M. Andreani (PSI, Switzerland), E. Laurien (UniStuttgart, Germany) 10:30 a.m. - 12:15 p.m. – Morss Hall	
Presentation:	2.1		
Paper Title:	<u>Double Blind Simulation Benchmark Based on Initial Operation Test of the Extended THAI+ Facility on Steam Condensation and Light Gas Mixing by Natural Convection</u>		
Authors:	M. Freitag and E. Schmidt		
Presentation:	2.2		
Paper Title:	<u>Blind Simulations of THAI Test TH27 with GASFLOW-MPI for Participation in the International Benchmark Conducted within the German THAI Program</u>		
Authors:	P. Royl, J. Xiao and T. Jordan		
Presentation:	2.3		
Paper Title:	<u>Numerical Simulation of Droplet Flows in the Model Containment THAI</u>		
Authors:	C. Kaltenbach and E. Laurien		
Presentation:	2.4		
Paper Title:	<u>URANS Analysis of the Erosion of a Stably Stratified Layer</u>		
Authors:	L. Ishay, G. Ziskind, U. Bieder and A. Rashkovan		

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Session 3 Multiphase General 1 Session Co Chairs: D. Bestion (CEA, France), A. Uchibori (JAEA, Japan) 2:10 p.m. - 3:30 p.m. – Wong Auditorium	
Presentation:	3.1
Paper Title:	<u>Validation of the Baseline Model for Poly-Disperse Bubbly Flows</u>
Authors:	D. Lucas, E. Krepper and R. Rzehak
Presentation:	3.2
Paper Title:	<u>CFD Calculations of Multiphase Flows with a Multifield Approach</u>
Authors:	S. Mimouni, D. Lucas and I. Tiselj
Presentation:	3.3
Paper Title:	<u>Integral and Separate Effect Simulations of Bubbly Flows Using Interface Tracking Approach</u>
Authors:	J. Fang, J. Feng and I. Bolotnov
Session 4 Plant - PTS Session Co Chairs: J.P. Simoneau (EDF, France), M. Tanaka (JAEA, Japan) 2:10 p.m. - 3:30 p.m. – Morss Hall	
Presentation:	4.1
Paper Title:	<u>IAEA CRP Benchmark of ROCOM Boron Dilution and PTS Test Cases for the Use of CFD in Reactor Design</u>
Authors:	T. Höhne and S. Kliem
Presentation:	4.2
Paper Title:	<u>Towards the Benchmarking Direct Numerical Simulations of a Single Phase Pressurized Thermal Shock</u>
Authors:	D. Rosa, A. Shams and E.M.J. Komen
Presentation:	4.3
Paper Title:	<u>Methodology Development of CFD/PFM for PTS Analysis on Nuclear Reactor Safety</u>
Authors:	J.-X. Kang, P.-C. Huang, Y.-C. Hung, C.-H. Lin, Y.-S. Tseng, Y.-M. Ferng and C.-Y. Shih

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Poster Session 1	Plant and Mixing Applications 3:30 p.m. - 4:15 p.m. – Morss Hall
Poster:	P1.1
Poster Title:	<u>ANALYSIS OF THE COLD TRAP CONFIGURATION IN AP1000® USING CFD</u>
Authors:	H.Xu, R.F. Wright
Poster:	P1.2
Poster Title:	<u>NEPTUNE CFD VALIDATION FOR PRESSURIZED THERMAL SHOCK (PTS) APPLICATIONS ON TOPFLOW-PTS STEADY-STATE STEAM-WATER EXPERIMENTAL TESTS WITH DIFFERENT WATER LEVELS IN THE COLD LEG</u>
Authors:	J. Roy, C. Heib
Poster:	P1.3
Poster Title:	<u>COMPUTATIONAL STUDY OF THE SAFETY INJECTION TANK PERFORMANCE</u>
Authors:	J.O. Cho, J. I. Lee, Y. Addad, Y. S. Nietiadi, Y. S. Bang, S. H. Yoo
Poster:	P1.4
Poster Title:	<u>ANSYS CFX SIMULATION OF T-JUNCTION MIXING PHENOMENA AND VALIDATION AGAINST VATTENFALL EXPERIMENT RESULTS</u>
Authors:	M. Aghazarian, A. Nalbandyan, Ts. Malakyan, A. Amirjanyan
Poster:	P1.5
Poster Title:	<u>DEVELOPMENT OF UNSTRUCTURED MESH-BASED NUMERICAL METHOD FOR SODIUM-WATER REACTION PHENOMENON IN STEAM GENERATORS OF SODIUM-COOLED FAST REACTORS</u>
Authors:	A. Uchibori, A. Watanabe, T. Takata, S. Ohno, H. Ohshima
Poster:	P1.6
Poster Title:	<u>COMPARISON OF HYDROGEN FLAME ACCELERATION PREDICTIONS USING THE EDDY-DISSIPATION AND THE TURBULENT FLAME CLOSURE</u>
Authors:	Y. Halouane, A. Dehbi
Poster:	P1.7
Poster Title:	<u>PREDICTION OF THE TEMPERATURE DISTRIBUTION IN A DOUBLE TUBE COUNTER-FLOW HEAT EXCHANGER USING ANSYS CFX</u>
Authors:	A. Papukchiev, M. Scheuerer
Poster:	<i>OECD-GEMIX Benchmark Special Session</i>
Poster Title:	OECD-GEMIX Benchmark Results
Authors:	Christopher Boyd (US Nuclear Regulatory Commission)

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Session 5	Boiling 1 Session Co Chairs: S. Mimouni (EDF, France), S. Lo (CD-adapco, UK) 4:25 p.m. - 5:45 p.m. – Wong Auditorium
Presentation:	5.1
Paper Title:	<u>Evaluation of Coalescence and Break-Up Kernels of Subcooled Boiling Flows in Vertical Channels</u>
Authors:	S. Vahaji, L. Deju, S.C.P. Cheung, J.Y. Tu and Yeoh
Presentation:	5.2
Paper Title:	<u>Numerical Simulation of Nucleate Boiling Using Dynamic Models of Microlayer Formation and Evaporation</u>
Authors:	A. Guion, J. Buongiorno, S. Zaleski, S. Afkhami and C. Narayanan
Presentation:	5.3
Paper Title:	<u>CFD Model for Simulation of Subcooled Nucleate Flow Boiling – Implementation and Validation</u>
Authors:	M. Sonntag and X. Cheng
Session 6	Fluid Structure Interaction 1 Session Co Chairs: K. Miyoshi (INSS, Japan), T. Hoehne (HZDR, Germany) 4:25 p.m. - 5:45 p.m. – Morss Hall
Presentation:	6.1
Paper Title:	<u>Investigation of Cross-Flow Induced Vibrations in a Normal Square Tube Array by Means of Large-Eddy Simulations for Tube Damage Risk Assessment</u>
Authors:	J. Berland, E. Deri, A. Adobes
Presentation:	6.2
Paper Title:	<u>Numerical Prediction of Flow Induced Vibrations for Safety in Nuclear Reactor Applications</u>
Authors:	E. ter Hofstede, S. Kottapalli and A. Shams
Presentation:	6.3
Paper Title:	<u>Validation of Beam Vibration Simulations in Axial Flow</u>
Authors:	R.A. Brewster and Y. Aleshin