

International Students Workshop on High Performance Light Water Reactors

March 31 to April 3, 2008
 Organized by the HPLWR Working Group
 Hosted by Karlsruhe Institute of Technology

Program

Monday, March 31, 2008

09:00 – 10:30	HPLWR Reactor Design	T. Schulenberg
11:00 – 12:30	Steam Cycle and Safety System Design	T. Schulenberg
12:30 – 14:00	<i>Lunch Break</i>	
14:00 – 14:25	Steam Cycle Analysis for HPLWR	M. Schlagenhauser
14:25 – 14:50	Simulation of Thermal Hydraulics at Supercritical Pressures with APROS	J. Kurki
14:50 – 15:15	Residual Heat Removal System of the HPLWR	B. T. de Marsac
15:15 – 15:45	<i>Coffee Break</i>	
15:45 – 16:10	Design Study for Fuel Replacement during an HPLWR Yearly Outage	C. Köhly
16:10 – 16:35	CFD Analysis of Feedwater Flow in the High Performance Light Water Reactor	H. Foulon
16.35 – 17:00	Coolant Mixing in the HPLWR Upper Plenum	A. Wank

Tuesday, April 1, 2008

09:00 – 10:30	Reactor Physics and Methods	G. Rimpault
11:00 – 12:30	HPLWR Neutronic Core Optimization	G. Rimpault
12:30 – 14:00	<i>Lunch Break</i>	
14:00 – 14:25	Thermal Hydraulic Feedbacks on Neutronic Analysis of the HPLWR Fuel Assembly	L. Monti
14:25 – 14:50	Neutronic and Thermal-hydraulic Modelling of High Performance Light Water Reactor	M. Seppälä
14:50 – 15:15	A Coupled Neutronics-Thermohydraulic Program System for Steady State Analysis of HPLWRs	T. Reiss
15:15 – 15:45	<i>Coffee Break</i>	
15:45 – 16:10	Safety Analysis of a Supercritical-Pressure Water Cooled Fast Reactor	S. Ikejiri
16:10 – 16:35	A Study on Supercritical Light Water Fast Reactor with Internal Blanket Zones to enable High Fissile Breeding Potential	U. Pal
16:35 – 17:00	Nuclear Waste Burning: An important Goal in the Frame of the Generation IV of Nuclear Reactors	E. Bamboni
17:00 – 17:25	Main Features of the Fixed Bed Nuclear Reactor	H. Van Thong

Wednesday, April 2, 2008

09:00 – 10:30	Heat Transfer Phenomena of Supercritical Water	E. Laurien / D. M. McEligot
11:00 – 12:30	Sub-channel and CFD Analyses	H. Anglart
12:30 – 14:00	<i>Lunch Break</i>	
14:00 – 14:25	CFD Analysis of Thermal-Hydraulic Behaviour in SCWR Typical Flow	H. Gu
14:25 – 14:50	Predicting Sharp Increase in Wall Temperature of a Strongly Heated Circular Tube with Water Flowing at Supercritical Pressure	M. Rashid
14:50 – 15:15	CFD of CO ₂ Flow in Vertical Annular Channel and Comparison of Numerical Predictions with Experimental Data	Y. Zhu
15:15 – 15:45	<i>Coffee Break</i>	
15:45 – 16:10	Numerical Study of the Heat Transfer Deterioration	D. Palko
16:10 – 16:35	Analysis of a Thermal SCWR Core with New Type Fuel Assemblies	X. Lui
16:35 – 17:00	CFD Analysis of Mixing Coefficients in Rod Bundles	B. Vogt
17:00 – 17:25	Numerical Analysis of Heat Transfer in Upward Flow of Supercritical Water on a Circular Tube	A. Tripathi

Thursday, April 3, 2008

09:00 – 10:30	Thermal-Hydraulic Stability Limits	W. Ambrosini
11:00 – 12:30	Materials for HPLWR	L. Heikinheimo
12:30 – 14:00	<i>Lunch Break</i>	
14:00 – 14:25	CFD Analysis of Subchannel Flow in an HPLWR Assembly with Wire Wraps	S. Himmel
14:25 – 14:50	Numerical Simulation of a HPLWR Fuel Assembly Flow with Wrapped Wire Spacers	A. Kiss
14:50 – 15:15	Experimental Investigation of Flow Obstacles Effect on Single Phase Heat Transfer	A. Tanase
15:15 – 15:45	<i>Coffee Break</i>	
15:45 – 16:10	Thermo-Mechanical Stress and Deformation Analysis of the Pressure Vessel and Steam Plenum for a Reactor with Supercritical Steam Conditions	K. Fischer
16:10 – 16:35	Stress and Deformation Analysis of an HPLWR Assembly Box	H. Herbell
16:35- 17:10	Thermal-Hydraulic Stability Limits of the HPLWR Evaporator including Neutronic Feedback	T. Ortega-Gomez

Evening Events

Sunday March 30, 2008

Welcome

19:00 Welcome and Beer at Badisch Brauhaus, Stephaniensstrasse 38-40.
(Invitation by RWE Power AG)
We meet at 18:30 at Hotel Eden in the Lobby to walk there together.



www.badisch-brauhaus.de

Wednesday April 2, 2008

Dinner

19:00 Dinner at Hoepfner Burghof, Haid-und-Neu-Strasse 18
(Invitation by AREVA-NP)



www.hoepfner-burghof.de

Organizing committee:

Prof. Thomas Schulenberg, KIT
Prof. Eckart Laurien, IKE, University of Stuttgart
Prof. Henryk Anglart, KTH, Stockholm
Internet: www.hplwr.eu

