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Hong Yi (Renaissance Computing Institute), Michel Rasquin (Argonne National Laboratory; University of Colorado at Boulder), Anand Mishra, Jun Fang, Igor A. Bolotnov (North Carolina State University)

7.10 SMR Thermal Hydraulics

14041 Post-Test Simulation Results on the Integral Effect Tests using the VISTA-ITL for the SMART Design **1878**

Hyun-Sik Park, Youn-Gyu Jung (Korea Atomic Energy Research Institute), Doo-Hyuk Kang (System Engineering & Technology Co., Ltd), Hwang Bae, Sung-Jae Yi (Korea Atomic Energy Research Institute), Jae-Seung Suh (System Engineering & Technology Co., Ltd)

14067 Comparison of Thermal Hydraulic Performances of Rod-Type Fuel to Plate-type Fuel for Small Modular Reactor Application **1885**

Min-Gil Kim, Youho Lee, Jeong Ik Lee (Korea Advanced Institute of Science and Technology)

14077 A v2-f Model Assessment for Mixed Convection in Water-Cooled SMR Configuration **1894**

Andhika Feri Wibisono (Korea Advanced Institute of Science and Technology), Yacine Addad (Khalifa University of Science, Technology & Research (KUSTAR)), Jeong Ik Lee (Korea Advanced Institute of Science and Technology)

14306 Fuel Assembly Hydraulic Testing for Westinghouse Small Modular Reactor **1903**

M.E. Conner, R.L. Wang, R. Lu (Westinghouse Electric Company)

7.11-I Single Phase CFD-I

14063 Large Eddy Simulation of Fluid Mixing at High Temperature Differences in a T Junction Piping System **1910**

Karthick Selvam, Rudi Kulenovic, Eckart Laurien (University of Stuttgart)

14092 Large Eddy Simulation of Turbulent Penetration in a T-junction **1921**

John Kickhofel, Horst-Michael Prasser (ETH Zürich)

14143 Turbulence Model Comparison for Innovative Compact Plate Heat Exchanger Design Application **1930**

Francesco Vitillo, Lionel Cachon (CEA Cadarache), Pierre Millan, Philippe Reulet, Emmanuel Laroche (ONERA Toulouse)

14160 UTK Twin Jet Water Facility Computational Fluid Dynamics Validation Data Set **1940**

Mark Crosskey, Art Ruggles (University of Tennessee)

7.11-II Single Phase CFD—II

14075 RANS-Based CFD Analyses of Turbulent Flow in a Solid Core, Small Modular Reactor **1946**

Timothy M. Schriener, Mohamed S. El-Genk (University of New Mexico)

14192 Numerical Flow Simulation of Bare Square Array Subchannel with Partially Closed Gaps **1956**

Hyung Min Son (Korea Atomic Energy Research Institute), Kune Yull Suh (Seoul National University; PHILOSOPHIA, Inc.)

14263 Large Eddy Simulations of Flow inside a Cubical Differentially Heated Cavity under Realistic Conditions **1963**

A. Dehbi, F. Han, J. Kalilainen (Paul Scherrer Institut)

Track 8.00: Fuel Cycle and Waste Management

8.01 General Fuel Cycle Analysis

14010 Spent Nuclear Fuel Management for Salt-Cooled Reactors: Storage, Safeguards, and Repository Disposal	1971
Charles Forsberg (Massachusetts Institute of Technology), Per Peterson (University of California)	
14094 Nuclear Fuel Cycle Technology Readiness Metrics Level Determination: The Results of a Focused Expert Review	1980
Steven Krahn (Vanderbilt University), Andrew Sowder, Albert Machiels (Electric Power Research Institute), Robert Jubin (Oak Ridge National Laboratory), Allen Croff, Timothy Ault (Vanderbilt University)	
14104 The Environmental Health and Safety Risks of the Transition from the Present U.S. Once-through to a Modified Open Nuclear Fuel Cycle	1990
Bethany L. Smith, Steven L. Krahn, James H. Clarke, Kevin G. Brown (Vanderbilt University), Albert Machiels, Andrew Sowder (Electric Power Research Institute)	
14120 Highlights and Summary Observations from the Global 2013 Thorium Fuel Cycle Track	2006
Steven Lee Krahn, Allen Croff, Timothy Ault (Vanderbilt University), Fausto Franceschini (Westinghouse Electric Corporation)	

8.02 Performance and Specific Issues on Fuel Cycle Options

14040 Development and Testing of an Americium/Lanthanide Separation Flowsheet Using Sodium Bismuthate	2019
Jack Law, Bruce Mincher, Troy Garn, Mitchell Greenhalgh, Nicholas Schmitt, Veronica Rutledge (Idaho National Laboratory)	
14136 TRU Burning Fast Reactor Cycle Using Uranium-Free Metallic Fuel	2025
Kazuo Arie, Mitsuaki Yamaoka, Yasuyuki Moriki (Toshiba Corporation), Masatoshi Kawashima (Toshiba Nuclear Engineering Services Corporation), Takashi Oomori, Kyoko Ishii, Yasushi Tsuboi (Toshiba Corporation)	
14153 Phenomenological and Experimental Study of the Tritium Distribution in the Effluents Resulting from the Sodium Hydrolysis	2035
Aurelien Chassery (CEA, DEN, Cadarache, DTN; Université de Toulouse; CNRS), Helene Lorcet, Joel Godlewski, Karine Liger, Pierre Trabuc, Christian Latge (CEA, DEN, Cadarache, DTN), Xavier Joulia (Université de Toulouse; CNRS)	
14270 Impact of SiC Cladding on Plutonium Burning in a Thorium Fueled PWR	2043
N. Andrews, E. Pilat, K. Shirvan, M.S. Kazimi (Massachusetts Institute of Technology)	

8.03 Fuel Cycle Economics

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Maria Elena Urso, Alexey Likhov, Ron Cameron (OECD Nuclear Energy Agency)	
14167 Modeling Non-Destructive Assay Based Signatures for Application to Safeguarding Pyroprocessing	2056
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14299 Sustainability and Economy of Energy Supply with HTGR Fueled by Uranium from Seawater 2066

Yuji Fukaya, Minoru Goto, Hirofumi Ohashi, Yukio Tachibana, Kazuhiko Kunitomi (Japan Atomic Energy Agency)

14394 Economics Analysis of Complex Nuclear Fuel Cycles with NE-COST 2073

Francesco Ganda (Argonne National Laboratory), Brent Dixon (Idaho National Laboratory), Edward Hoffman, Taek K. Kim, Temitope Taiwo (Argonne National Laboratory), Roald Wigeland (Idaho National Laboratory)

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14007 Development, Characterization and Testing of Materials of Relevance to Nuclear Energy Sector Using Neutron Beams—A Progress Report of the IAEA Coordinated Research Project 2086

M. Grosse (Karlsruhe Institute of Technology), A. Balagurov (Joint Institute for Nuclear Research), V. Inozemtsev (IAEA), E. Lehmann (Paul Scherrer Institut), P. Mikula (Nuclear Physics Institute ASCR), D. Ridikas (IAEA), G. Török (Central Research Institute for Physics)

14111 Creep Rupture Behaviour of Cr-Mo Ferritic Steels Under Multiaxial State of Stress 2094

K. Laha, Sunil Goyal, M.D. Mathew, T. Jayakumar (Indira Gandhi Centre for Atomic Research)

14117 Status of the French R&D on ASTRID Core Materials 2104

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14245 Some Recent Results on Stainless Steel 316L(N) for a 60 Years Design Life as ASTRID Structural Material 2110

Celine Cabet, France Dalle, Maxime Sauzay, Yiting Cui (CEA, DEN/DANS), Laurent Forest (CEA, DEN/DANS/DM2S/SEMT), Jean-Louis Courouau (CEA, DEN/DANS/DCEA), Sophie Dubiez-Le Goff, Thorsten Marlaud (AREVA NP), Martine Blat-Yrieix (EDF R&D MMC)

14289 Influence of Milling Duration and Aluminum Pollution on the Microstructure of Oxide Dispersion Strengthened 2116

M. Loyer-Prost (CEA-DEN, Service de Recherches de Métallurgie Physique), C. Hatzoglou, B. Radiguet (Université et INSA de Rouen), G. Vaux (CEA-DEN, Service de Métallurgiques Appliquées), D. Nunes, D. Sornin, N. Lochet, P.F. Giroux, F. Frossard, Y. Le Bouar (Laboratoire d'Etudes des Microstructures), S. Poissonnet, P. Bonnallie (CEA-DEN, Service de Recherches de Métallurgie Physique), P. Pareige (Université et INSA de Rouen), L. Chaffron (CEA-DEN, Service de Métallurgiques Appliquées), F. Legendre (CEA-DEN, Service de Recherches de Métallurgie Physique)

9.03 Corrosion/CRUD Issues

14211 High Temperature Steam Oxidation Performance of MAX Phase (Ti₂AlC) Coated ZIRLO 2126

Michael Pantano (Massachusetts Institute of Technology), Valentina Avincola (Karlsruhe Institute of Technology), Pierre Arnauld de Sèze (INSTN), Thomas McKrell, Mujid S. Kazimi (Massachusetts Institute of Technology)

14268 Fuel CRUD Redeposition Following On-Line NobleChem™ Application **2136**

Carola A. Gregorich, Mike Pop, Larry S. Lamanna (AREVA Inc.)

14300 Influence of Water Chemistry on the Corrosion Behaviour of the CANDU Steam Generator Tubing Material **2144**

Dumitra Lucan, Lucian Velciu (Institute for Nuclear Research), Georgiana Lucan (The Bucharest University of Economic Studies)

14339 Nuclear Fuel Rod Corrosion Model Optimization **2149**

Andrew J. Petrarca, Henk C. Schutte, Zeses E. Karoutas (Westinghouse Electric Company)

14391 Development of SCC Mitigation Method in BWR by TiO₂ Technique **2155**

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14171 Evaluation of Structural Performance of Nuclear Components Considering Weld Mechanical Properties **2171**

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14064 Fuel Grid Vane Failure Caused from Higher Hoist Speed **2212**

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14114 Core Mechanical Dynamics Experiment in the Phenix Reactor 2218
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