

IYNC 2008 Technical Program Schedule (As of September 10, 2008)

Note: Subject to changes. Please check the final schedule prior to the start of the conference.

Venues

V1	Theatersaal
V2	Ballsaal
V3	Club Casino
V4	Brüning
V5	Harder 1+2

Tracks

A	Nuclear Science and Technology
B	Nuclear Fuel Cycle and Decommissioning
C	New Plant Construction
D	Non-power Applications of Nuclear
E	Nuclear Politics, Economics and Human Resources
F	Young Generation and IYNC Activities
G	ENEN Ph.D Sessions
P	Poster Presentations

W Workshops

W1	Nuclear Lobbying - A FORATOM Perspective	FORATOM
W2	Challenges for New NPP Projects in Europe	ENS - Young Generation Network
W3	Risk Management and Public Perception	Prof. David Ropeik, Harvard University
KNS 1	Keynote Speaker 1	Dave Novog (UNENE) - Track A
KNS 2	Keynote Speaker 2	Madiba Saïdy (WNU) - Track B
KNS 3	Keynote Speaker 3	Ralf Guldner (E.ON) - Track C
KNS 4	Keynote Speaker 4	Keiko Hanamitsu (IAEA) - Track E

P1 Poster Presentations

Paper #	Author	Title
P1,1	485 Malinda Prasanna Ranaweera	Youth Nuclear Society of Sri Lanka (YNSS)
P1,2	486 Malinda Prasanna Ranaweera	Present status of Co-60 Multipurpose Gamma Irradiator of Sri Lanka
P1,3	487 Steven Dhlomo	Mobile Hot Cell

A Nuclear Science and Technology

A1 Reactor Core Simulation and Modelling 1

Paper #	Author	Title
A1,1	267 Simo Saarinen	A Four Group Reference Code for Solving Neutron Diffusion Equation in a VVER-440 Core
A1,2	383 Pavel Borodkin(1), Nikolay Khrennikov(1)	VVER-440 Ex-Core Neutron Transport Calculations by MCNP-5 Code and Comparison with Experiment
A1,3	223 Frédéric PAIROT	EPR : HIGH LOAD VARIATION PERFORMANCES WITH THE "TMODE" CORE CONTROL
A1,4	303 Jaakko Ilmari Leppänen	On the Calculation of Reactor Time Constants Using the Monte Carlo Method

A1 Reactor Core Simulation and Modelling 2

Paper #	Author	Title
A1,5	208 Olga Pavlova	USE OF MONTE CARLO SIMULATION FOR COMPUTATIONAL ANALYSIS OF CRITICAL SYSTEMS ON IPPE'S FACILITY ADDRESSING NEE
A1,6	420 IAN HILL	MCNP Simulations of End Flux Peaking in ACR-1000, 2.4 wt % 235U Fuel Bundles
A1,7	141 Frolova, Margarita	CONSUL code package application for LMFBR core calculations

A2 Reactor Safety 1

Paper #	Author	Title
A2,1	408 Mark McIntyre (1) David Reeves (1) Robyn Prime (2)	Implementation of an Improved Safe Operating Envelope
A2,2	363 Sergey V. Tsyganov, Stanislav V. Marin, Lev K. Shishkov	The Procedure for Determination of Special Margin Factors to Account for a Bow of the VVER-1000 Fuel Assemblies
A2,3	241 Mariano Vela, Rolando Arrieta, Alberto Salazar, José Félix, Agustín Urcia	Time Delay Measurement for the Initiation of an Emergency Shutdown at Peruvian Nuclear Reactor RP-10

A2 Reactor Safety 2

Paper #	Author	Title
A2,4	296 Arkady Serikov(1), Ulrich Fischer(1), Luigi Mercatali(1), Peter Baeten(2), Gi	Activation and Shielding Analyses in Support of the GUINEVERE Project
A2,5	140 Jian Tao Jiang and John C. Luxat	Mechanistic Modeling of Pool Film-Boiling and Quench of a CANDU Calandria-Tube Following a Critical Break LOCA
A2,6	199 Hyun Gook Kang • Seung-Cheol Jang	Risk Effect of Signal Generation Failures of Digitalized Safety Systems and Main Risk Contributors

A3 Structural Integrity and Assessment 1

Paper #	Author	Title
A3,1	337 Alexander Mutz	Strain Limits within the Scope of the Integrity Assessment of Piping Systems
A3,2	309 Matthias Hümmer	Multi Scale Modelling
A3,3	426 Heiko Herbell(1), Steffen Himmel(2), Thomas Schlenker(2)	Mechanical Analysis of an Innovative Assembly Box with Honeycomb Structures Designed for a High Performance Light Water Reactor
A3,4	263 Tomas Nicak, Matthias Hümmer	Calculation of residual stresses by means of a 3D numerical weld simulation
A3,5	400 Byeongwook Noh	Sensitivity Analysis for Residual Stress on DVI Nozzle Welded Joint

A4 Severe Accident Management 1

Paper #	Author	Title
A4,1	225 Andrea Bachratá	In-Vessel Retention via External Reactor Cooling
A4,2	108 Sergei A. Kulyukhin(1), Nikolai B. Mikheev(1), Leo N. Falkovskii(2), Leo A.	A NEW SOLUTIONS FOR INCREASING OF ENVIRONMENTAL PROTECTION DURING SEVERE ACCIDENTS AT NUCLEAR POWER PLANT
A4,3	189 Sudarat Worapittayaporn	Hydrogen Analysis in the EPR

A4 Severe Accident Management 2

Paper #	Author	Title
A4,4	224 Andrea Bachratá (1), Laurence Godin-Jacqmin (2)	Validation of Code ASTEC with LIVE-L1 Experimental Results
A4,5	161 Andrey Morozov	Experimental Investigation of Operation of VVER Steam Generator in Condensation Mode in the Event of the Severe Accident
A4,6	417 Mika Pikkarainen(1), Jani Laine(1), Heikki Purhonen(1), Riitta Kyrki-Rajama	Heat Transfer Analysis of the European Pressurized Water Reactor (EPR) Core Catcher Test Facility Volley

A5 Operations and Maintenance 1

Paper #	Author	Title
A5,1	118 Daniel Urjan	Foreign Material Exclusion Program at CNE CERNAVODA Nuclear Generating Station
A5,2	272 Stefano Caruso	On-line Core Monitoring at the BEZNAU PWRs
A5,3	244 Barnaby Jonathan Bruce, Thomas Schwarz	Up-Rating – An Alternative Approach to Meeting Future Power Demands – Exploitation of Design Margins
A5,4	439 Yung Hoang, Benjamin Xu	Vacuum drying of a CANDU Primary Heat Transport System in support of Bruce A refurbishment
A5,5	427 Bharath Nangia, Siddharth Das	Establishment of an Environmental Qualification Program for Bruce A refurbishment

A5 Operations and Maintenance 2

Paper #	Author	Title
A5,6	246 André Zander, Roman Baier	COMSY - A Software Tool for Aging and Plant Life Management with an Integrated Documentation Tool

A5,7	348	Seung Jun Lee	Theoretical and Experimental Impact Analysis of Decision Support Systems for Advanced MCR Operators
A5,8	380	Clemens Baron	RodPilot® – The Innovative and Cost-Effective Digital Control Rod Drive Control System for PWRs
A5,9	410	Lev Zavalov	Experience of international projects implementation at Leningrad Nuclear Power Plant
A5,10	390	Oliver Wilhelm	Availability Improvement of German Nuclear Power Plants

A6 Design, Simulation and Testing

Paper #	Author	Title
A6,1	200	Design of Safety Injection Tanks Using Axiomatic Design and TRIZ
A6,2	286	Full Scale Component Test Facility KOPRA – Qualification Test of EPR Control Rod Drive Mechanism
A6,3	238	NUMERICAL SIMULATION OF SMALL SCALE SOFT IMPACT TESTS
A6,4	290	A Model to Reproduce the Response of the Gaseous Fission Product Monitor (GFFM) in a CANDU® 6 Reactor
A6,5	293	Design Basis of Core Components and their Realization in the Frame of the EPR's Core Component Development

A7 Thermal Hydraulics 1

Paper #	Author	Title
A7,1	301	CFD Simulations of Pb-Bi Two-Phase Flow
A7,2	122	Correlation of Steam Generator Mixing Parameters for Severe Accident Hot-Leg Natural Circulation
A7,3	382	Thermal Hydraulic Analysis Of Thorium-Based Annular Fuel Assemblies
A7,4	124	Neutronic and Thermal-hydraulic Modelling of High Performance Light Water Reactor
A7,5	172	DRAGON AND DONJON CROSS-SECTION MODELS FOR SIMULATING LBLOCA IN CANDU GENERATION III+

A7 Thermal Hydraulics 2

Paper #	Author	Title
A7,6	145	Simulation of thermal hydraulics at supercritical pressures with APROS
A7,7	352	Heat Transfer Phenomena of Supercritical Fluids
A7,8	282	Analysis of an XADS target with the system code TRACE

A8 Nuclear Chemistry and Materials

Paper #	Author	Title
A8,1	202	Concrete/Febex Bentonite Interaction: Results On Short-Term Column Experiments
A8,2	284	Development of Electrochemical Separation Methods from Molten Fluoride Salts
A8,3	395	Experimental Studies to Evaluate the Role of Colloids on the Radionuclide Migration in a Crystalline Medium
A8,4	288	The Unsuspected Roles of Chemistry in Nuclear Power Plants
A8,5	374	Metal-Oxide Film Conversions Involving Large Anions

A9 Fast Reactor Applications

Paper #	Author	Title
A9,1	229	System of Modelling and Calculation Analysis of Neutron-Physical Experiments at Fast Reactors
A9,2	312	Simulating the Behaviour of the Fast Reactor JOYO
A9,3	358	Extending the CANDU Nuclear Reactor Concept: The Multi-Spectrum Nuclear Reactor

A10 Advanced Calculation Methodologies 1

Paper #	Author	Title
A10,1	144	Impact of the Improved Resonance Scattering Kernel on HTR Calculations
A10,2	192	Numerical Analysis on Transient of Steam-gas Pressurizer
A10,3	305	Studies of Influences of Scattering Kernels on Multigroup Cross Sections and Integral Results
A10,4	340	Decay Power Calculation for Safety Analysis of Innovative Reactor Systems
A10,5	295	Advanced methods for BWR transient and stability analysis
A10,6	371	Analysis of the state of SG tubes

B Nuclear Fuel Cycle and Decommissioning

B1 Waste Management & Storage Technologies 1

Paper #	Author	Title
B1,1	403	Loading and Handling of Casks for Interim Storage
B1,2	341	CASTOR® 1000/19: Development and Design of a New Transport and Storage Cask
B1,3	294	Three-dimensional geological and geomechanical modelling of repositories for nuclear waste disposal in deep geological structures
B1,4	385	Scheme of higher-density storage of spent nuclear fuel in Chernobyl NPP Interim Storage Facility No. 1
B1,5	345	Mobile storage tanks for evaporator concentrate made of Polyethylene
B1,6	482	Safety Assessment for the Transportation of Necs's Low and Intermediate Level Waste (LILW) to the Vaalputs Waste Disposal Facility

B1 Waste Management & Storage Technologies 2

Paper #	Author	Title
B1,7	327	Disposal Of Spent Fuel In Salt Using Borehole Technology: BSK 3 Concept
B1,8	360	Overview of Treatment and Conditioning Practices in Goesgen NPP
B1,9	157	Effect of up-scaling on the study of the steel/bentonite interface in a Deep Geological Repository
B1,10	261	Options For The Disposition Of UK Civil Plutonium Stocks
B1,11	456	Performance of CASTOR® HAW Cask Cold Trials for Loading, Transport and Storage of HAW canisters

B2 Decommissioning

Paper #	Author	Title
B2,1	357	Construction, Maintenance and Demolition of Nuclear Power Plants
B2,2	432	The Optimization of Radioactive Waste Management in the Nuclear Installation Decommissioning Process
B2,3	158	Disposal of Steam Generators from Decommissioning of PWR Nuclear Power Plants
B2,4	219	Full System Decontamination (FSD) with the COR® Family prior to Decommissioning - Experiences at the German NPP Obrigheim in 2007-

B3 Advanced Fuel Cycles

Paper #	Author	Title
B3,1	339	High Conversion Thorium Fuel Cycle for PWRs
B3,2	181	Methods for the calculation of Pebble Bed HTRs with high burn-up Pu/MA based fuel
B3,3	314	CO ₂ emissions of nuclear electricity generation
B3,4	222	Consistent Set of Experiments from ICSBEP Handbook for Evaluation of Criticality Calculation Prediction of Apparatus of External Fuel Cycle with OAO "Mashinostroitelny Zavod" – One of the Largest Nuclear Fuel Manufacturers
B3,5	492	

B4 Fuel Properties

Paper #	Author	Title
B4,1	138	Molecular-Dynamic Simulation In Substation Of Advanced Fuel With Improved Properties
B4,2	146	GEN IV : Carbide Fuel Elaboration for the "Futurix Concepts" experiment
B4,3	480	A Determination of Fission Gas Inclusion Pressures using Laser Ablation ICP-MS combined with SEM/EPMA

C New Plant Construction

C1 New Build Initiatives

Paper #	Author	Title
C1,1	317 Zivile Giedraityte	ADVANCED LIGHT WATER REACTOR PLANT
C1,2	236 Andrey Morozov, Alexandra Soshkina	Passive Core Cooling Systems for Next Generation NPPs: Characteristics and State of the Art
C1,3	311 Dr. D. Knoche (1), Dr. F. Sassen (1), Dr. W. Tietsch (1), Prof. Dong Yujie (2)	Advanced Nuclear Reactor Concepts for China
C1,4	221 Denys Zenyuk	CONSTRUCTION PROSPECTS OF NEW POWER UNITS AT KHMELNITSKIY NPP SITE

C1 New Build Initiatives

Paper #	Author	Title
C1,5	366 Riitta Dersten, Sini Gahmberg, Jenni Takala	Environmental Impact Assessment for Olkiluoto 4 Nuclear Power Plant Unit in Finland
C1,6	334 Samuel Otis Brinton	An Initial Study on Modeling the Global Thermal and Fast Reactor Fuel Cycle Mass Flow Using Vensim
C1,7	458 Brigitte Faust	Geological-Hydrological Site Evaluation for NPP Planning
C1,8	235 Joseph Doerfler	Distributed Control Systems in New Nuclear Power Plants

D Non-Power Application of Nuclear

D1 Innovative Applications 1

Paper #	Author	Title
D1,1	378 Reuben Ephraim Makgae	MCNP Variance Reduction technique application for the Development of the Citrusdal Irradiation Facility
D1,2	321 Luciana Caminha Afonso and Linda Viola Ehlin Caldas	Study of the Influence of Scattered Radiation at a Gamma Irradiator
D1,3	237 Andrey Morozov	Comparative Analysis of Hydrogen Production Methods with Fast Nuclear Reactors
D1,4	269 JinYoung Chung, JungHoon Kim, Jooho Whang	BASIC CONCEPTUAL DESIGN OF THE GAMMA GAUGE

D2 Innovative Applications 2

Paper #	Author	Title
D2,1	164 Spencer Gill (1), Andrew Harrison (1), Liaohui Liu (1), David Zekveld (1), David	DETERMINING SOOT DISTRIBUTION IN AUTOMOTIVE COMPONENTS USING NEUTRON RADIOGRAPHY
D2,2	359 Javier Gómez Barria, Julio Favián, Mariano Vela Mora	Evaluation of Soils Contained in Mineral Tailings at Junin Lake
D2,3	460 M. J. Radebe & F. C. de Beer	TOWARDS A PROPOSED SOUTH AFRICAN NATIONAL CENTRE FOR RADIOGRAPHY AND TOMOGRAPHY
D2,4	487 Steven Dhlomo Harry Swart	Evaluation and Verification of a Biological Shield in a SHARS Unit

E Nuclear Politics, Economics and Human Resources

E1 Economics and Human Resources 1

Paper #	Author	Title
E1,1	375 Thomas Winkler, Marco Streit	Modelling The Economics Of A New Nuclear Power Plant In Switzerland
E1,2	431 Thomas Muhale Mutshena	Skills Development and Transfer Plan
E1,3	430 Disang Sennanye	Knowledge Management and Transfer

E1 Economics and Human Resources 2

Paper #	Author	Title
E1,4	342 Dinesh Naidoo	KEY ELEMENTS OF A SUSTAINABLE NUCLEAR BUSINESS CASE
E1,5	239 Ionut Zaharow	Preparedness for Romanian Future Nuclear Industry – Methods to Attract Young Professionals
E1,6	231 Alexandru Havris	Risk Management and Nuclear Insurance Program within Societatea Nationala Nuclearelectrica S.A.

E2 Nuclear Politics

E2,1	276 John Bird	Nuclear Renaissance in an Era of Anthropogenic Climate Change
E2,2	369 Marco Streit	Utopia Switzerland (2) - A Country Without CO2 Emissions
E2,3	393 Nathalie HUBERT	Joining the Nuclear Renaissance with the Engineering business Unit of AREVA
E2,4	278 Jeetesh Bhana Keshaw	A World Class Nuclear Research Reactor Complex for South Africa's Nuclear Future
E2,5	228 Corina Maria BARARU	Nuclear Energy Has To Communicate
E2,6	179 keofithetse gilbert lekwe gerhardt stander Dr Arnaud Faanhof	ESTABLISHMENT OF A SOUTH AFRICAN NUCLEAR SCIENCE EXHIBITION CENTRE

F Young Generation and IYNC activities

F1 YGN Activities

Paper #	Author	Title
F1,1	418 Jan Langenberger Jana Seidel	Fuel Services Germany - AREVA NP
F1,2	370 Marco Streit(1), Thomas Bichsel (2), Andre Fassbender (3), Matthias Horva	Nuclear Energy In Switzerland: It's going ahead!
F1,3	354 Nonkululeko Fionah Khathi	SAYNPS Participation in Nuclear Public Education in South Africa
F1,4	435 Miguel Anegil Millán, Jose Luis Perez, Miguel Sanchez Lopez	Spanish Young Generation (JJNN) Activities
F1,5	493 Denis Nikolaevich Khryashchev	Young Generation of OAO "Mashinostroitelny Zavod" Specialists Trends and Prospects

G ENEN Ph.D. Symposium Presentations

G1 ENEN Session 1

Paper #	Author	Title
G1,1	442 V.D. Simutkin	Measurement of Fragment Mass Distributions in Neutron-induced Fission of 238U and 232Th at Intermediate Energies
G1,2	444 Zsuzsanna Mácsik, Nóra Vajda, Balázs Bene, Zsolt Varga	Development of Radioanalytical and Microanalytical Procedures for the Determination of Actinides in Environmental Samples
G1,3	446 Juan Andrés Lozano, José María, Aragonés, Nuria García-Herranz	Development of an Analytic Nodal Diffusion Solver in Multigroups for 3D Reactor Cores with Rectangular or Hexagonal
G1,4	452 M. Lenoir, A. Grandjean, J.L. Dussossoy, D.R. Neuville	Sulphate Incorporation in Borosilicate Glasses and Melts: a Kinetic Approach

G2 ENEN Session 2

Paper #	Author	Title
G2,1	443 Ondrej Benes	A Thermodynamic Model for the Fuel of a Molten Salt Actinide Burner
G2,2	447 Eleonora Bomboni1	New Developments in Actinides Burning with Symbiotic LWR-HTR-GCFR Fuel Cycles
G2,3	451 Benoît Prabel, Stéphane Marie, Alain Combescure	Predictive Modelling of Brittle Crack Propagation in Ferritic Steel with the X-FEM
G2,4	453 B. Becker, R. Dagan, C.H.M. Broeders, G. Lohmert	A Stochastic Proof of the Resonant Scattering Kernel and its Applications for Gen IV Reactors Type

G3 ENEN Session 3

Paper #	Author	Title
G3,1	488 F. Sordo ¹ , A. Abánades ¹	DEVELOPMENT OF NUCLE DESIGN CRITERIA FOR NEUTRON SPALLATION SOURCES
G3,2	448 I. Uytendouwens, V. Massaut, G. Van Oost	Plasma Wall Interaction Phenomena on Tungsten Armour Materials for Fusion Applications
G3,3	450 Wassim Khamakhem1, Gérald Rimpault1	Uncertainty Evaluation of Reactivity Coefficients for a large advanced SFR Core Design

G4 ENEN Session 4

Paper #	Author	Title
G4,1	422 Davide Bertolotto (1, 2) Annalisa Manera(1) Horst-Michael Prasser(1, 3) Ra	CFD Simulations of a Single-phase Mixing Experiment
G4,2	445 D. McKendrick1, S. R. Biggs1, M. Fairweather1 and D. Rhodes	Physical Modelling of Axisymmetric Turbulent Impinging Jets as used within the Nuclear Industry for Mobilisation of Sludges
G4,3	409 S. Sojak, V Kršjak, V. Slugeň, S. Stanček, M. Petriská, K. Vitáček, M. Stacl	Application of the Positron Annihilation Spectroscopy for Chromium Effect Investigation in Binary Fe-Cr Alloys

EDS OF NUCLEAR SAFETY

