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Program

Select a session from the list to go directly to that session:

Sunday June 9

Conference Welcome Reception

Room: Grand Ballroom & Conference Foyer

18:00 Greetings from the Hon. Reza Moridi, Ontario Minister of Research and Innovation  N/A

Monday June 10

Conference Welcome

Room: Grand Ballroom

07:50 Welcoming Remarks: John Roberts, President, CNS  N/A
07:55 Honorary Chair Address: Duncan Hawthorne, President & CEO, Bruce Power  N/A

Monday June 10

**Plenary 1A: Nuclear Power - A Business Driver for the Next Generation**

**Room:** Grand Ballroom  
**Chair:**

Aleck Dadson (COO, Ontario Energy Board)

Special Address by The Hon. Joe Oliver, Minister of Natural Resources, Canada  N/A  

Joe Oliver (Minister of Natural Resources, Canada)

08:20 Nuclear Power - A Business Driver for the Next Generation Canadian Nuclear Society  1  

Don Hoffman (President-elect, ANS)

08:40 Science and Technology Supporting Innovation  N/A  

Robert Walker (President & CEO, AECL)

09:15 Nuclear is GREAT Britain  15  

Jonathan Dart (British Consul General, Toronto)

Monday June 10

**Plenary 1B: Designing - The Next Generation**

**Room:** Grand Ballroom  
**Chair:**

Frank Yee (Chief Nuclear Engineer, Candu Energy Inc.)

10:10 Advanced Fuel Cycles in Chinese Market  21  

Sermet Kuran (Director, AFCR & Fuel Cycles, CANDU Energy Inc.)

10:30 CANDU Position and Prospects in China  30  

Chen Mingjun (Technical Director, CNNO Plant #3, TQNPC, China)

10:50 Post Fukushima Design Changes I: Asset Management Program  44  

Gary Newman (Chief Engineer & SVP Engineering, Bruce Power)
11:10  Integration of Accident Management Strategies into Station Operation  50
       Fred Dermarkar (Vice President Engineering Strategy, OPG)

11:30  DNGS Refurbishment Improvements  57
       Neil Mitchell (Vice President Refurbishment Engineering, OPG)

Monday June 10

Conference Luncheon & W.B. Lewis Lecture

       Room: Grand Ballroom
12:00  Speaker: Dr. Nigel Lockyer, TRIUMF: From Higgs (Boson) to Mass  64

       Dr. Nigel Lockyer (Laboratory Director, TRIUMF)

Monday June 10

Reactor & Radiation Physics 1

       Room: Trinity Salon 1
14:00  Thermal Neutron Scattering Cross Section Measurements of Light and Heavy Water  88

       Gang Li (AECL)
       Ghaouti Bentoumi (AECL)
       Zin Tun (National Research Council Canada)
       Liqian Li (AECL)
       Bhaskar Sur (AECL)

14:25  Behaviour of Aged and New Flux Detectors in Darlington Reactors  100

       Constantin Banica (OPG)
       Matthew Foster (OPG)

14:50  Development of Benchmark Experiment Sets Applicable to Thorium-Fueled Power Reactor Bias-Calculations  108

       Stephanie Langton (McMaster University)
       Adriaan Buijs (McMaster University)

15:45  Numerical Verification of the Theory of Coupled Reactors for a Deuterium Critical Assembly Using MCNP5  122

       Mohamed Hussein (Royal Military College of Canada)
       Hugues Bonin (Royal Military College of Canada)
       Brent Lewis (Royal Military College of Canada)
16:10 **Description and Results of a Two-Dimensional Lattice Physics Code Benchmark for the Canadian Pressure Tube Supercritical Water-cooled Reactor (PT-SCWR)** 131

D. W. Hummel (McMaster University)
S. E. Langton (McMaster University)
M. R. Ball (McMaster University)
D. R. Novog (McMaster University)
A. Buijs (McMaster University)

16:35 **RFSP-IST/CERBERUS SIMULATIONS WITH REACTOR REGULATING SYSTEM ON FOR CANDU 6 ACCIDENT ANALYSIS BY USING LARGER TIME-STEP SIZE** 146

Dai-Hai Chung (Atomic Creative Technology Co., Ltd.)
Cheon-Hwey Cho (Atomic Creative Technology Co., Ltd.)

---

**Monday June 10**

**Environment & Spent Fuel Management 1**

**Room:** Trinity Salon 2

14:00 **Evaluation of Sorption Distribution Coefficient of Cs onto Granite using Sorption Data Collected in Sorption Database and Sorption Model** 168

Shinya Nagasaki (McMaster University)

14:25 **Initial Interaction of $^{137}$Cs with Soils** 175

Shinya Nagasaki (McMaster University)
Hisashi Makino (University of Tokyo)
Takumi Saito (University of Tokyo)

14:50 **The Darlington Retube Waste Container System - A Full Life Cycle Design Solution** 183

Bryan Goode (Rolls-Royce Civil Nuclear Canada Ltd.)
Eric Freeman (OPG)

15:45 **Closing the CANDU nuclear reactor fuel cycle with a Modified PUREX Processing System: Reducing, Refining and Recycling CANDU Spent Fuel** N/A

Alexander Koven (University of Toronto)
Jinah Kim (University of Toronto)
Juhx Pellazar (University of Toronto)
Leon Wu (University of Toronto)
Marty Tzolov (University of Toronto)
Sameena Mulam (University of Toronto)
Eric Jelinski (University of Toronto)
Peter Ottensmeyer (University of Toronto)

16:10 **The Radiation Stability of Organic Ionic Liquids in Biphasic Systems** 195

Susan E. Howett (Western University)
James J. Noel (Western University)
J. Clara Wren (Western University)
16:35  **A High Recovery Membrane Process for Purification of Low-Level Radioactive Liquid Waste**  206

Riad Al-Samadi (OPG)
Ram Davloor (Bruce Power)
Bill Harper (Bruce Power)

Monday June 10

**Operations & Maintenance**

**Room:** Trinity Salon 4

14:00  **Fuel Defect Localization Using Delayed Neutron Monitoring System Bruce A 2011 to 2013**  223

Jennifer Stark (Bruce Power)
Andrew Ertel (Bruce Power)

14:25  **FSN-BASED FAULT MODELING FOR NEUTRON OVERPOWER SYSTEMS IN CANDU® STATIONS**  234

Elnara Nasimi (Bruce Power)
Hossam Gabbar (UOIT)

14:50  **Resilience of Nuclear Power Plants to Withstand Large Earthquakes: An Overview**  246

Aman Usmani (Principal Consultant & Manager, AMEC-NSS)
Ayman Saudy (Senior Technical Expert, AMEC-NSS)

15:45  **Reactor Core Flow Measurements during Plant Start-up using Non-Intrusive Flow Meter CROSSFLOW**  256

Varun Kanda (Advanced Measurement & Analysis Group Inc.)
Brendan Sharp (Advanced Measurement & Analysis Group Inc.)
Alex Gurevich (Advanced Measurement & Analysis Group Inc.)
Yuri Gurevich (Daystar Technologies Inc.)
Srikrishnarajah Selvaratnarajah (Advanced Measurement & Analysis Group Inc.)
Armando Lopez (Advanced Measurement & Analysis Group Inc.)

17:00  **Seismic Evaluation of Equipment for Seismic Demand Based on UHS - Implications and Impact**  269

Ying An (Candu Energy Inc.)
Ravi Jategaonkar (Candu Energy Inc.)

Monday June 10

**Fusion Science & Technology**
Room: Trinity Salon 5

14:00  

Review of AECL and International Work on Sub-critical Blankets Driven by Accelerator-Based and Fusion Neutron Sources   279

Blair Bromley (AECL)

14:25  

A Comparative Study of Some Spatial-temporal Discretization Schemes for Nonlinear Magnetohydrodynamic Simulation of Plasmas   292

Dinesh Nath (Indian Institute of Technology Kanpur)
Manjeet Singh Kalra (Indian Institute of Technology Kanpur)
Prabhat Munshi (Indian Institute of Technology Kanpur)

14:50  

Progress Towards Acoustic Magnetized Target Fusion: An Update on the R&D Program at General Fusion   304

Doug Richardson (General Fusion)
Aaron Froese (General Fusion)
Victoria Suponitsky (General Fusion)
Meritt Reynolds (General Fusion)
David Plant (General Fusion)

15:45  

Thermal Management using a Hypervapotron; Part II: Additional Controlling Parameters   319

Ronald Boyd (Prairie View A&M University)

16:10  

The Design of a Neutron Generator Using the Inertial Electrostatic Confinement of Deuterium Plasma   335

Terry Price (UOIT)
Rachid Machrafi (UOIT)

Tuesday June 11

Advanced Reactors and Fuels

Room: Trinity Salon 1

08:30  

Assessment of a Transuranic Mixed Oxide fuelled CANDU Reactor   341

Andrew C. Morreale (McMaster University)
John C. Luxat (McMaster University)
David R. Novog (McMaster University)

08:55  

Accelerated Reduction of Used CANDU Fuel Waste with Fast-Neutron Reactors: Fuel Cycle Strategy Cuts TRU Waste Lifespan from 400,000 Years to Less than 80 Years   360

Peter Ottensmeyer (University of Toronto)

09:20  

Progression of the Physics Conceptual Design for the Canadian Supercritical Water Reactor   372
09:45  **EC6 Design Features and Pre-Project Licensing Review**  382

Stephen Yu (Candu Energy Inc.)
Albert G. Lee (Candu Energy Inc.)
N.B. Dinh (Candu Energy Inc.)
Michael Soulard (Candu Energy Inc.)

10:40  **The use of Small Modular Nuclear Reactors for Canadian Oils Sands Applications: A proposal and way forward**  394

Dennis Attwood (Human Factors Applications)
Mohamed Moledina (WorleyParsons Resources & Energy Canada)

11:05  **Emergency Support Centre Concept for the Enhanced CANDU 6**  410

Roshanak Moradi Nadimian (Candu Energy Inc.)
Robert Leger (Candu Energy Inc.)

11:30  **Simulations of CANDU Fuel Bundles Under Static Mechanical Loads and Refuelling Loads Using LS-DYNA Finite Element Models**  417

Yabiao(Albert) Sun (Candu Energy Inc.)
Ben Wong (Candu Energy Inc.)
Dev Gossain (Candu Energy Inc.)
Masoud Shams (Candu Energy Inc.)

Tuesday June 11

**Instrumentation & Control**

**Room:** Trinity Salon 2

08:30  **Evaluation of Common Mode Signal Rejection Algorithm on Ultrasonic Cross-Correlation Flow Measurement**  N/A

Vi Ton (OPG)
Jin Kim (OPG)
Chunlei Zhao (OPG)

08:55  **On-line Monitoring of Enhanced CANDU® 6 (EC6®) Plant Instruments**  427

Qingfeng (Eric) Li (Candu Energy Inc.)
Andrew Younker (Candu Energy Inc.)

09:20  **Hitachi’s Proposed DCS Solution for New Build CANDU® EC6® using the G-HI ACS® Unified Platform**  435

Daisuke Tan (Hitachi Ltd., Infrastructure Systems Company)
Kazuhiko Ishii (Hitachi Ltd., Infrastructure Systems Company)
Yusaku Otsuka (Hitachi Ltd., Infrastructure Systems Company)
Tuesday June 11

Environment and Spent Fuel Management 2

Room: Trinity Salon 2

10:40  In-situ Alpha Detector for Wet Soil   448

Shuwei Yue (AECL)
Ghaouti Bentoumi (AECL)

11:05  Experimental modeling of radioactive particle resuspension   458

Sharman Perera (UOIT)
Edward Waller (UOIT)

Tuesday June 11

Plant Life Extension, Refurbishment & Aging

Room: Trinity Salon 4

08:55  Statistical Modelling of External Corrosion in Buried Piping   463

Mikko Jyrkama (University of Waterloo)
Mahesh Pandey (University of Waterloo)

09:20  A RATIONALE FOR THE OBSERVED NON-LINEARITY IN PRESSURE TUBE CREEP SAG WITH TIME IN SERVICE   472

Paul Sedran (RESD Inc)

10:15  Improvements Made to the Bruce A Upgraders and Heavy Water Cleanup System as Part of the Bruce A Units 1 and 2 Restart Project and Commissioning Results   483

Ram Davloor (Bruce Power)
Gretel Steinberg (SNC-Lavalin Nuclear, Inc.)
Charles Boddy (SNC-Lavalin Nuclear, Inc.)
Daniel Rocci (Aecon Nuclear)

11:05  Replacement of Radiography with Ultrasonic Phased Array for Feeder Tubes in CANDU Reactors using ASME Code Case N- 659-2   505

Robert Simmons (Metalogic Inspection Services)
Quintin Bower (Metalogic Inspection Services)
Shawn Arseneau (Metalogic Inspection Services)

11:30  A TECHNO-ECONOMIC ASSESSMENT OF PRIMARY HEAT TRANSPORT SYSTEM
Safety & Licencing 1

Room: Trinity Salon 5

08:30 Meeting Regulatory Requirements for Fire Safety Assessments with the PBFANS Software System  527

Luke Morrison (Professional Loss Control)
Lyle Hamre (Professional Loss Control)
Edward Mansfield (Professional Loss Control)
James Reid (Acuratek Inc.)

08:55 Design Extension Conditions  542

Adrian Bujor (CNSC)
Chris Harwood (CNSC)
Quanmin Lei (CNSC)
Alex Viktorov (CNSC)

09:20 Post-Fukushima Focus on Fire Protection  554

SHOBHIT SHANKER (AMEC-NSS)
MALCOLM RAWLINGSON (AMEC NCL)

10:15 APPLICATION OF PROBABILISTIC SAFETY GOALS TO REGULATION OF NUCLEAR POWER PLANTS IN CANADA  564

Greg Rzentkowski (CNSC)
Yolande Akl (CNSC)
Smain Yalaoui (CNSC)

10:40 Accidents, “Black Swans” and Risk  572

John Luxat (McMaster University)

11:30 The Role of Uncertainties in Reactor Safety Calculations: Lessons Learned from the OECD-NEA Reactor Physics and Thermalhydraulic Benchmarks  585

David R. Novog (McMaster University)
Plenary 2A: Licencing - The Next Generation

Room: Grand Ballroom
Chair: Terry Jamieson (Vice President, Technical Support Branch, CNSC)

14:00 Licensing the First Nuclear Power Plant in the United Arab Emirates  596
Ian Grant (Director, Nuclear Safety Department, Federal Authority for Nuclear Regulation, Abu Dhabi, UAE)

14:20 Licensing Overseas: TSO Support to Safety Authorities in New Reactor Licensing  610
Neil Numark (President, Numark Associates, Inc.)

14:40 Licensing Discussion: SMRs in Canada  623
Marcel de Vos (Senior Project Officer, CNSC)

15:00 SMR – The Vendor Perspective: Generation mPower  636
Peter Hastings (Director of Licensing, Generation mPower, LLC)

15:20 Nuclear North of 60: Total Energy Supply for Remote Human Habitations  643
Jay Harris (Independent Consultant)

Tuesday June 11

Plenary 2B: Maintaining Operational Excellence for The Next Generation

Room: Grand Ballroom
Chair: Pierre Tremblay (Deputy Chief Nuclear Officer, OPG & EVP (Canadian Nuclear Partners))

16:10 Navigating for Excellence  N/A
Gaëtan Thomas (New Brunswick Power)

16:30 Building Capability: Beyond Knowledge Transfer  673
Steve Ramjist (Director of Operations and Maintenance, DNGS, OPG)

16:50 Bruce Power: Equipment and Physical Plant Changes in Response to Fukushima  678
Gary Newman (Chief Engineer & SVP Engineering, Bruce Power)
**Keynote Speech**

**Room:** Grand Ballroom

09:00  
**Review of Fukushima Daiichi Accident - Defective Regulatory System in Japan and Confusion Resulting from Lack of Preparedness**  
Haruki Madarame (Professor Emeritus, Tokyo University & Former Chair of Nuclear Safety Commission, Japan)

---

**Plenary 3: Competency Assurance for the Next Generation**

**Room:** Grand Ballroom  
**Chair:** John Froats (Associate Professor and Nuclear Engineer in Residence, UOIT)

09:30  
**Assurance of Nuclear Competence; A Canadian Perspective**  
Basma Shalaby (President, UNENE)

09:50  
**Changes in Competency Assurance at Bruce Power Over the Next Generation**  
Chip Horton (Manager Training Division, Bruce Power)

10:40  
**Carolinas’ Nuclear Cluster: Building Competency Through Collaboration**  
Jim Little (Chairman, Carolinas Nuclear Cluster)

11:00  
**COG Knowledge Management Program**  
Tom Henderson (Director, Information Exchange, CANDU Owners’ Group)

---

**Reactor & Radiation Physics 2**

**Room:** Trinity Salon 1

14:00  
**Calculation Methodology for Effective Bundle-Average Fuel Temperature Correlation**  
Tony Liang (Candu Energy Inc.)  
Mohamed Dahmani (Candu Energy Inc.)  
Randall McArthur (Candu Energy Inc.)

14:50  
**Methodology to Calculate Gamma Dose Contours for a Postulated Criticality Accident**  

Wednesday June 12

Chemistry & Materials

Room: Trinity Salon 2

14:00 Statistical Modelling of Pressure Tube Diametral Creep
Mikko Jyrkama (University of Waterloo)
Grant Bickel (AECL)
Mahesh Pandey (University of Waterloo)

14:25 Influence of Defect Identification Method on the Statistics of Primary Irradiation Damage in α-Zirconium
Kevin P. Boyle (CanmetMATERIALS, Natural Resources Canada)
Timothy J. Robotham (CanmetMATERIALS, Natural Resources Canada)

14:50 Effect of Water Radiolysis on Corrosion: Steel, Cobalt and Nickel Alloys
A.Y Musa (Western University)
M Behazin (Western University)
Q Knapp (Western University)
D Mizzi (Western University)
J.C Wren (Western University)

15:45 Radiation-Induced Nanoparticle Formation under Steady-State Radiolysis: Comparison of the Fe, Co and Cr Systems
Jiju M. Joseph (Western University)
Leena M. Alrehaily (Western University)
Pam A. Yakabuskie (Western University)
David A. Guzonas (AECL)
Jungsook Clara Wren (Western University)

16:10 Effect of Supercritical Water Composition on the Corrosion of Engineering Materials
Peter McClure (Carleton University)
Muzammil Mehdi (Carleton University)
Xiao Huang (Carleton University)
Dave Guzonas (AECL)

16:35 Study on Protective Layer for Severe Accident Conditions for EC6 Reactor Vault Structure
Homayoun Abrishami (Candu Energy Inc.)
Rick Ricciuti (Candu Energy Inc.)
Azhar Khan (Candu Energy Inc.)
Ranjit Singh (Candu Energy Inc.)

Wednesday June 12

**Thermalhydraulics**

**Room:** Trinity Salon 4

**14:00**

**Three-dimensional Simulations for Void Fraction Distribution in a Two-component Two-phase Flow System**

Sanjeev Kumar (Indian Institute of Technology Kanpur)
Arun K. Saha (Indian Institute of Technology Kanpur)
Prabhat Munshi (Indian Institute of Technology Kanpur)

**14:25**

**Experimental Study of Water Flow at Supercritical Pressures**

Altan Muftuoglu (École Polytechnique de Montréal)
Alberto Teyssedou (École Polytechnique de Montréal)

**14:50**

**MODELING A DIRECT CONTACT HEAT EXCHANGER FOR A SUPERCRITICAL WATER LOOP**

Franco Cascella (École Polytechnique de Montréal)
Alberto Teyssedou (École Polytechnique de Montréal)

**15:45**

**RELAP5/SCDAPSIM/MOD3.4 Analysis of the Influence of Water Addition on the Behavior of a BWR during a Fukushima-like Severe Accident**

A.K. Trivedi (Indian Institute of Technology Kanpur)
Chris Allison (Innovative Systems Software)
Ashok Khanna (Indian Institute of Technology Kanpur)
Prabhat Munshi (Indian Institute of Technology Kanpur)

**16:10**

**IAEA ICSP on HWR Moderator Subcooling Requirements to Demonstrate Backup Heat Sink Capabilities of Moderator during Accidents**

Jong Ho Choi (IAEA)
Thambiayah Nitheanandan (AECL)

Wednesday June 12

**Safety & Licencing 2**

**Room:** Trinity Salon 5

**14:00**

**Enhanced CANDU 6 Design Assist Probabilistic Safety Assessment Results and Insights**

Keivan Torabi (Candu Energy Inc.)
Ralph Bettig (Candu Energy Inc.)
Petre Iliescu (Candu Energy Inc.)
14:25 Operational Risk Management for a NPP   899
C. Keith Scott (Atlantic Nuclear Services Inc.)

14:50 A Bayesian Formulation of Seismic Fragility Analysis of Safety Related Equipment   918
Zhao-Liang Wang (University of Waterloo)
Mahesh Pandey (University of Waterloo)
Wei-Chau Xie (University of Waterloo)

15:45 Variable ROP Setpoints Remove Random Epistemic Detector Error   931
Frank Laratta (Retired)

16:10 The Effect of Dilution on the Covariance of Multigroup Cross Sections   943
Curtis McEwan (McMaster University)
Matthew Ball (McMaster University)
Dave Novog (McMaster University)

16:35 Generation of Earthquake Ground Motions Preserving Non-Stationary Characteristics for Nuclear Power Plants   954
Shunhao (Sean) Ni (Candu Energy Inc.)
Wei-Chau Xie (University of Waterloo)
Mahesh Pandey (University of Waterloo)
Wei Liu (Candu Energy Inc.)
Homayoun Abrishami (Candu Energy Inc.)

Nuclear Operator Presentations (Not peer-reviewed)

16:10 OPG Nuclear - Deaerator Gravity Flow Test   966
Evan Davidge (OPG)
Reynel Sanchez (OPG)
Arvind Misra (OPG)
Jack Vecchiarelli (OPG)

11:05 Modified 37-Element (37M) Bundle Safety Enhancements at OPG   976
Zlatko Catovic (OPG)

10:15 Pickering Fish Diversion Net - An Engineered Environmental Solution   983
John Xiao (OPG)
Allan Lew (OPG)
10:40  Extending Pickering Fuel Channel Life to 247K EFPH  993

Imtiaz Malek (OPG)

14:25  Neutron Overpower Protection (NOP) System Evaluation of NOP Trip Setpoints Using a Novel Statistical Methodology  N/ A

Zlatko Catovic (OPG)
Student Conference Program

Tuesday June 11

Student Conference Session

Optimization of the Fuel Assembly for the Canadian Supercritical Water-cooled Reactor  1001

Corey French (Royal Military College of Canada)
Paul K Chan (Royal Military College of Canada)
Hugues Bonin (Royal Military College of Canada)

The Development of a Small Inherently Safe Homogeneous Reactor for the Production of Medical Isotopes  1006

George Carlin (Royal Military College of Canada)
Hugues Bonin (Royal Military College of Canada)

Simulation of Personal Protective Equipment Exposure to Radioactive Particulates  1011

Michael Roeterink (Royal Military College of Canada)
Emily C. Corcoran (Royal Military College of Canada)
MATERIAL CHARACTERIZATION OF HIGH DENSITY CONCRETE USING DIFFERENT ANALYTICAL TECHNIQUES TO SUPPORT LICENSING REQUIREMENTS FOR A CLASS II RADIATION FACILITY 1016

Aakash Joshi (UOIT)
Sharman Perera (UOIT)
Edward Waller (UOIT)
Jennie Eastcott (UOIT)
Anthony Waker (UOIT)
Rachid Machrafi (UOIT)

The role of fission products (noble metal particles) in spent fuel corrosion process in a failed container 1028

Linda Wu (Western University)
David Shoesmith (Western University)

Evaluation of Interferences on Measurements of 90Sr/90Y by the TDCR Čerenkov Counting Technique 1033

Michelle Tayeb (Royal Military College of Canada)
Xiongxin Dai (Royal Military College of Canada)
Emily C. Corcoran (Royal Military College of Canada)
David Kelly (Royal Military College of Canada)

An Introduction to the Delayed Neutron and Gamma Counting System at the Royal Military College of Canada 1037

Madison Sellers (Royal Military College of Canada)
Emily C. Corcoran (Royal Military College of Canada)
David Kelly (Royal Military College of Canada)

Proof of Concept Validation Results of the FAST Fuel Element Model 1043

Andrew Prudil (Royal Military College of Canada)
Brent Lewis (Royal Military College of Canada)
Paul K Chan (Royal Military College of Canada)

Development of a 3-D Finite Element Model to Examine Fuel Bundle Behaviour under Post-Dryout Heat Transfer Conditions 1049

Cody Krasnaj (Royal Military College of Canada)
Paul K Chan (Royal Military College of Canada)
Diane Wowk (Royal Military College of Canada)

Corrosion in the SCWR: Insights from Molecular Dynamics Simulations of the Supercritical Water - Iron Hydroxide Interface 1054

Dimitrios Kallikragas (Trent University)
Andriy Plugatyr (Trent University)
Igor Svishchev (Trent University)

Advanced Fuel Cycles in CANDU Reactors 1059
Tyler Cunningham (University of Calgary)
Jason Donev (University of Calgary)

Precipitation Temperatures and DHC Velocities  1064

Sean Hanlon (Carleton University)
Scott Read (Carleton University)
Glenn McRae (Carleton University)
Christopher Coleman (AECL)

Study of the Response Functions of a Cs$_2$LiYCl$_6$ Scintillator to Neutron and Gamma Radiation  1069

Nafisah Khan (UOIT)
Rachid Machrafi (UOIT)

Development of a Fuel Performance Model for the Canadian SCWR  1075

John Stuart Bell (Royal Military College of Canada)
Paul K Chan (Royal Military College of Canada)

Simulation of a Compact Multi Element Tissue Equivalent Proportional Counter Response in Low Energy Monoenergetic Neutron Fields  1080

Fawaz Ali (UOIT)
Anthony Waker (UOIT)
Edward Waller (UOIT)

Mechanical testing of alternative brazing materials for CANDU$^+$ fuel bundles  1085

Kieran Nicholas Potter (Queen's University)
Emily C. Corcoran (Royal Military College of Canada)
Graham A. Ferrier (Royal Military College of Canada)

POWER CONVERSION CYCLES FOR SODIUM-COOLED FAST REACTORS  1089

Eugene Saltanov (UOIT)
Tiberiu Preda (UOIT)
Glenn Harvel (UOIT)
Igor Pioro (UOIT)

The Effect of Dilution on the Covariance of Multigroup Cross Sections  1095

Curtis McEwan (McMaster University)
Matthew Ball (McMaster University)
David Novog (McMaster University)

Advanced Finite Element Modelling of a Horizontal Fuel Element using a Multiphysics Object-Oriented Simulation Environment  1100

Kyle Gamble (Royal Military College of Canada)
Paul K Chan (Royal Military College of Canada)

Development of a Dynamic Loading Apparatus for Investigating Strategies that Mitigate Stress Corrosion Cracking in Nuclear Fuel Elements  1105
A Computational Mesh Sensitivity Study for Forced Convective Heat Transfer to Water at Supercritical Conditions in Tubes  1110

Darryl McClure (McMaster University)
Alex Rashkovan (McMaster University)

An Approach to Model Stress Corrosion Cracking in Nuclear Fuels Containing a Graphite Coating  1115

Andrew Oussoren (Royal Military College of Canada)
Paul K Chan (Royal Military College of Canada)
Andrew Prudil (Royal Military College of Canada)
Brent Lewis (Royal Military College of Canada)

Powering Up A Green Saskatchewan: Exploring Possible Sustainable Solutions for Saskatchewan's Electricity Market  1120

Rodney Blanco (University of Calgary)
Isaac Faubert (University of Calgary)
Kyla Steele (University of Calgary)
Jillian Wohrizek (University of Calgary)
Jason Donev (University of Calgary)

Education in Radiation, Radioactivity, and Nuclear Science  1125

Isaac Faubert (University of Calgary)
Jillian Wohrizek (University of Calgary)
Jason Donev (University of Calgary)

The Biology of Low-Dose Radiation Response at the Cellular Level  1130

Stacy Muise (University of Calgary)

Electrochemical Characterization of Lithium Ferrite Electrodes through Cyclic Voltammetry and Raman Spectra  1135

Maggie Manley (University of New Brunswick)
William Cook (University of New Brunswick)

Design and Safety Assessment of Slightly Enriched Fuel Elements for CANDU Reactors  1141

Danielle Whittier (Queen's University)
Paul K Chan (Royal Military College of Canada)
Jordan Morelli (Queen's University)

The Development of a Monte Carlo Model of an Americium-Beryllium Neutron Source Facility  1146

Riccardo Zavatti (UOIT)
Terry J. Price (UOIT)
Sharman Perera (UOIT)

The Development of Remote Teaching Laboratory Access Software for Multi-Slice Computed Optical
Tomography for Use in Undergraduate Nuclear Education 1150

Terry J. Price (UOIT)
Eleodor Nichita (UOIT)

Determining Transfer Factors of Non-Human Biota 1155

Ashkan Saberi (UOIT)
Niv Menon (UOIT)
Joel Cockerham (UOIT)
Ali Akhtar (UOIT)
Cora Wong (UOIT)
Edward Waller (UOIT)

Evidence of Internal Intergranular Oxidation as a Mechanism of Primary Water Stress Corrosion Cracking in Alloy 600 1160

Suraj Persaud (University of Toronto)
Roger Newman (University of Toronto)
Anatolie Carcea (University of Toronto)
Julia Huang (McMaster University)
Gianluigi Botton (McMaster University)

LASER Scanning of Flaws inside the Pressure Tubes of a CANDU Reactor 1166

Dean Egerter (UOIT)
Jordan Gilbert (UOIT)
Hannah Graham (UOIT)
Cameron Verstegen (UOIT)

Closing the CANDU nuclear reactor fuel cycle with a Modified PUREX Processing System: Reducing, Refining and Recycling CANDU Spent Fuel 1169

Alexander Koven (University of Toronto)
Jinah Kim (University of Toronto)
Juhx Pellazar (University of Toronto)
Leon Wu (University of Toronto)
Sameena Mulam (University of Toronto)
Marty Tzolov (University of Toronto)

Raman Investigation of Nickel Chloride Complexation Under SCWR Coolant Conditions 1181

K Bissonette (University of Guelph)
Lucas Applegarth (University of Guelph)
JS Cox (University of Guelph)
CC Pye (St. Mary’s University)
Peter Tremaine (University of Guelph)

Deuterium Isotope Effects, ΔpK = pK_{D2O} - pK_{H2O}, on the Second Dissociation of Carbonic Acid by Raman Spectroscopy 1186

John Noel (University of Guelph)
Lucas Applegarth (University of Guelph)
Peter Tremaine (University of Guelph)

Investigation of different thermodynamic cycles for Nuclear Power Plants 1191
Neutron Transport Calculations for ITER 1196

Savino Longo (McMaster University)
Adriaan Buijs (McMaster University)

Particle-in-Cell Technique with Monte Carlo Collisions for Plasma Simulation and Application to Fusion 1205

Boone Tensuda (McMaster University)
Adriaan Buijs (McMaster University)

Design Earthquake for Nuclear Power Plants Considering Variability of Soil Parameters 1211

Bo Li (University of Waterloo)
Shun-Hao Ni (University of Waterloo)
Wei-Chau Xie (University of Waterloo)
M.D Pandey (University of Waterloo)

Computationally Efficient Seismic Risk Analysis for Nuclear Energy Facilities 1216

Wang Zhaoliang (University of Waterloo)
Ni Shunhao (University of Waterloo)
Xie Wei-Chau (University of Waterloo)
Pandey Mahesh D. (University of Waterloo)

The Effect of OH Scavenger on the Formation of Cobalt Oxide Nanoparticles by Gamma-Radiolysis 1221

Leena Alrehaily (Western University)
Jiju.M Joseph (Western University)
J.Clara Wren (Western University)

Effect of High Temperature on Steady-State Radiolysis Product Behaviour 1226

Nastaran Yousefi (Western University)
Jiju.M Joseph (Western University)
Leena Alrehaily (Western University)
Jungsook.C Wren (Western University)

Application of Small Modular Reactors in Modern Microgrids 1231

Md Razibul Islam (UOIT)

A MATLAB Computational Tool for Modelling Mo-99-Producing CANDU Bundles 1236

Nicholas Chornoboy (UOIT)
Kyle Croucher (UOIT)
Alexander Edwards (UOIT)
Mark Lam (UOIT)
Adam Waters (UOIT)
Eleodor Nichita (UOIT)
Characterization of the UOIT Applied Radiation Laboratory 1241

Ray Mutiger (UOIT)
Rachid Machrafi (UOIT)
Igor Pioro (UOIT)

FEW CHALLENGES ASSOCIATED WITH DEVELOPING 1-D HTC CORRELATIONS FOR SUPERCRITICAL CO2 1246

Sahil Gupta (UOIT)

FEASIBILITY ASSESSMENT OF A FLUORESCENCE DOSIMETER 1251

Jason Jaeho Song (Royal Military College of Canada)
Megan St Aubin (Royal Military College of Canada)
Emily C. Corcoran (Royal Military College of Canada)
Kela Weber (Royal Military College of Canada)
Andy Kerr (Cancer Centre of South Eastern Ontario)

The effect of temperature on the lattice spacing around a notched Zircaloy-4 specimen determined from X-ray diffraction 1256

Sean Hanlon (Carleton University)
Scott Read (Carleton University)
Glenn McRae (Carleton University)
Kit Coleman (Carleton University)
Brian Leitch (Carleton University)