



**37th Annual CNS Conference
41st CNS/CNA Student Conference**

“Our Nuclear Future: Renewal and Responsibility”

**Niagara Falls, Ontario, June 4-7, 2017
Sheraton on the Falls Hotel**



PRELIMINARY LIST OF PAPERS

AUTHOR	AFFILIATION	PAPER TITLE
Nour Al-Sadi	University of Ontario Institute of Technology	Feasibility Study of Determining Point Source Location in Cronos-4 Gamma Tool Contamination Monitor
Qingshan Dong	Queen's University	Study of Zr-2.5Nb-0.5Cu CANDU Spacer Material: Microstructure and Irradiation Effect
Mohammed Mahdi	University of Ontario Institute of Technology	Aspects of Evaluation of Heavy Actinides For CANDU
Wei Li	University of Toronto	The Importance of Microstructural Characterization of Copper Coatings on Used Fuel Containers for Long-Term Disposal of Canada's Nuclear Waste
Usama Shahid	McMaster University	Neutronic Modeling of Molten Salt Reactors
Chireuding Zeliang	University of Ontario Institute of Technology	Dynamic Reliability Analysis of a Steam Generator Level Control System
Hakim Maloufi	University of Ontario Institute of Technology	Generation of HTC Profiles for Three Correlations at Various Operating Conditions
Hakim Maloufi	University of Ontario Institute of Technology	Verification of the Dyadyakin and Popov Heat Transfer Correlation Using Experimental Data for 3-Rod Bundles
Cong Dai	Queen's University	Atomistic Simulations of Dislocations in Zirconium Alloys
William Davis	University of Saskatchewan	Dosimetric Characterization of an Accessory Mounted Mini-Beam Collimator Across Multiple Clinically Beam-Matched Medical Linear Accelerators
Ahmad Moghrabi	McMaster University	Investigation of Lattice Physics Phenomena in the Canadian PT-SCWR in Some Perturbed Scenarios
Dimitrios Kallikragas	Trent University	SCWR Water Chemistry: Experimental Studies and MD Simulations
Perryn Bennet	Queen's University/Royal Military College of Canada	Minimization of Lift-Off Effects on Gap Measurements Using Optimal Frequencies
Kyle Ansilio	McMaster University	ELORA: The Canadian Nuclear Fuel Simulation



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Mario Ponce Tovar	McMaster University	Benchmarking of the Transient Reactor Physics Simulation Code: G4-STORK
Frederic Salaun	McMaster University	Reactivity Initiated Accident for the Canadian SCWR
Amirhossein Foroozan Ebrahimi	University of Toronto	The Role of Sulfur in the Corrosion of Nickel Alloys Relevant to Nuclear Steam Generators
Evan Veryard	Royal Military College of Canada	Investigation of the Factors Affecting Stress Corrosion Cracking Rates in Zircaloy-4 Foil
Simon Younan	McMaster University	Comparative Reactor Physics Study on Accident-Tolerant Fuel for the CANDU Reactor
Harishan Manoharan	University of Ontario Institute of Technology	The Component Operational Experience, Degradation and Ageing Programme (CODAP) Project; Canada's Contributions and Capabilities of the Program
Mohammed Alqahtani	McMaster University	Utilizing Simulation and Experiment for In-Core Gamma Heat Estimation at the McMaster Nuclear Reactor
Ralph Laite	University of Ontario Institute of Technology	An Educational Tool for Pressurized Heavy Water Reactor Burnup Analysis
Geoff Klein	Queen's University/Royal Military College of Canada	Evaluation of Effect of Temperature Variation on Pressure Tube to Calandria Tube Gap Measurements
Colin Shannon	Royal Military College of Canada	Design of an Organic Cooled Nuclear Reactor
Tzach Makmal	McMaster University	Core Elements Improvements for Optimization of Radioisotopes Production in an MTR-Type Core
Jirapinya Kongtuk	University of New Brunswick	Verification of Hydrogen Corrosion Probe (HCP) Operability Under Feedwater Chemistry Conditions
Pongpat Santiwiparat	University of New Brunswick	Evaluation of the Effect of Construction Material on the Accumulation of Hydrogen in CNER's Hydrogen Corrosion Probes (HCPs)
Jason Sharpe	McMaster University	Practical Environment-Corrected Discontinuity Factors for Diffusion Calculations



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Chris Hollingshead	McMaster University	Measurement and Simulation of Dividing Manifolds for Moderator Flow Test Facility
Ali Eskandari	University of Toronto	Evolution of an Alloy 690 Surface During Oxidation in a Simulated PWSCC Environment
Jordan Lyons	University of New Brunswick	Synergistic Effects Between Radiation Chemistry and Carbon Steel Corrosion in the Calandria Vault and End Shield Cooling System of a CANDU Reactor
Roman Popov	University of Ontario Institute of Technology	Thermal Efficiencies of Various Power Cycles for GFRs
Aravind Ravichandran	University of Saskatchewan	A Comparison of Cs-137 and X-Ray Sources as Calibration References for Thermoluminescent Dosimeter Chips Used in the Saskatchewan Postal Quality Assurance Program for Diagnostic Radiology
Derek Logtenberg	Royal Military College of Canada	Fuel Behaviour After a Loss of Coolant in an Irradiated Fuel Bay
Mariusz Bryk	University of Toronto	Susceptibility of Alloy 800 to Stress-Corrosion Cracking Investigated In Caustic Solutions at High-Temperature and High-Pressure Conditions
Cedric Eveleigh	McMaster University	Literature Review of Cladding for Corrosion Protection of Structural Alloys in Molten Fluoride Salts
Jordan Hanania	University of Calgary	Educating the Public About Radiation Using Inexpensive, Easy to Make Scintillator Detectors
Jennifer Shin	University of Western Ontario	Effect of Ni and Cr Contents on Corrosion of Steel Under Reactor Condition
Jacqueline Schoenfeld	University of Saskatchewan	Gendering Analysis of Social License to Operate in Saskatchewan's Nuclear Sector
Julie Kim	University of Ontario Institute of Technology	Decision Matrix for the Waste Processing of Spent Ion-Exchange Resin from Nuclear Power Plants
Ellen Lloyd	University of Saskatchewan	Who's Listening? Stakeholder Dialogue as Seen by Stakeholders
Andrew Walker	McMaster University	Ionic Strength and pH Dependence of Sorption of Pd onto Illite, Bentonite, and Shale



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Michelle Bootsma	University of Calgary	An Exploration of Interactive Teaching Tools for the Use of Nuclear and Astrophysics Education
Matthew Ballyk	McMaster University	Numerical Modeling of Turbulent Mixing in Connected Nuclear Fuel Subchannels Under the Influence of Appendages
Chris Alcorn	University of Guelph	Quantitative Raman Investigation of Uranyl Sulfate Complexation Under Hydrothermal Conditions
Jane Ferguson	University of Guelph	Boric Acid Ionization Constants and Triborate Formation Constants Under PWR Primary Coolant Conditions by AC Conductivity
Mohammed Mahdi	University of Ontario Institute of Technology	Thermal Efficiencies of Various Power Cycles for VHTRs