



Sharing and Preserving Nuclear Science: A Case Study of the Canadian Nuclear Society Proceedings

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University of Regina

Dr. John Archer Library
& Archives



Canadian Nuclear Society (CNS)

<https://www.cns-snc.ca/>

- ◆ Founded in 1979
- ◆ Dedicated to facilitating information exchange, supporting ongoing education, and promoting the peaceful development and application of nuclear science and technology
- ◆ Our project is to make the CNS Conference Proceedings Collection publicly available online

Project Milestones: CNS Conference Proceedings Collection

9/2023	CNS contacts Library about CNS Proceedings Collection
	Ad hoc Library group meets to discuss options
Fall 2023	Library and CNS enter negotiations of MOU
3/2024	MOU signed
5/2024	Technical project working group formed and starts working
11/2024	Library posts and hires Production and Publishing student position
4/2024	Demo site made available for feedback
5/2025	Co-mentorship of MI practicum student
	You are here
	CNS Conference Proceedings Collection launch



CNS Collections

1979 to 2003

Zip files of PDFs

No metadata

2002 to 2021

Excel spreadsheet #1

URLs for PDF download

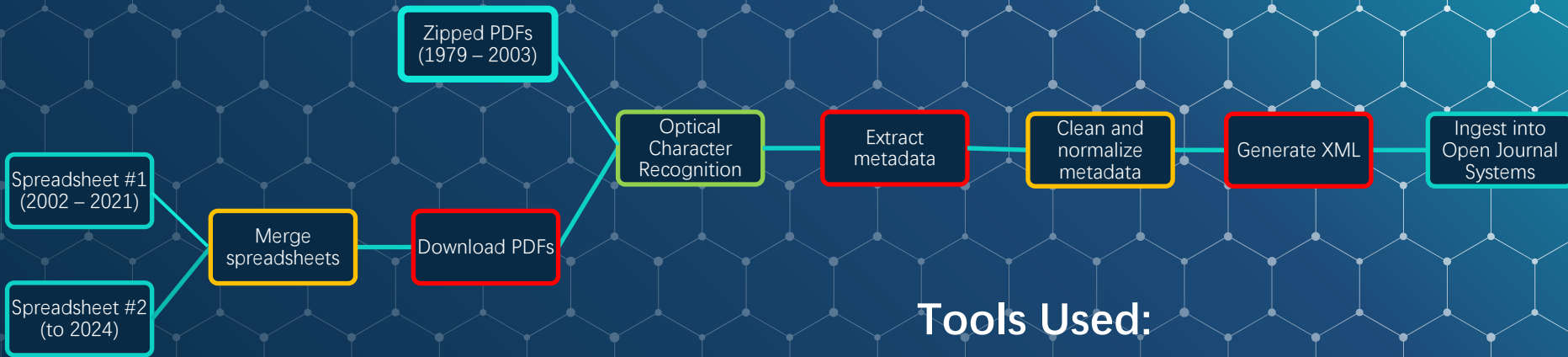
Robust metadata

Up to 2024

Excel spreadsheet #2

URLs for PDF download

Minimal metadata



Tools Used:

Open Refine

Python

Adobe Pro



A Collaborative Approach

- ◆ **Christina Winter** (Copyright & Scholarly Communications Librarian)
- ◆ **Ali Cheperli** (Production & Publishing Assistant)
- ◆ **James Holobetz** (Digital Collections Administrator)
- ◆ **Clara Riga** (Practicum student, usability and accessibility)
- ◆ **Dale Storie** (Associate Dean, Research)
- ◆ **Brett Waytuck** (Dean)

Current Status

- ◆ 127 issues (1979 – 2024)
- ◆ Approximately 7,000 articles
 - ◇ Full-text PDFs with OCR
 - ◇ Complete metadata
- ◆ OJS instance launched
 - ◇ Rolling paywall enabled
 - ◇ Domain-based access to subscription content for University of Regina affiliates



The Canadian Nuclear Society (CNS) promotes the exchange of information on all aspects of nuclear science and technology and its applications. This includes nuclear power generation, fuel production, uranium mining and refining, management of radioactive wastes and used fuel.

Current Issue

2024: 14th International Topical Meeting on Nuclear Reactor Thermal-Hydraulics, Operation and Safety

Published: 2024-08-24

Articles

Study of Turbulence and Pressure Recovery in Heat Pipe Vapor Flow Using the Spectral-Element Method

Carolina Bourdot Dutra, Tri Nguyen, Elia Merzari, Joshua E. Hansel



How and Why Flow Resistances of Cross Flow over Inline Tube Bundles Vary with Reynolds Number

Xiaoyang Xie, Yunhao Luo, Houjian Zhao, Xiaowei Li, Xinxin Wu



Transient Reactor Core Behavior by Multi-Physics Approach with Neutron Kinetics, Fuel Performance and Sub-channel Thermal-Hydraulics Coupling

Jae Ryong Lee, Yeong Hun Lee, Han Young Yoon





Takeaways

- ◆ Update society partners frequently
- ◆ Negotiate on the Open Access window
- ◆ Seek out partnerships and support from your colleagues, consider hiring options/internships
- ◆ Be prepared for a commitment that can take some time
- ◆ Leverage your existing resources and expertise
- ◆ Don't let the perfect be the enemy of the good

THANKS!

QUESTIONS?

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