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Spectrum, Concordia University's Open Access Research Repository

Twelfth Annual Report, 2021
November 2022

Overview

Concordia University's open access institutional repository, Spectrum, contains book chapters, articles, conference papers, datasets, videos, theses, graduate research projects, and other works authored or created by members of the Concordia community. EPrints (www.eprints.org) is the free and open-source software platform on which Spectrum is built.

During 2021, we continued to develop our ability to preserve the works in Spectrum as well as to increase their visibility and accessibility. We continued to support the Concordia community's use of Spectrum through outreach on open access issues and direct consultation. These efforts continue to build on the 2010 Concordia Senate resolution,[1] encouraging Concordia researchers to deposit their peer-reviewed articles in Spectrum. Both the number of deposits and the number of downloads increased in 2021 from the previous year.

This twelfth annual report summarizes progress and achievements from January 1, 2021 to December 31, 2021, and outlines developments for Spectrum's 13th year.

Growth and usage of content in Spectrum

Between January 1, 2021 and December 31, 2021, 968 deposits were made to Spectrum.

Deposit Type	Number Deposited	Percentage of Total Deposits
Thesis	818	84.5%
Article	62	6.4%
Non-Thesis Graduate Project	36	3.7%
Conference Paper	21	2.2%
Monograph & Book	17	1.8%
Monograph Chapter	10	1%
Dataset	4	0.4%

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[1] Concordia University Senate Resolution on Open Access, 2010,
http://library.concordia.ca/research/openaccess/SenateResolutiononOpenAccess.pdf.

Total	968	100%

Table 1. Number of deposits added to Spectrum in 2021 by type and percentage of total.

A total 18,311 documents were deposited in Spectrum from September 1, 2009 to December 31, 2021. Deposits have averaged 774 per year over the last three years.
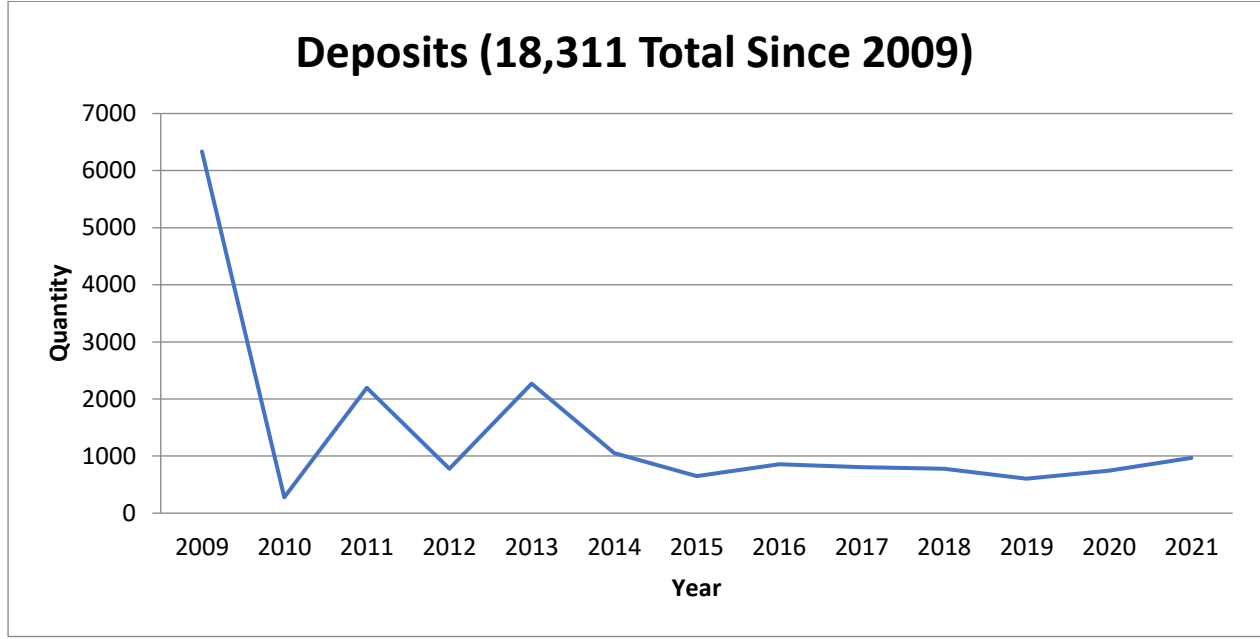
Deposits (18,311 Total Since 2009)

Figure 1. Number of deposits in Spectrum per year from 2009 to 2021.

Access to Spectrum's full text content between January 1, 2021 to December 31, 2021 was 492,657 downloads. Total or cumulative downloads of Spectrum materials from September 1, 2009 to December 31, 2021 was 6,285,687.
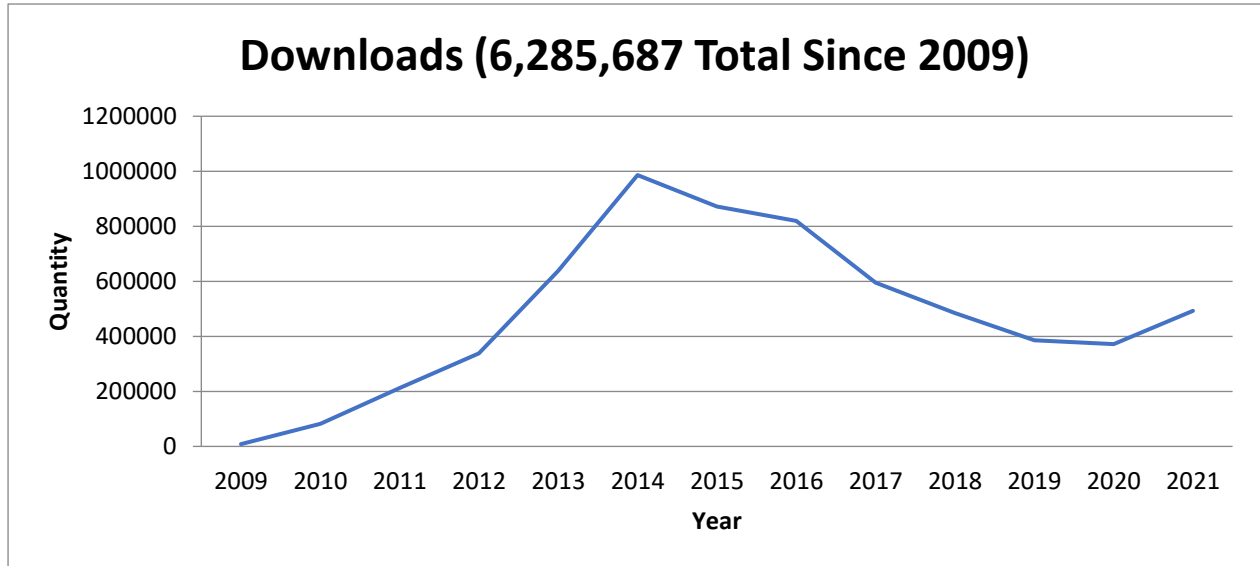
Downloads (6,285,687 Total Since 2009)

Figure 1. Number of downloads from Spectrum per year over a twelve-year period.

Spectrum was accessed by users from across the globe.

The top ten countries represented by downloads for the year covered in this report are (in descending order).

1. United States
2. Canada
3. China
4. United Kingdom
5. France
6. Germany
7. Australia
8. India
9. Vietnam
10. Indonesia

Spectrum's download statistics track information about individual authors and deposits. The following authors' works were heavily downloaded in 2021:

Author	Department/Faculty	Downloads
Cicchetti, Umberto	Religion	17,171
Laroche, Michel	John Molson School of Business	5,153
Harrell, D. Fox	Computer Science & Artificial Intelligence Laboratory at MIT	4,904
Lewis, Jason Edward, et al.[2]	Design and Computation Arts	4,897
Zhang, Shuzhe	John Molson School of Business	3,476
Radomsky, Adam S.	Psychology	3,239
Valverde, Raul	John Molson School of Business	3,112
Byers-Heinlein, Krista	Psychology	2,693
Reilly, Rosemary C.	Applied Human Sciences	2,657
Richard, Marie-Odile	John Molson School of Business	2,626

Table 2. Most downloaded Spectrum authors, 2021.

The following 10 documents in Spectrum received the most full-text downloads from January 1, 2020 to December 31, 2020.

Author	Document Type	Title	Downloads
Cicchetti, Umberto	PhD Thesis	Ibn Qutayba et l'islamisation de la science de l'interprétation des rêves en Islam; Suivi d'une traduction de l'oneirocriton d'Ibn Qutayba (m.276/889) et une présentation inédite du texte	17171

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[2] The following co-authors all shared 4,897 downloads associated with the Indigenous Protocol and Artificial Intelligence Position Paper: Lewis, J.E., Abdilla, A., Arista, N., Baker, K., Benesiinaabandan, S., Brown, M., Cheung, M., Coleman, M., Cordes, A., Davison, J., Duncan, K., Garzon, S., Harrell, D. F., Jones, P., Kealiikanakaoleohaililani, K., Kelleher, M., Kite, S., Lagon, O., Leigh, J., Levesque, M., Mahelona, K. Moses, C., Nahuewai, I., Noe, K., Olson, D., Parker Jones, 'Ō., Running Wolf, C., Running Wolf, M., Silva, M., Fragnito, S., and Whaanga, H.

		intégral arabe de l'oneirocriton attribué à Ibrāhīm B.'Abdullāh al-Kirmānī (m.184/800)	
Lewis, Jason Edward, Abdilla, Angie, Arista, Noelani, Baker, Kaipulaumakaniolono, Benesiinaabandan, Scott, Brown, Michelle, Cheung, Melanie, Coleman, Meredith, Cordes, Ashley, Davison, Joel, Duncan, Kūpono, Garzon, Sergio, Harrell, D. Fox, Jones, Peter-Lucas, Kealiikanakaoleohaililani, Kekuhi, Kelleher, Megan, Kite, Suzanne, Lagon, Olin, Leigh, Jason, Levesque, Maroussia, Mahelona, Keoni, Moses, Caleb, Nahuewai, Isaac ('Ika'aka), Noe, Kari, Olson, Danielle, Parker Jones, 'Ōiwi, Running Wolf, Caroline, Running Wolf, Michael, Silva, Marlee, Fragnito, Skawennati and Whaanga, Hēmi	Monograph (Project Report)	Indigenous Protocol and Artificial Intelligence Position Paper	4897
Zhang, Shuzhe	MSc Thesis	Color associations with masculine and feminine brand personality among Chinese consumers	3476
Laroche, Michel, Habibi, Mohammad Reza, Richard, Marie-Odile and Sankaranarayanan, Ramesh	Journal Article	The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty	2027
Okoli, Chitu and Pawlowski, Suzanne D.	Journal Article	The Delphi method as a research tool: an example, design considerations and applications	1901
Ravinder Kumar, Ravinder	MA Thesis	The Effect of Collaborative Learning on Enhancing Student Achievement : A Meta-Analysis	1679
Florence, Kathryn	MA Thesis	Tail/Tale/Tell: The Transformations of Sedna into an Icon of Survivance in the Visual Arts Through the Eyes of Four Contemporary Urban Inuit Artists	1451
Hoebanx, Pauline	MA Thesis	Dating scripts on social media: A case study of Matthew Hussey's YouTube videos	1451
Subzwari, Khawer, Mokhov, Serguei A., Khalid,	Seminar Presentation	TRIZ: A Theory of Inventive Problem Solving	1441

Outlioua, Gonzalez, Alex and Kadiri, Mutair M.			
Byers-Heinlein, Krista	Book section	High amplitude sucking procedure	1359

Table 3. Most downloaded Spectrum documents, 2021.

Developments in 2021 and Goals for 2022

In 2021, we released the plugin for OpenAIRE interoperability through the EPrints Bazaar: The Software Portal for the EPrints Community. This plugin was developed as a part of our work with the Canadian Association of Research Libraries (CARL) to use the OpenAIRE service to improve the discoverability of Canadian open access content. We continued to refine our own use of this plugin that allows Spectrum content to be indexed in OpenAIRE search.

In 2021, we continued the development and testing of the EPrints-Archivematica export plugin used to export digital objects from Spectrum to a dedicated Archivematica digital preservation system, as a part of an institutional effort to continually ensure that files are not lost or corrupted and sufficient information about the digital objects is collected to enable future preservation actions and access. We plan to issue a public release of this plugin in the EPrints Bazaar in 2022, and to use this plugin to complete the export of all of Spectrum's contents for digital preservation using Archivematica.

During 2021, we completed an upgrade of Spectrum's EPrints digital repository software from version 3.3.12 to 3.4.3. This major upgrade of the core software that powers Spectrum includes cumulative improvements from version releases: 3.3.13, 3.3.14, 3.3.15, 3.3.16, 3.4.1, 3.4.2, and 3.4.3. The EPrints open-source software is following a roadmap with the objective of an accessibility compliant web interface that reports no errors, alerts or contrast issues according to the WAVE web accessibility evaluation tool. By updating our configuration and the help of version 3.4.3 of the EPrints open-source software released in 2021, we addressed many accessibility issues, resolving errors and most alerts on public facing pages and the deposit and backend administrative pages.

In 2021, we upgraded our DataCite DOI minting plugin so that it would use Version 4 of the DataCite schema, resulting in more complete metadata sent to DataCite when minting DOIs, including abstract, publisher, corporate creators, and rights information.

We continued to test the upgrade of Spectrum's ORCID integration in 2021 that is scheduled to be released in 2022. The aims for 2022 include ORCID integration allowing import and export of bibliographic metadata between Spectrum and ORCID. We will also initiate a plan to improve the user-friendliness of the deposit process and Spectrum editing workflows.

Submitted by T. Neugebauer and R. Harris