

Spectrum, Concordia University's Open Access Research Repository

Eleventh Annual Report, 2020

December 2021

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 2020, we continued to develop our ability to preserve the works in Spectrum as well as to increase their visibility and accessibility. We completed the validation and registration of Spectrum in OpenAIRE, and shared the results of this work as an open source plugin to EPrints. We are leading the development of enhanced digital preservation functionality in EPrints through the EPrints-Archivematica plugin. 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.

This eleventh annual report summarizes progress and achievements from January 1, 2020 to December 31, 2020, and outlines developments for Spectrum's 12th year.

Growth and usage of content in Spectrum

Between January 1, 2020 and December 31, 2020, 743 deposits were made to Spectrum.

Deposit Type	Number Deposited	Percentage of Total Deposits
Thesis	585	78.7%
Article	75	10.1%
Non-Thesis Graduate Project	43	5.8%
Monograph & Book	19	2.7%
Monograph Chapter	8	1.1%
Conference Paper	8	1.1%

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

Dataset	4	0.4%
Video	1	0.1%
Total	743	100%

Table 1. Number of deposits added to Spectrum by type and percentage of total, 2018.

A total 17,393 documents were deposited in Spectrum from September 1, 2009 to December 31, 2020. Deposits have averaged 710 per year over the last three years.

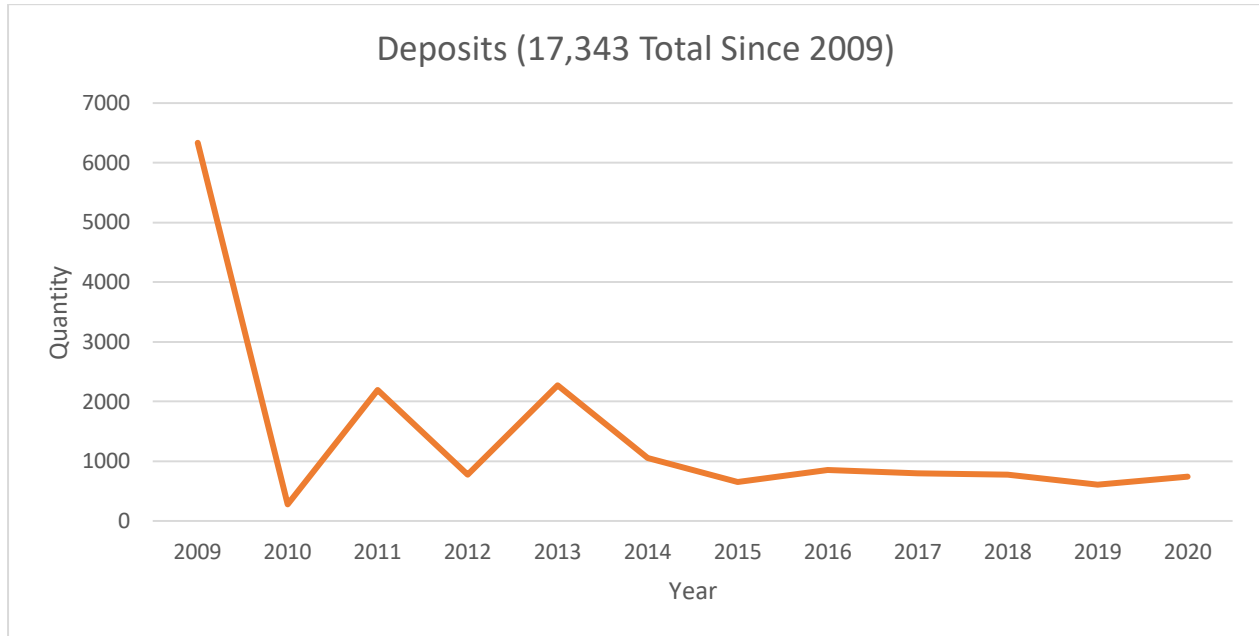


Figure 1. Number of deposits in Spectrum per year over a nine-year period.

Access to Spectrum's full text content between January 1, 2020 to December 31, 2020 was 371,710 downloads. Total or cumulative downloads of Spectrum materials from September 1, 2009 to December 31, 2020 was 5,421,320.

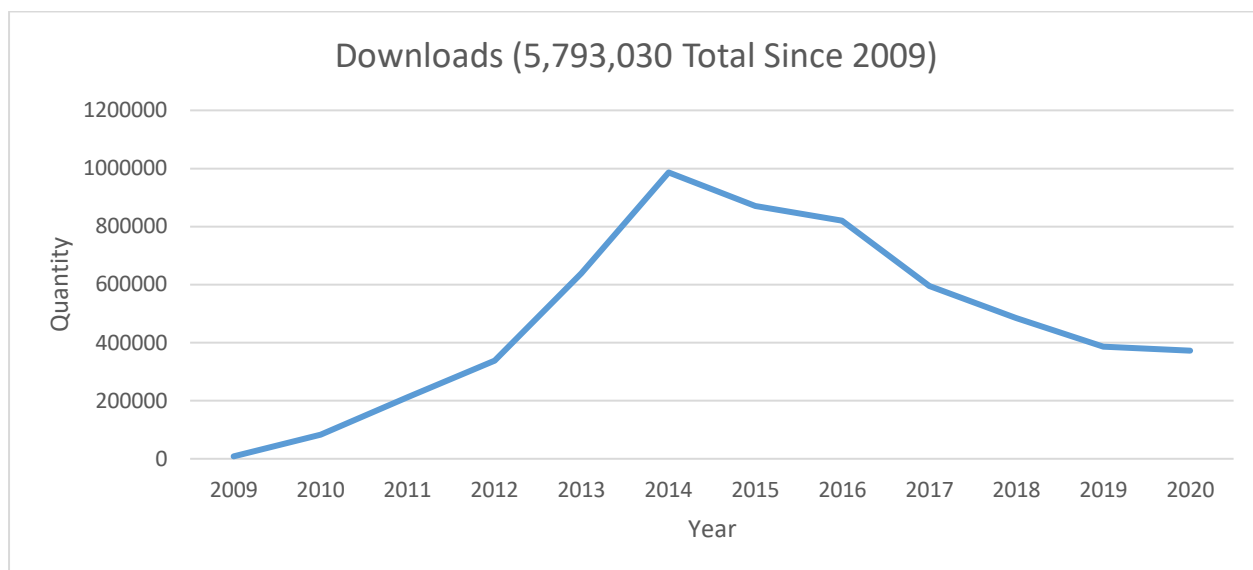


Figure 1. Number of downloads from Spectrum per year over a ten-year period.

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. Germany
4. China
5. France
6. Germany
7. Australia
8. India
9. Netherlands
10. Indonesia

Spectrum’s download statistics track information about individual authors and deposits. The following authors’ works were heavily downloaded during Spectrum’s tenth year.

Author	Department/Faculty	Downloads
Laroche, Michel	John Molson School of Business	6,897
Cicchetti, Umberto	Religion	6,188
Richard, Marie-Odile	John Molson School of Business	4,058
Radomsky, Adam S.	Psychology	3,945
Habibi, Mohammad Reza	John Molson School of Business	3,513
Sankaranarayanan, Ramesh	John Molson School of Business	3,467
Harrell, D. Fox	Computer Science & Artificial Intelligence Laboratory at MIT	3,230
Lewis, Jason Edward, et al.	Design and Computation Arts	3,219

Table 2. Most downloaded Spectrum authors, 2020.

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 intégral arabe de l'oneirocriton attribué à Ibrāhīm B.'Abdullāh al-Kirmānī (m.184/800)	6188
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	3449
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	3219
Zhang, Shuzhe	MSc Thesis	Color associations with masculine and feminine brand personality among Chinese consumers	2025
Okoli, Chitu and Pawlowski, Suzanne D.	Journal Article	The Delphi method as a research tool: an example, design considerations and applications	1898
Mlek, Magdalena	MA Thesis	Nursing Students' Learning Experiences in Clinical Settings: Stress, Anxiety and Coping	1375
Byers-Heinlein, Krista	Book Section	High amplitude sucking procedure	1304
Kumar, Ravinder	MA Thesis	The Effect of Collaborative Learning on Enhancing Student Achievement : A Meta-Analysis	1213

Snow, Shelley	PhD Thesis	Healing through sound: An exploration of a vocal sound healing method in Great Britain	1102
Shirgir, Samira	MSc Thesis	Issuing a Convertible Bond with Call-Spread Overlay: Incorporating the Effects of Convertible Arbitrage	1010

Table 3. Most downloaded Spectrum documents, 2020.

Developments in 2020 and Goals for 2021

In 2019, Concordia University joined a Canadian Association of Research Libraries (CARL) pilot project which seeks to use the [OpenAIRE](#) service to improve the discoverability of Canadian open access content. In partnership with Canada's federal funding agencies, this pilot project aims to provide more comprehensive ways to discover and relate research outputs with funding organizations. In 2019, during the first phase of the pilot, we developed a [metadata export plugin for Spectrum](#) necessary for OpenAIRE to make Spectrum content retrievable in [OpenAIRE search](#). In 2020, we made our plugin available in GitHub, and successfully validated it for compatibility with [OpenAIRE Literature Repository Guidelines V4](#). We registered Spectrum as a data source in OpenAIRE, and tested the use of OpenAIRE validation, aggregation and metadata enrichments. As a result of this work, Spectrum content is now discoverable in OpenAIRE. In 2021, we plan to publish the plugin through the [EPrints Bazaar: The Software Portal for the EPrints Community](#), and to share the lessons learned from this work through presentations and workshops, especially with those Canadian institutions also using the EPrints digital repository platform.

Since 2019, with the help of Artefactual Systems, EPrints Services, and other members of the international EPrints open source software community, we have been leading the development of the [EPrints-Archivematica export plugin](#). This plugin is used to export digital objects and metadata from Spectrum to a dedicated Archivematica digital preservation system. This functionality is a best practice for open repositories that allows us 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. In 2020, we continued to carry out test exports and further develop the functionality of this plugin, updating the source code in collaboration with the EPrints community.

During 2020, we continued to apply server and security updates while preparing for an upgrade of Spectrum's database and the EPrints digital repository software platform from version 3.3.12 to 3.4.3.

Spectrum has been collecting ORCID IDs since 2019, but the enhanced ORCID integration will allow depositors to manage permissions to import from ORCID to Spectrum and write to their ORCID profile with information about content deposited to Spectrum. The ORCID integration upgrade, which allows users to register and connect their ORCID IDs to Spectrum, has been delayed and is now scheduled for 2022.

Submitted by T. Neugebauer