



DRUM Upload Checklist

For MRSEC authors to prepare your data files for curation in the Data Repository for the University of Minnesota (DRUM). DRUM is an open-access data repository run by the UMN Libraries. Review the [deposit license](#) before submitting. If you have questions, contact Meghan Lafferty (mlaffert@umn.edu).

Example submissions: Dorfman Research Group ([1](#)), Goldman Group ([2](#))

If you are planning to file a patent, do not submit data to DRUM until the patent is filed.

- Confirm you have permission to publish all the data contained in the files.
All your collaborators and co-authors MUST be aware and OK with publishing the data, and the files MUST NOT contain any private, confidential, or other legally protected information. Don't surprise anyone.
- Locate data files for each figure, supporting figure, table, scheme, etc. in the paper (this includes .jpgs of Chemdraw files used in figures).
If you have raw and processed data for a single figure, choose the level of processing that another scientist would need to fully evaluate the data. Contact datarepo@umn.edu about larger files (>50GB).
- Open each of the files to make sure they are operable and review contents.
- Make sure the data files are thoroughly described.
If applicable, add units or variables to column headers. Ensure the contents are described thoroughly enough for someone else to be able to readily interpret the files 10 or more years from now.
- Make a copy of the README.txt template ([text file](#)) ([qdoc file](#)) and fill it out.
The README will describe the files, the software needed to open them, and provide contact information for the dataset. This document will be submitted with your data.
 - Spell out all acronyms/abbreviations.
Your goal is for someone else to be able to understand your dataset using the documentation.
 - Include your data collection methodology in the README. You can copy and paste the methods section from the paper if that covers it, or you can record more detailed methods.
 - Describe any important relationships between files.
Example: File A depends on Files B-G to run. File A contains calculations from Files B-C in Folder D. File A compiles raw data stored in Folders B-C.
 - Name each piece of software and version that would be required to access your data.
 - Generate printout (or copy the directory structure by hand) of the directory structure*, copy into README template.
*Windows: From the Windows command line: `tree /a /f >listmyfiles.txt`
Mac: Using the Command line (first install Tree with Homebrew): `tree -hF > ~/Desktop/output.txt`
* Recommended for 20 or more files*
- If applicable, export a .jpg of each Chemdraw file to include with the submission.
- Organize the files into a logical directory structure.
*Files are easier to browse in DRUM if they are not nested in folders and zipped up. Un-nest files if possible and use a logical nomenclature to preserve the organizational structure.
Example: Use `Raw_DMTA.zip`, `Raw_DSC.zip`, `Raw_NMR.zip` instead of `Raw.zip` with subfolders DMTA, DSC, NMR*

- ❑ [Fill out the DRUM upload form](#) and upload your data.
- ❑ Work with the DRUM Curator to finalize your publication. Once completed, you'll receive a DOI to add to your manuscript.

DRUM Upload Form Guide

The following guide is designed to provide a template for data submission and clarify ambiguous fields in the submission form.



1. Create new item

- Select collection
- You can type "DRUM" into the search bar to find "Data Repository for U of M (DRUM)"
- Select "Data Repository for U of M (DRUM)" from the list

2. Describe Section 1

- Title: Supporting data for My Article Title
 - Title should be distinct from the article title
 - Peer Review?
 - **IMPORTANT:** If your data submission needs restricted access for peer reviewers while the article is under peer review, then preface the title with the phrase "Peer Review Access Only" (e.g., Peer Review Access Only: Supporting data for My Article Title)
 - DRUM curators will move the data to a private location (with direct URL you can share with the journal editors) and not be public until you notify datarepo@umn.edu that the article was accepted or after 1 year, whichever is first.
- Authors: List authors individually. If more than one author, select "Add more" for each.
- Contact: If there are multiple PIs, choose one and list both in the abstract. See [this](#) example.
- Group: Materials Research Science & Engineering Center
- Data type: Pick one or more.
 - We recommend: Experimental Data, Programming Software Code

3. Describe Section 2

- Abstract:
 - This should be distinct from the article abstract. Do not copy and paste the article abstract.
 - Briefly describe the data (its contents, value, and purpose) and why it is now released (recommended maximum of 250 words).
- Citation to Related Paper(s):
 - This should be the full citation to the related article. If the article is under review, this is ok to update later

- Description: What files are included, how to use them and under what circumstances others would re-use the data. See examples ([1](#), [2](#))
- Funding information:
 - If the research was grant funded, include the name of the funding agency and grant number.
- Keywords:
 - Include keywords for others to find your research. Use “Add more” for each keyword.

4. Upload and Describe Files

- Upload all your data files.
 - Any file format is accepted, but do consider if there may be a more open, non-proprietary version (e.g., Instead of Microsoft PowerPoint → upload as a PDF)
 - Use short descriptions for each file that you upload (10-15 words per file). Longer descriptions go in the README.
- Embargos: Option to restrict access for up to 2 years, and completely up to you.
- Upload the readme file separate from the data (e.g., outside the zip)
- Upload a thumbnail image of your choice.
 - Thumbnails can be a representation of the data, such as a graph, or a picture relating to the data.
 - The image should be self-created or copyright free.
 - Add “Thumbnail image” for the description.

4. License

- License: Not required, but prefer CC0 if possible ([What is CC0?](#)).