
Raw Data For Supramolecular Fractal Growth of Self-Assembled Fibrillar Networks

A Data Management Plan created using DMP Assistant

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Project abstract:

Complex morphologies, as is the case in self-assembled fibrillar networks (SAFiNs) of 1,3: 2,4-Dibenzylidene sorbitol (DBS), are often characterized by their Fractal dimension and not Euclidean. Self-similarity presents for DBS-polyethylene glycol (PEG) SAFiNs in the Cayley Tree branching pattern, similar box-counting fractal dimensions across length scales, and fractals derived from the Avrami model. Irrespective of the crystallization temperature, fractal values corresponded to limited diffusion aggregation and not ballistic particle-cluster aggregation. Additionally, the fractal dimension of the SAFiN was affected more by changes in solvent viscosity (e.g., PEG200 compared to PEG600) than crystallization temperature. Most surprising was the evidence of Cayley branching not only for the radial fibers within the spherulitic but also on the fiber surfaces.

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Data Collection

What types of data will you collect, create, link to, acquire and/or record?

Question not answered.

What file formats will your data be collected in? Will these formats allow for data re-use, sharing and long-term access to the data?

Question not answered.

What conventions and procedures will you use to structure, name and version-control your files to help you and others better understand how your data are organized?

Question not answered.

Documentation and Metadata

What documentation will be needed for the data to be read and interpreted correctly in the future?

Question not answered.

How will you make sure that documentation is created or captured consistently throughout your project?

Question not answered.

If you are using a metadata standard and/or tools to document and describe your data, please list here.

Question not answered.

Storage and Backup

What are the anticipated storage requirements for your project, in terms of storage space (in megabytes, gigabytes, terabytes, etc.) and the length of time you will be storing it?

Question not answered.

How and where will your data be stored and backed up during your research project?

Question not answered.

How will the research team and other collaborators access, modify, and contribute data throughout the project?

Question not answered.

Preservation

Where will you deposit your data for long-term preservation and access at the end of your research project?

Question not answered.

Indicate how you will ensure your data is preservation ready. Consider preservation-friendly file formats, ensuring file integrity, anonymization and de-identification, inclusion of supporting documentation.

Question not answered.

Sharing and Reuse

What data will you be sharing and in what form? (e.g. raw, processed, analyzed, final).

Question not answered.

Have you considered what type of end-user license to include with your data?

Question not answered.

What steps will be taken to help the research community know that your data exists?

Question not answered.

Responsibilities and Resources

Identify who will be responsible for managing this project's data during and after the project and the major data management tasks for which they will be responsible.

Question not answered.

How will responsibilities for managing data activities be handled if substantive changes happen in the personnel overseeing the project's data, including a change of Principal Investigator?

Question not answered.

What resources will you require to implement your data management plan? What do you estimate the overall cost for data management to be?

Question not answered.

Ethics and Legal Compliance

If your research project includes sensitive data, how will you ensure that it is securely managed and accessible only to approved members of the project?

Question not answered.

If applicable, what strategies will you undertake to address secondary uses of sensitive data?

Question not answered.

How will you manage legal, ethical, and intellectual property issues?

Question not answered.