



SLoPP and SLoPP-E

Raman Spectral Libraries for Microplastics Research

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This folder contains:

- I. SLoPP and SLoPP-E Itemized_Public.xlsx – A table of all individual spectra in each library (SLoPP and SLoPP-E)
Library IDs match the file names for the individual spectra also provided. The original source, polymer types verified during library creation, colour and morphology are listed. Instrument parameters used to acquire the spectra are included. Relevant instrument parameters (e.g. spectral resolution, laser power, etc.) are provided in the journal article.
- II. SLoPP folder – All files for the Spectral Library of Plastic Particles
A single file for the entire SLoPP library (SLoPP.sdbx) is provided and is compatible with Bio-Rad KnowItAll software. The '.sdbx' file is the simplest method for importing the entire database and contains all spectra as well as relevant metadata. This folder also contains '.l6s' and '.txt' files for all individual spectra in SLoPP, organized into folders for each polymer group. File names for individual spectra match the Library IDs in the Excel table.
- III. SLoPP-E folder – All files for the Spectral Library of Plastic Particles aged in the environment
A single file for the entire SLoPP-E library (SLoPP-E.sdbx) is provided and is compatible with Bio-Rad KnowItAll software. The '.sdbx' file is the simplest method for importing the entire database and contains all spectra as well as relevant metadata. This folder also contains '.l6s' and '.txt' files for all individual spectra in SLoPP-E, organized into folders for each polymer group. File names for individual spectra match the Library IDs in the Excel table.

Please be advised that Library IDs were created to be consistent with source items, colours and morphologies but do not necessarily indicate the source, colour and morphology of the sample being analyzed. For example, a particle that matches well with 'Polyethylene 9. Clear Cling Wrap' is not necessarily cling wrap. However, the particle being analyzed is likely polyethylene. Similarly, a particle that matches well with 'Polyamide 2. Pink Fiber' may not be pink in colour but may contain similar pigments.