ARL\_Raman\_Aerosol\_Process\_DH20

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Processing and analyzing data from Raman spectrometers is a complex task. This task is often done by software bundled with the Raman spectrometer. Many of these software tools are not designed to automatically process over 100,000 spectra per day, numbers that are becoming more common with automated and hyperspectral Raman instruments. Additionally, many small, 'homebrew' or otherwise repurposed instruments may not have the sophisticated code for processing Raman spectra. Thus, we hope to make the tools that we have written available for reproducing our results, or applying to new instruments.

This software reproduces the figures from a paper currently under review. It includes plotting of effects of different focus heights on Raman spectra, examples of burning a particle with the laser, many Raman spectra, examples of fluorescence removal, saturation, dark current, and relationships between fluorescence and Raman spectra. It also illustrates Raman spectra from measurements made outside Adelphi, MD.