RAMAN DATA COLLECTION AND PROCESSING INFORMATION

DATA DESCRIPTION
Number of points: 1688
X-axis: Raman shift (cm$^{-1}$)
Y-axis: Raman intensity
First X value: 375.8496
Last X value: 3629.1726
Raman laser frequency: 12824.1025
Data spacing: 1.928467

DATA COLLECTION INFORMATION
Exposure time: 1.00 sec
Number of exposures: 10
Number of background exposures: 512

SPECTROMETER DESCRIPTION
Spectrometer: Almega
Laser: 780 nm
Laser power level: 100%
Laser polarization: Parallel
Grating: 360 lines/mm
Spectrograph aperture: 100 µm slit
Sample position: Macro compartment
Camera temperature: -50 °C
CCD rows binned: 6-250
CCD binning: On chip (auto row select)
Polarization analyzer: Out
De-convolving Gaussian modes process

1. Original Data Truncated to 1600-1800 cm\(^{-1}\)

![Graph showing original data]

2. Baseline correction

![Graph showing baseline corrected data]

3. Gaussian modes in counts with least residual

![Graph showing Gaussian modes in counts]

4. Gaussian modes in ratio: Data in part 3 was divided by the overall area below the curve (grey) and multiplied by 100. The data will show the relative population of each mode, which is free of the impact of dilution

![Graph showing Gaussian modes in ratio]