

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

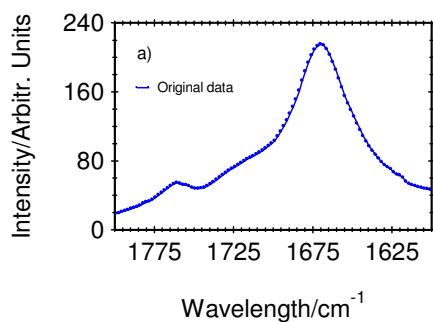
CCD rows binned: 6-250

CCD binning: On chip (auto row select)

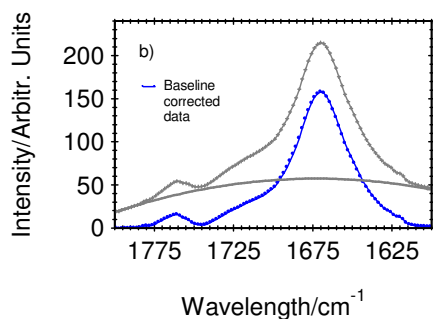
Polarization analyzer: Out

De-convolving Gaussian modes process

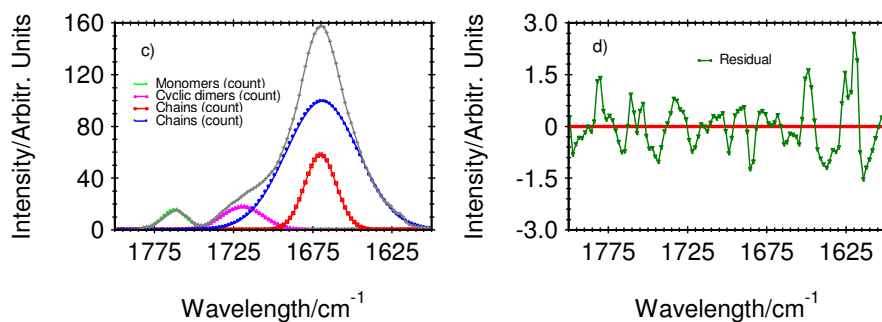
1. Original Data Truncated to 1600-1800 cm^{-1}



2. Baseline correction



3. Gaussian modes in counts with least residual



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

