



## Sample Details

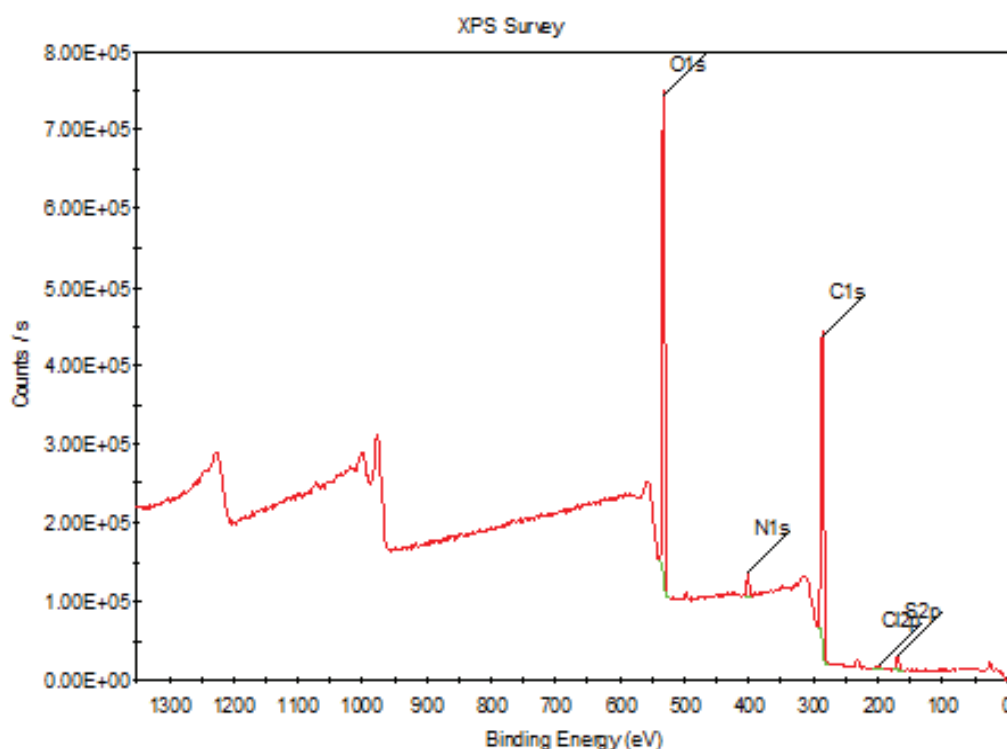
Start-up Graphite : Sri Lanka - C99+ Vein Graphite, Particle size range: 63-90  $\mu\text{m}$   
 Appearance : Brown color dry powder  
 Tapped Density :  $\sim 0.53 \text{ g/cm}^3$   
 Dispersibility : Polar solvents (water, ethanol, DMF, etc.)

## X-ray Photoelectron Spectroscopy (XPS)

\*C/O ratio: 1.92

The sample was mounted on a glass substrate using double tape. Three different spots per sample were analyzed. Parameters were set as follows, X-Ray source: Monochromatic Al K $\alpha$  (1486.6 eV), Spot size: 900  $\mu\text{m}$ . Survey scans and high resolution scans were collected with pass energies of 150 and 20 eV and with a step size of 1.0 and 0.05 eV. Detailed spectra processing was performed by Thermo Avantage (5.982) software

| Name  | Peak BE | Avg. % |
|-------|---------|--------|
| O 1s  | 533.17  | 32.40  |
| C 1s  | 286.71  | 62.38  |
| N 1s  | 402.1   | 3.34   |
| S 2p  | 169.27  | 1.80   |
| Cl 2p | 199.44  | 0.08   |



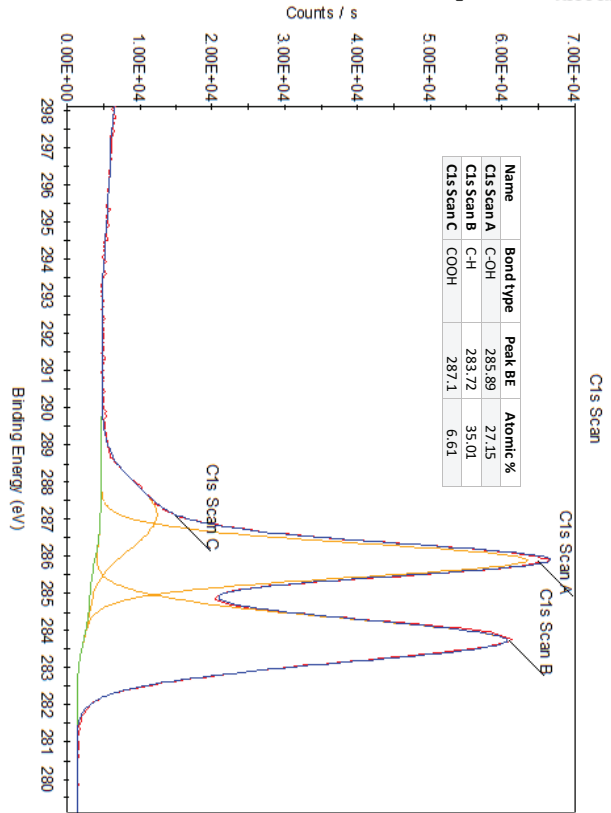


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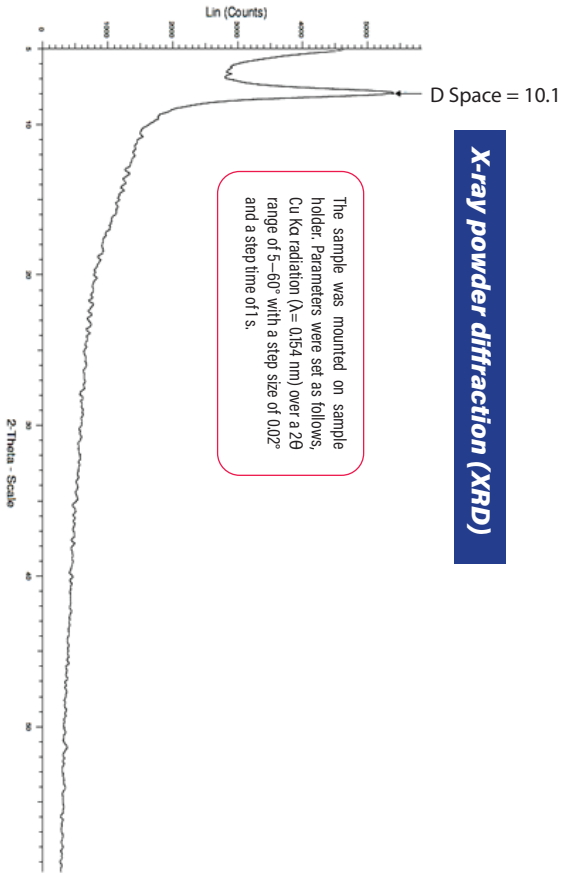


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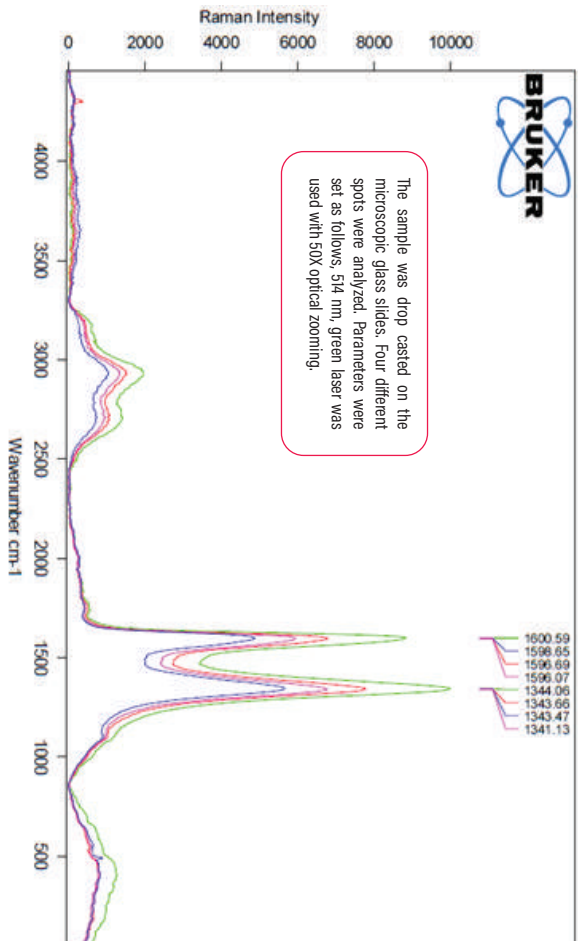
### Carbon 1S XPS narrow scan



### X-ray powder diffraction (XRD)



### RAMAN Analysis



### FTIR Analysis

