



**Ceylon Graphene Technologies**



## REDUCED GRAPHENE OXIDE

Reduced Graphene Oxide (rGO) is produced by reducing Graphene Oxide (GO) using chemical, thermal or electrochemical methods. rGO is one of the most obvious solution to be used for industrial applications such as energy storage.



### APPLICATION AREA



RESEARCH & DEVELOPMENT



BATTERY ADDITIVE



ENERGY STORAGE



PLASTIC & POLYMER COMPOSITES



OIL & LUBRICATION



ADVANCED APPLICATIONS

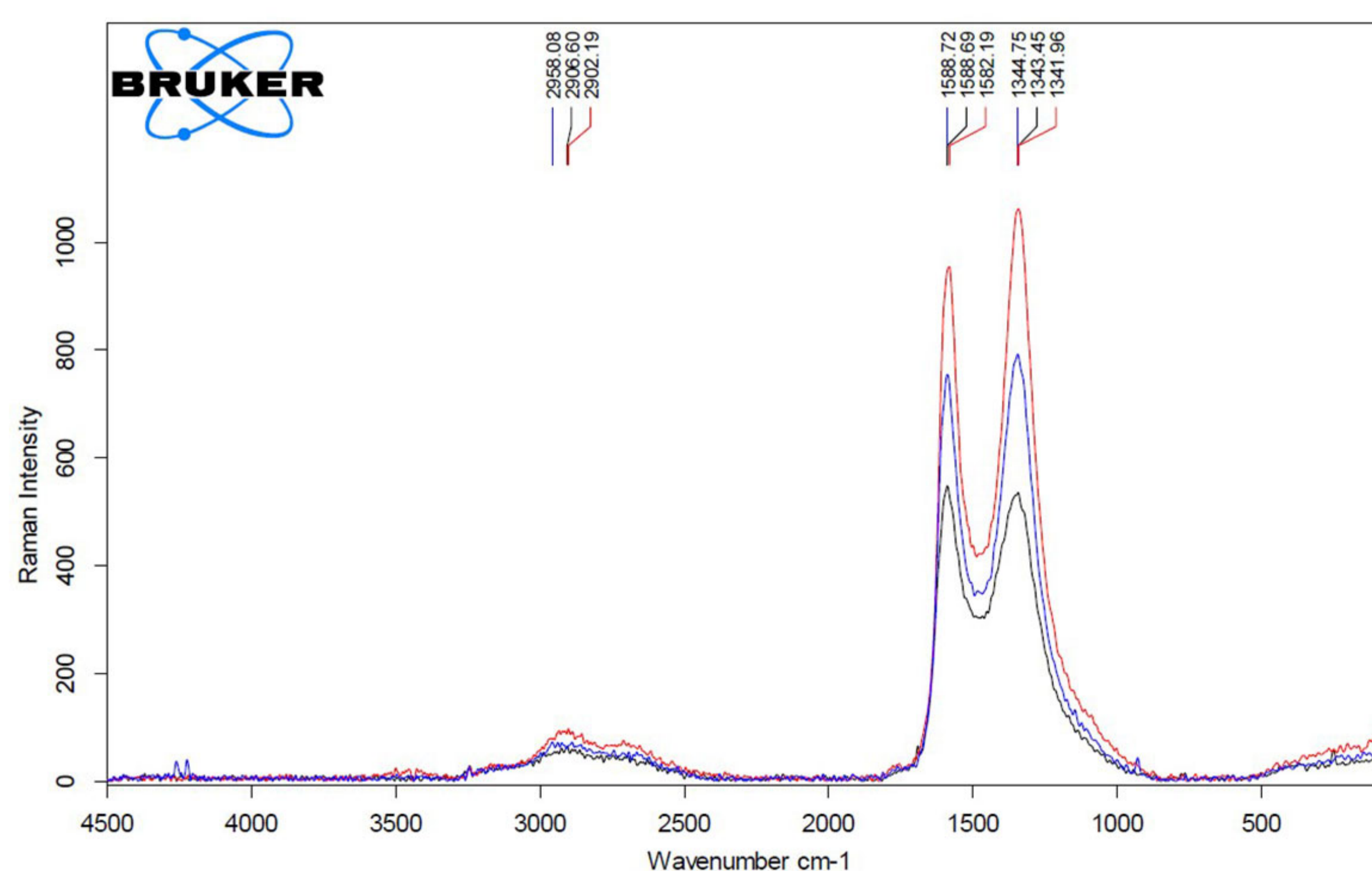
|                          |  |
|--------------------------|--|
| <b>Start-Up Graphite</b> | Sri Lankan C99+ Vein Graphite, Particle Size range 63-90 $\mu\text{m}$ |
| <b>Appearance</b>        | Soft Black Powder Platelets  |
| <b>Tapped Density</b>    | $5.9 \times 10^{-3} \text{ g/cm}^3$                                    |
| <b>BET Surface Area</b>  | $\sim 500 \pm 50 \text{ (m}^2/\text{g)}$                               |

**C/O ratio: 1.9 - 2.5**

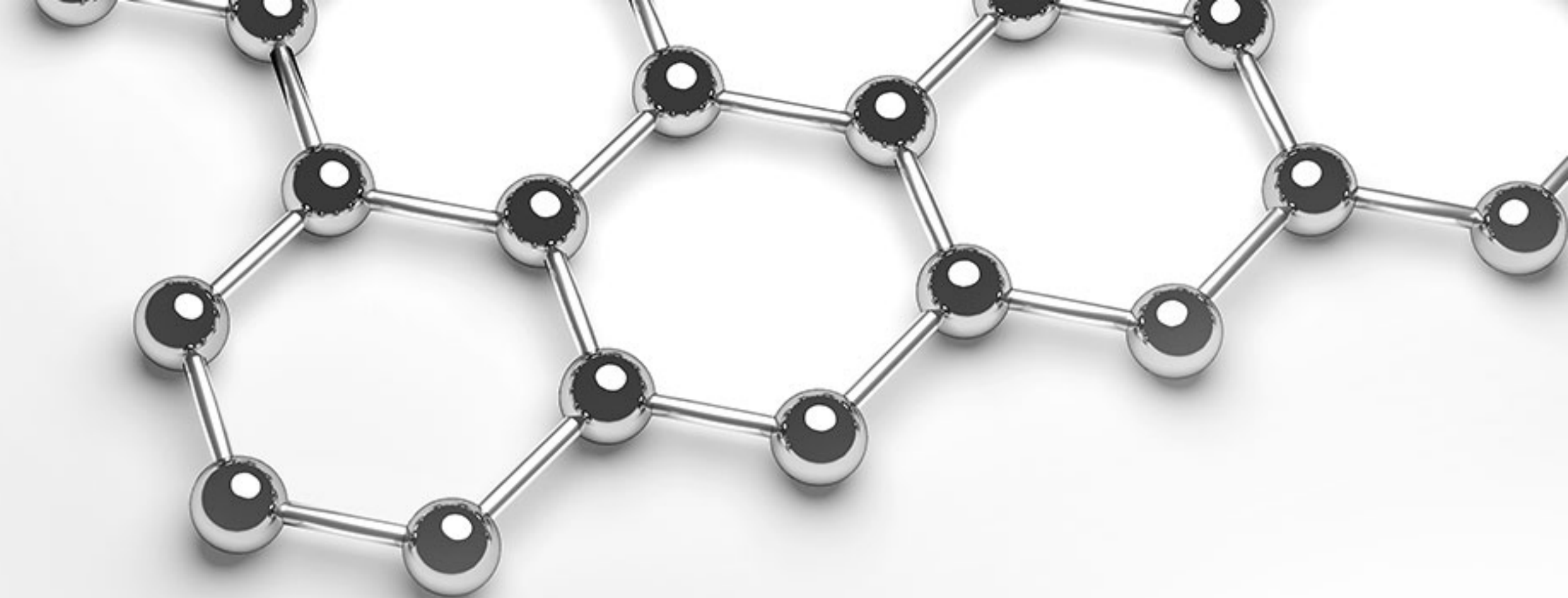
**X-ray Photoelectron Spectroscopy (XPS)**

| Name         | O1s         | C1s       | S2p     | Si2p     |
|--------------|-------------|-----------|---------|----------|
| <b>Avg %</b> | 94.0 - 95.0 | 4.5 - 5.0 | 0 - 0.4 | 0 - 0.88 |

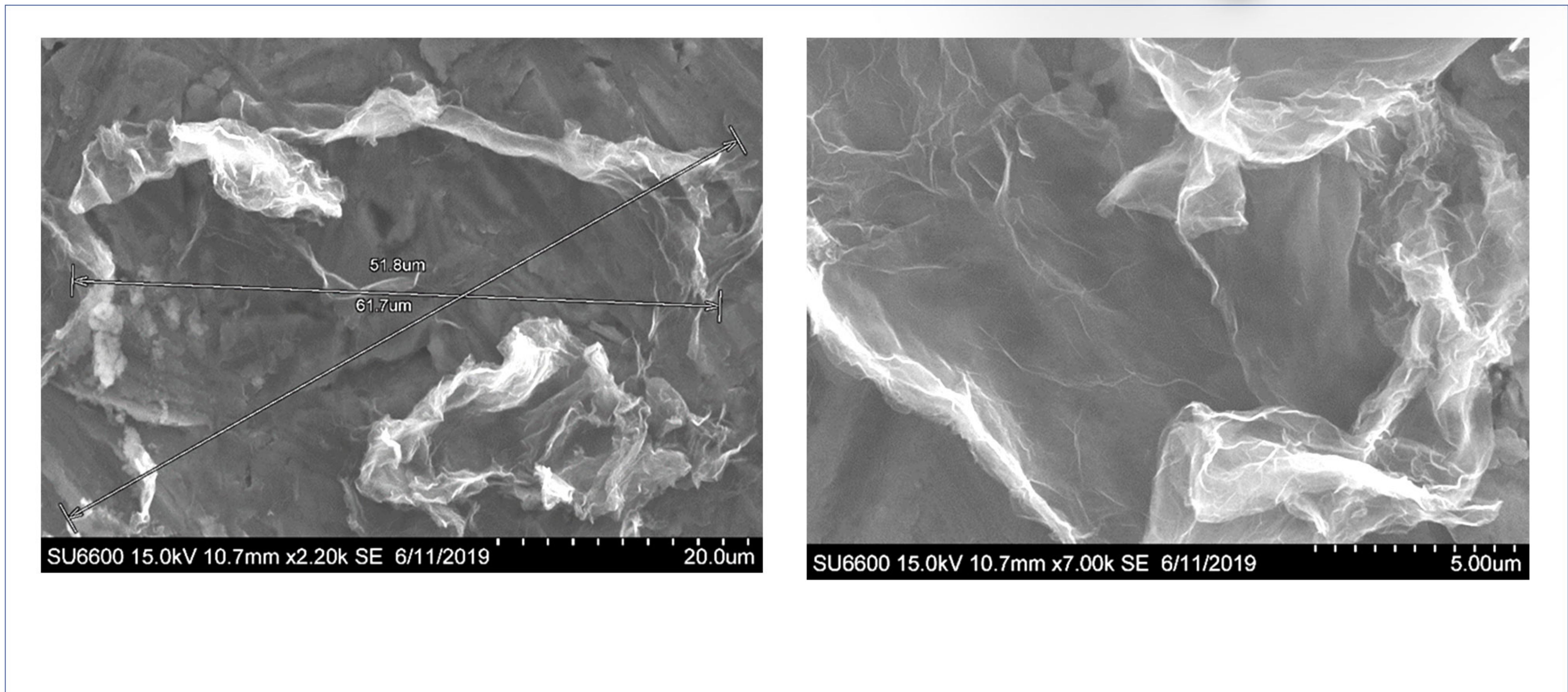
### RAMAN ANALYSIS



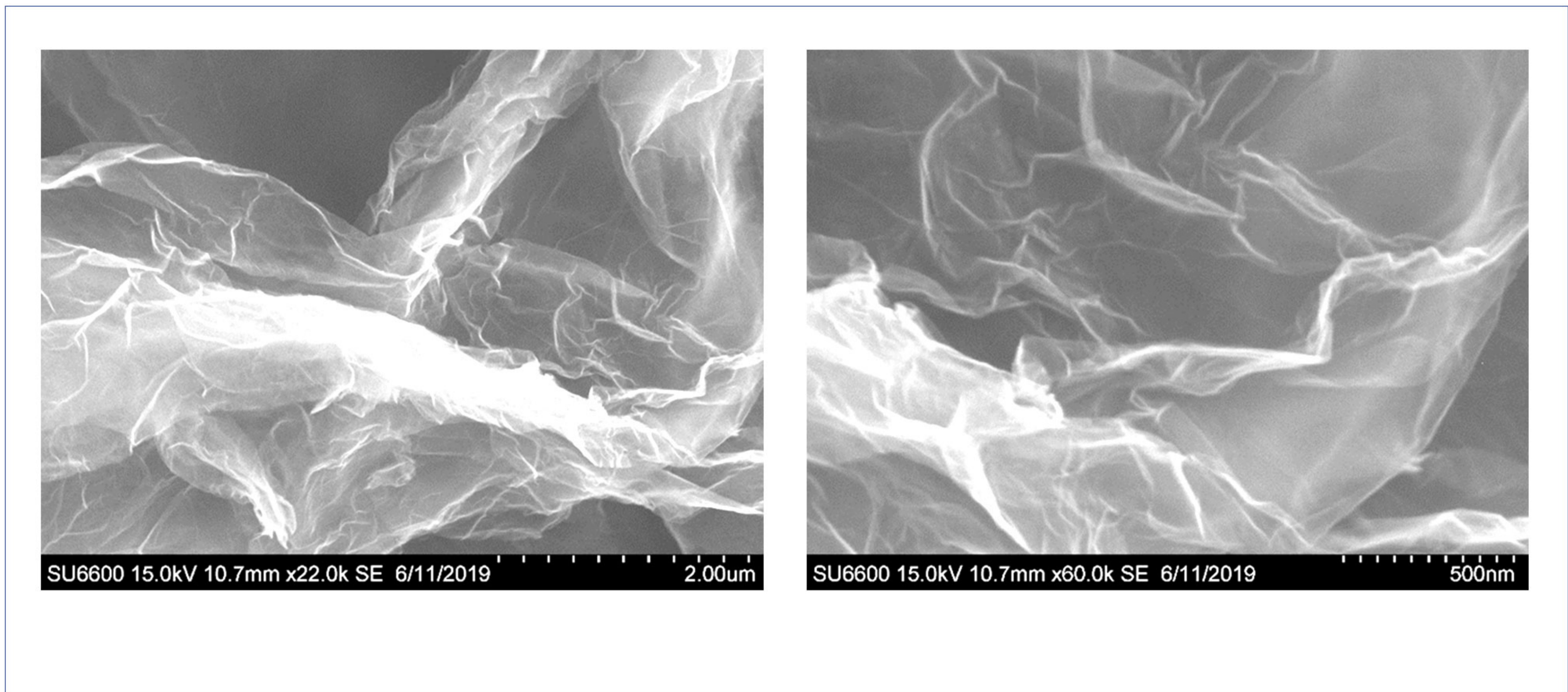




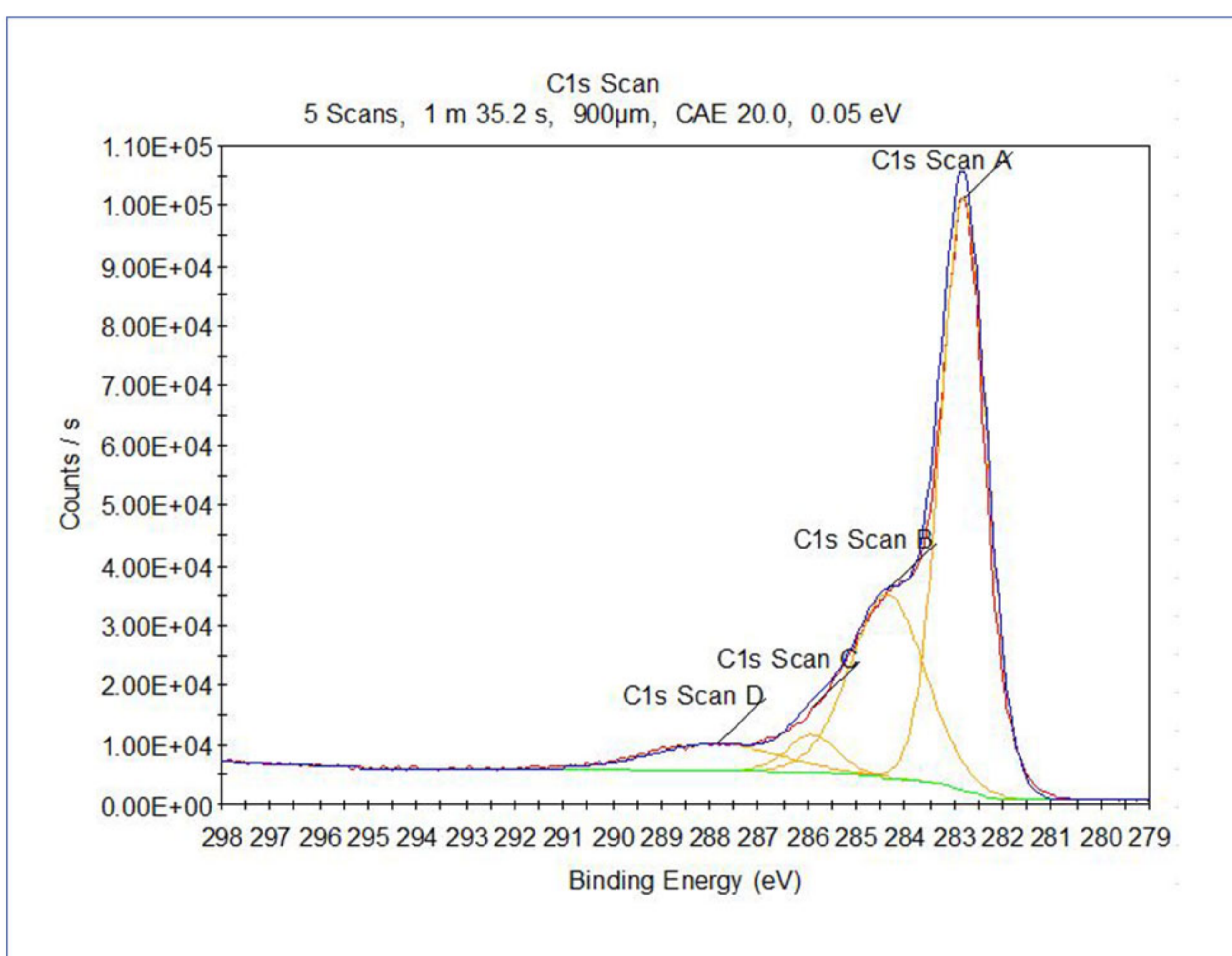
## TRANSMISSION ELECTRON MICROSCOPE (TEM)



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## XPS NARROW SCAN C1S



## FTIR ANALYSIS

