



Ceylon Graphene Technologies



GRAPHENE OXIDE

Graphene oxide (GO) is the oxidized form of graphene. It is a single-atomic layered material that is formed by the oxidation of graphite which is cheap and readily available. Graphene oxide is easy to process since it is dispersible in water and other solvents. GO is a unique material with various oxygen containing functionalities such as epoxide, carbonyl, carboxyl and hydroxyl groups.



APPLICATION AREA



RESEARCH & DEVELOPMENT



CONSTRUCTION MATERIAL



WATER FILTRATION



PLASTIC & POLYMER COMPOSITES



OIL & LUBRICATION



ADVANCED APPLICATIONS

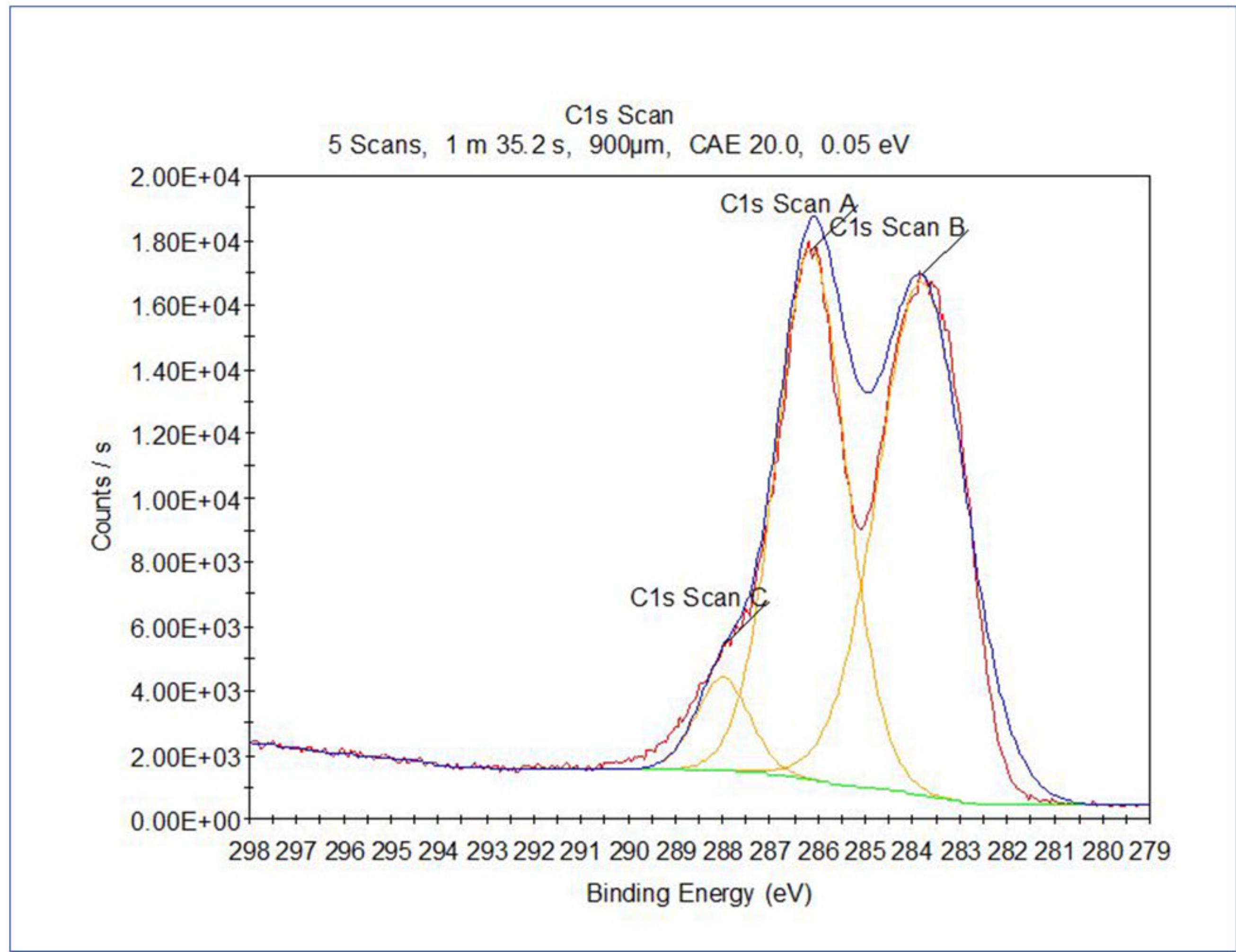
Start-up Graphite	Sri Lankan C99+ Vein Graphite, Particle Size range 63-90 μm
Appearance	Brown color dry powder
Tapped Density	~ 0.53 g/cm3
Dispersibility	Polar solvents (water, ethanol, DMF, etc.)

C/O ratio: 1.9 - 2.5

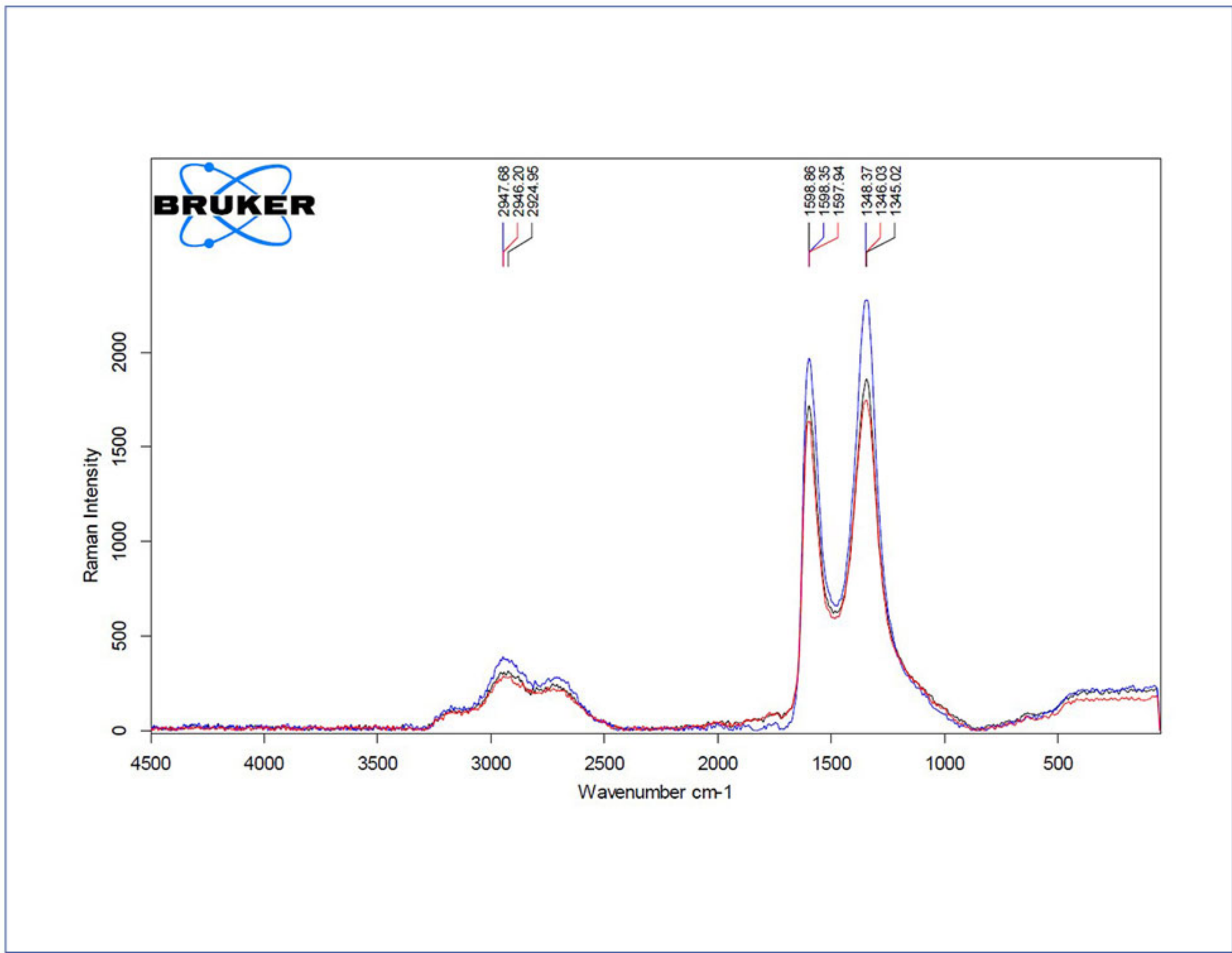
X-ray Photoelectron Spectroscopy (XPS)

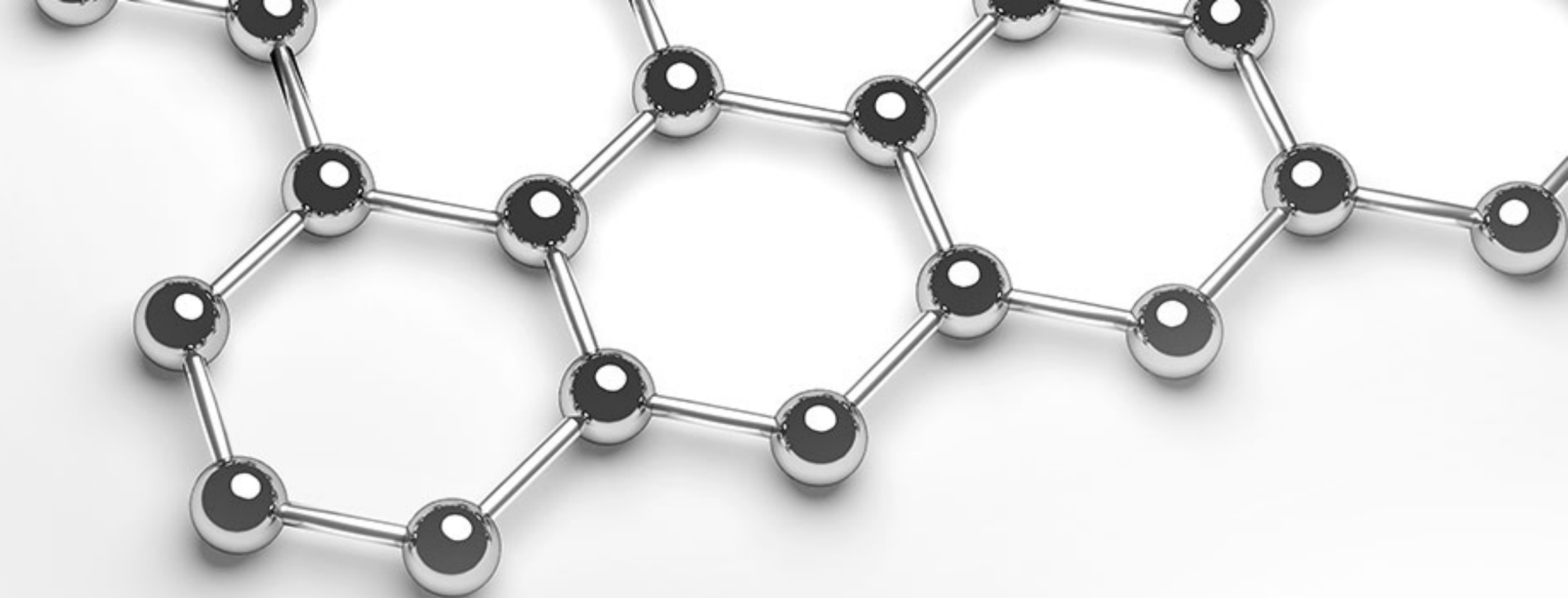
Name	O1s	C1s	S2p	Si2p
Avg %	28.64 - 34.04	61.56 - 68.98	0.73 - 1.79	0 - 0.77

CARBON 1S ZPS NARROW SCAN

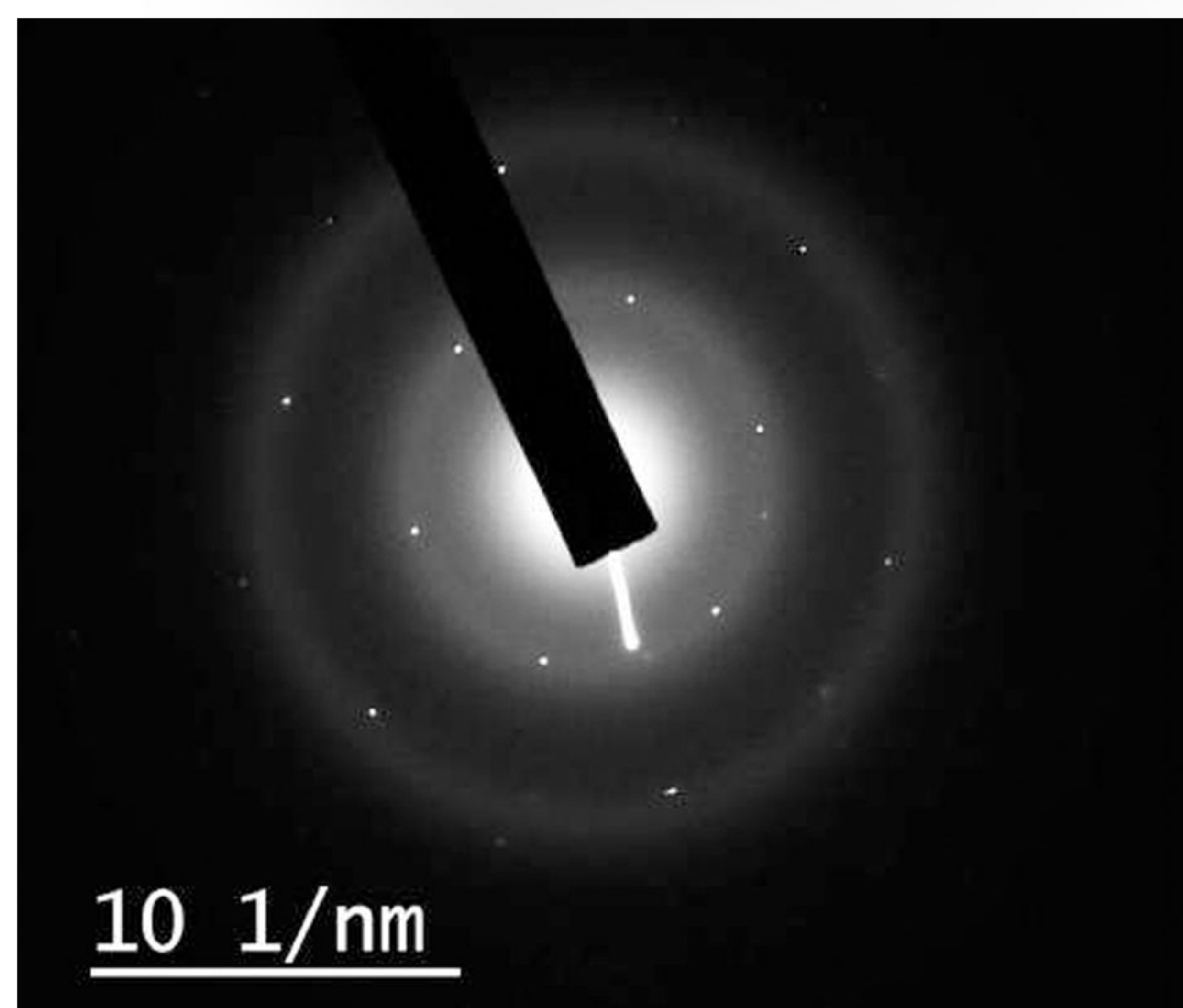
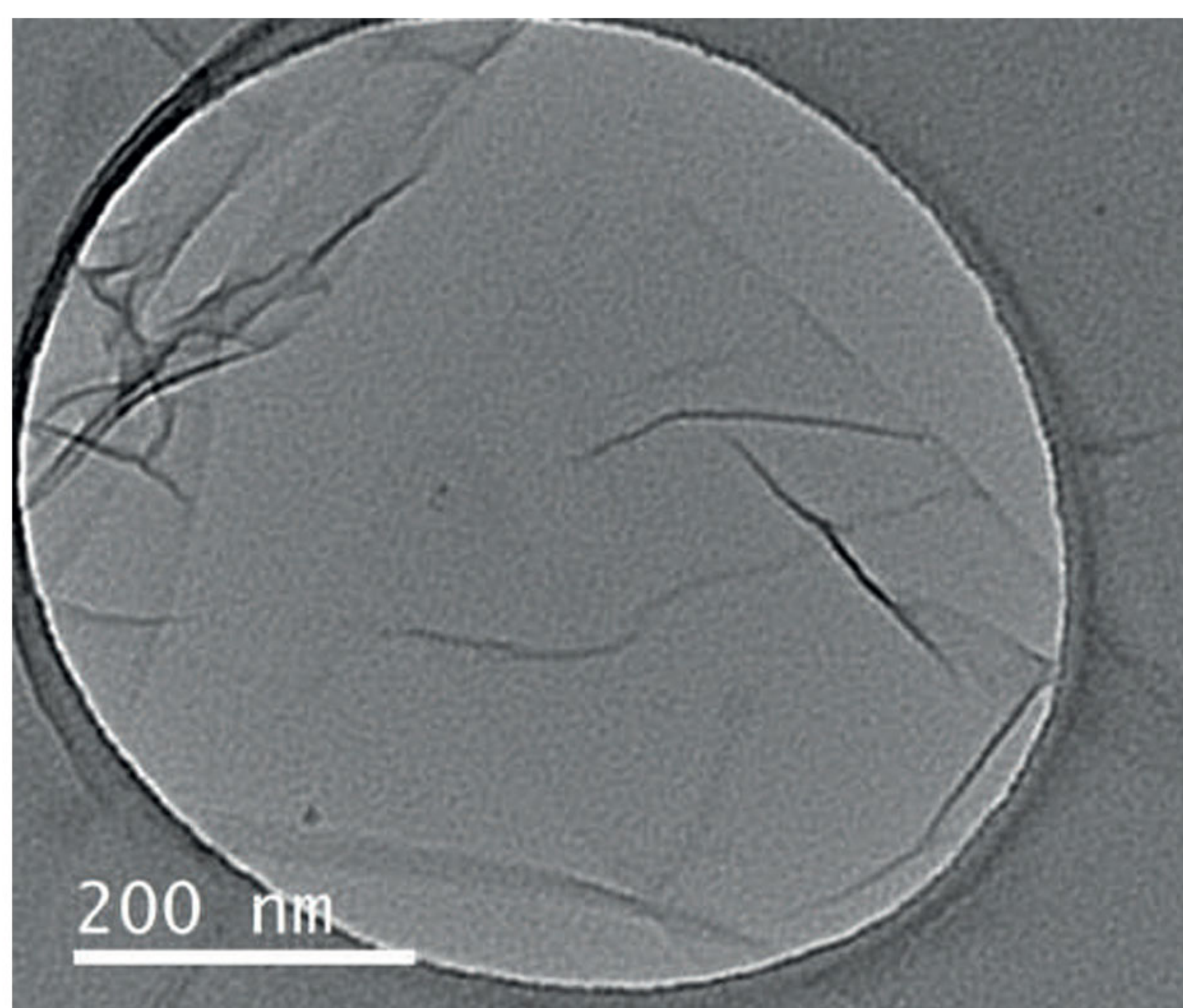


RAMAN ANALYSIS

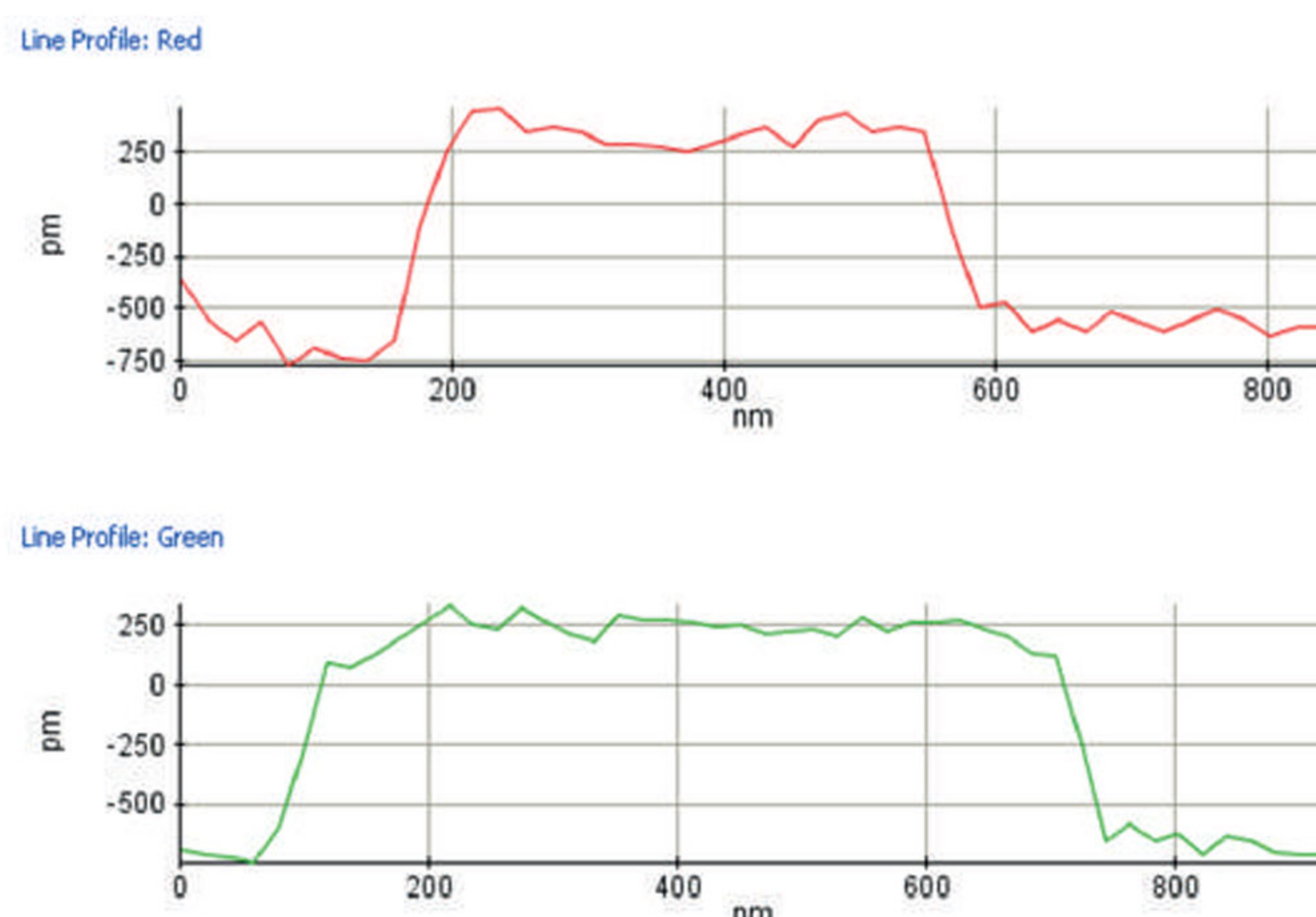
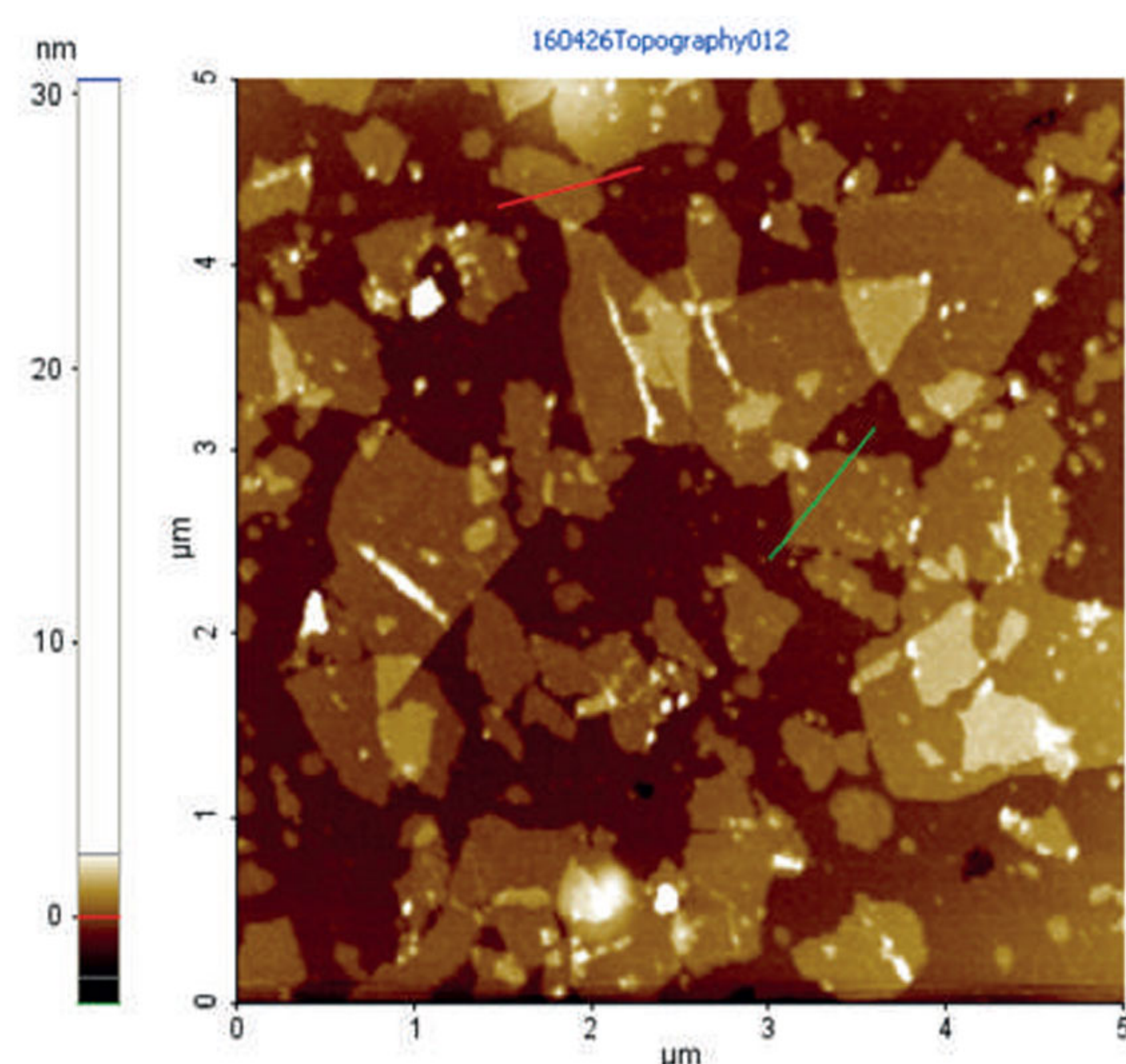




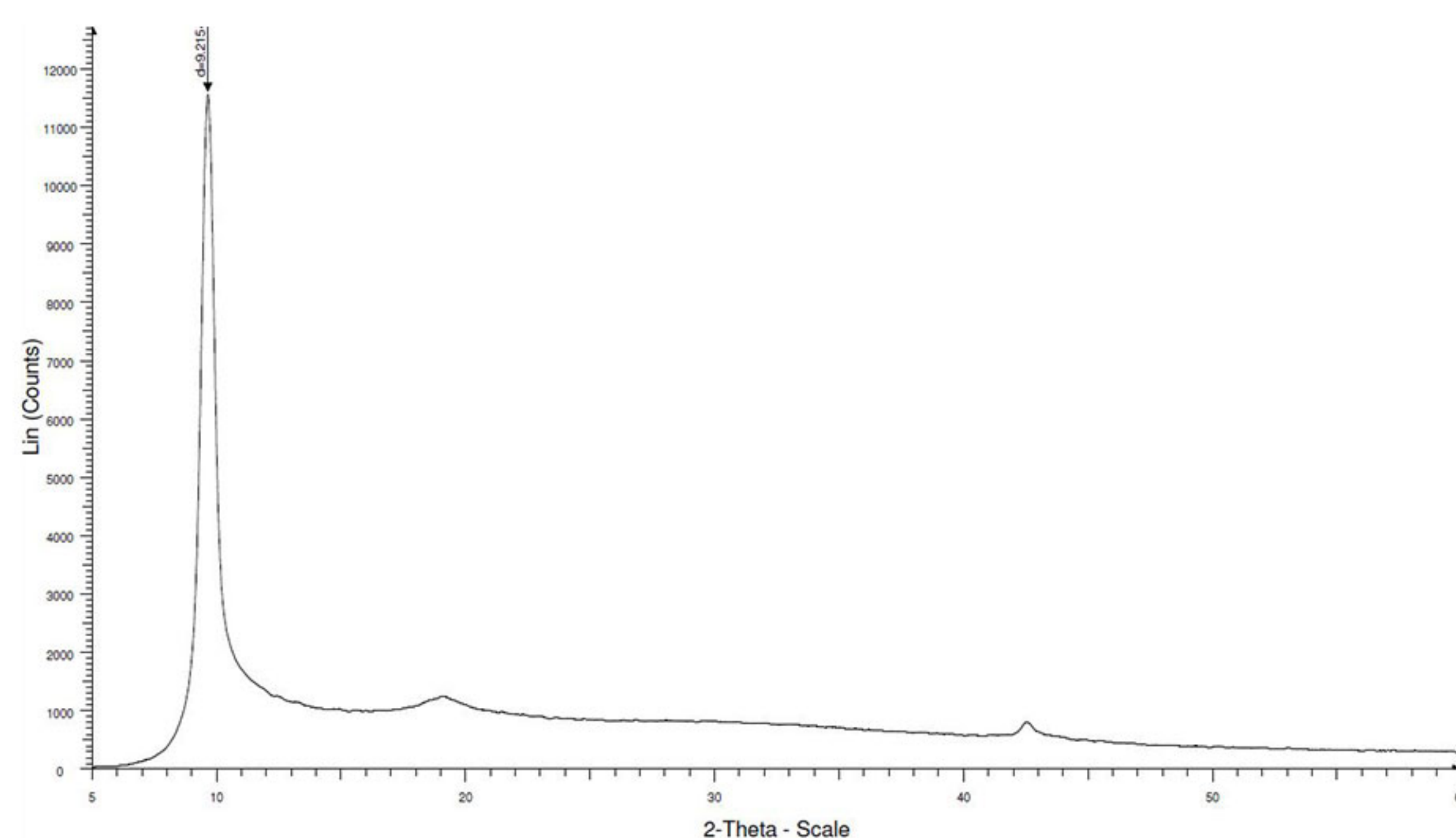
TRANSMISSION ELECTRON MICROSCOPE (TEM)



AFM IMAGES



X-RAY POWDER DIFFRACTION (XRD)



FTIR ANALYSIS

