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PRESS RELEASE
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Combined AFM-Raman with TERS

Characterise at nm scales, beat the diffraction limit and get chemical information at the ultimate spatial resolution.

Tip-enhanced Raman spectroscopy (TERS), from **Renishaw**, uses a sharp plasmonic tip to produce chemical information at the nanometre scale.

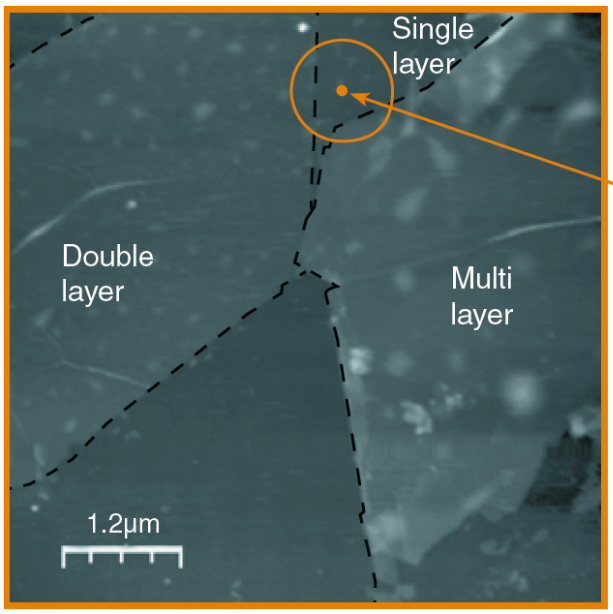
In the graphene example, the circle represents the size of the laser spot, from which a far field Raman spectrum was acquired (black). The smaller dot represents the contact area between a TERS tip and the graphene (~20nm diameter), from which a TERS spectrum was derived (green).

The carbon 2D band of the far-field spectrum (black) exhibits features of single-, double-, and multilayer graphene. The band in the TERS spectrum (green) is narrower than that of the far-field spectrum, and represents solely single-layer graphene. This demonstrates the high spatial resolution of TERS.

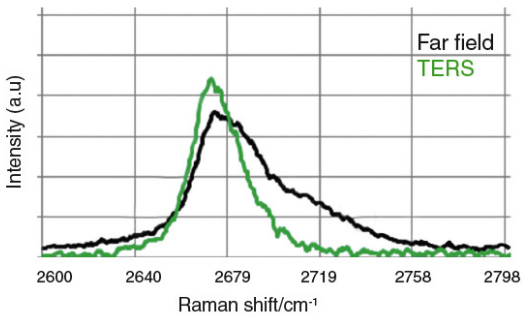
KEY FEATURES:

- Proven reliable systems
- High quality data
- High resolution data

For more information, contact Warsash Scientific on +61 2 9319 0122 or sales@warsash.com.au.



AFM image of a graphene flake



Raman spectra from far field and TERS measurements