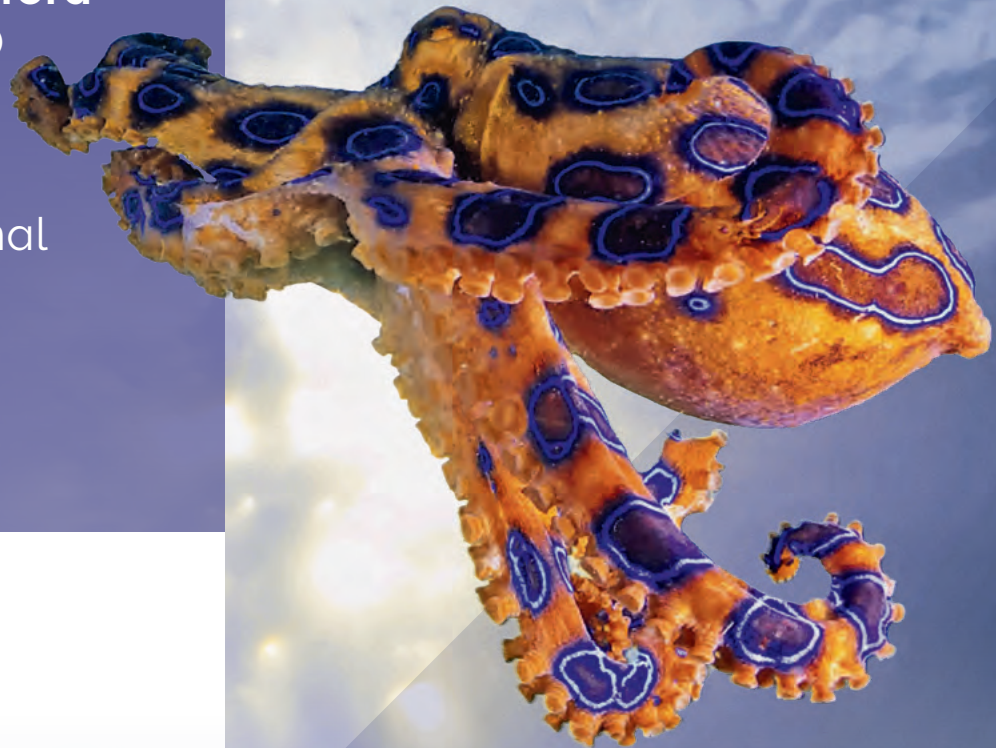


Dive Deep into Material Properties with Polarization-resolved Raman Microscopy

Reveal hidden details with automated polarization control options for Oxford Instruments' witec360 Raman microscopes:

- Structural orientation
- Symmetry of vibrational modes
- Chirality
- Optical anisotropy

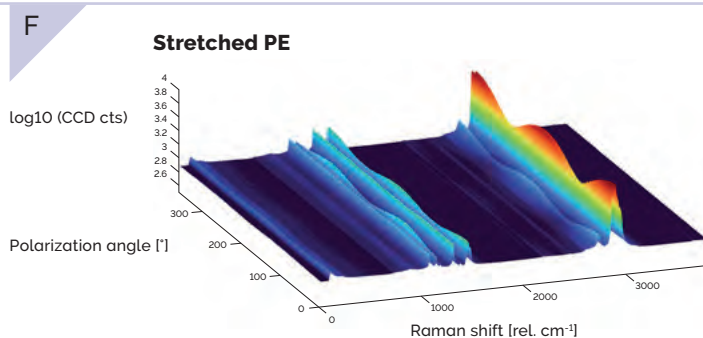
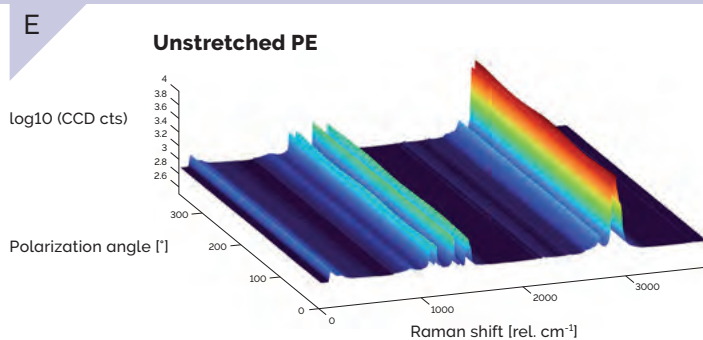
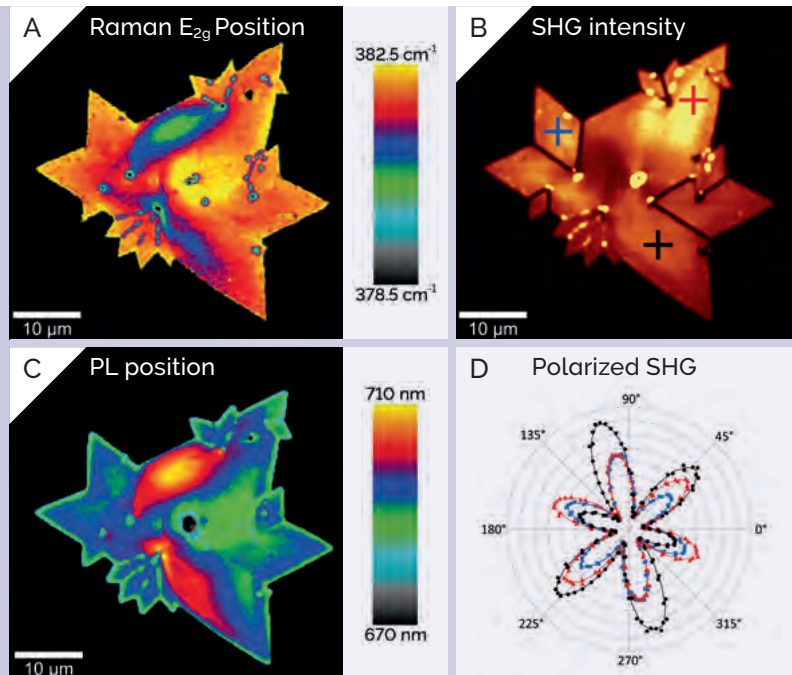


Blue-ringed octopuses can perceive polarized light, which gives them an advantage in detecting predators and prey in the murky twilight of their natural habitat.

Dive Deep into Material Properties with Polarization-resolved Raman Microscopy

Benefit from unique features:

- Independent/coordinated polarizer/analyzer rotation for automated series measurements
- Sub-degree angular positioning
- Automatic recording of filter angles in measurement metadata
- Configurable and separable excitation and detection beam paths
- 1/4 waveplate module for circular polarization
- EquiLight optic for polarization-independent spectral intensity



Correlative Raman imaging, SHG, PL, and Polarization Analysis of Mono-layer MoS_2

- A:** Raman images showing the frequency of the E_{2g} mode
B: SHG intensity image
C: Photoluminescence image depicting wavelengths
D: Polar plots of the SHG signal as a function of the excitation polarization angle from measurements made at the three positions indicated in B.

3D heatmaps of polarization-resolved Raman spectra of polyethylene foil in unstretched (E) and stretched (F) conditions. The alignment of polyethylene fibers in the stretched foil is visible in the polarization dependency of the Raman intensity at the modes for the symmetrical C-C stretching (1130 rel. cm^{-1}), CH_2 bending (1417, 1441 and 1464 rel. cm^{-1}) and C-H stretching (2849 and 2883 cm^{-1}).

