

Objective Adjustment (OA) Video Raman Matching (VRM)

The guarantee of perfect beam positioning whatever the objective

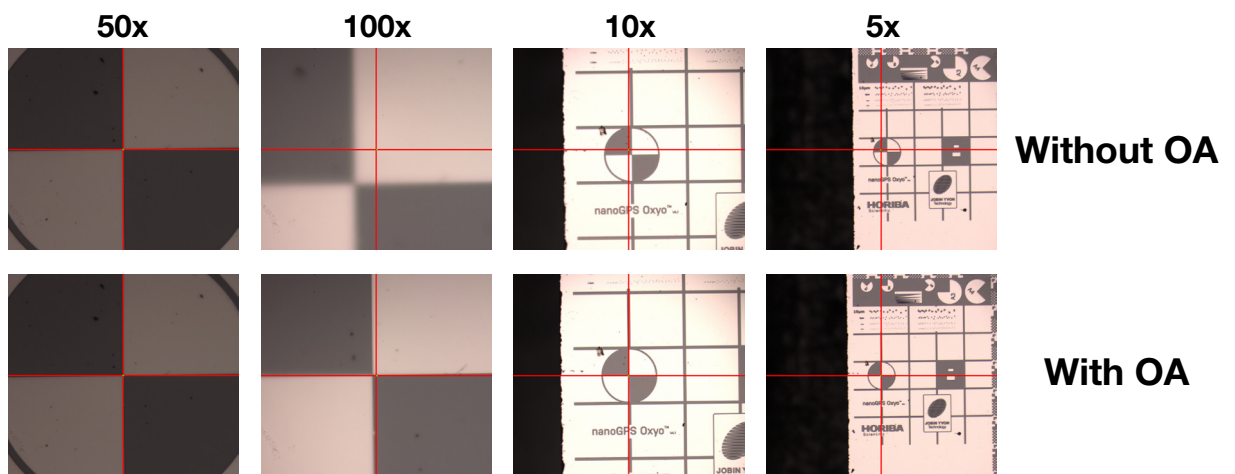
Raman is a technique based on optical elements. Like all these types of instruments, external variations and the aging of the instrument induce drifts that can, in the long term, shift optical and Raman images. Also, adjustments, based on the coincidence of patterns of a sight, are now integrated into our instruments and software. These new features, Objective adjustment and Video Raman Matching, will allow you to have perfect positioning of the laser beam in relation to the observation made optically.

Objective Adjustment: OA allows you to keep your point of interest in the field of view whatever objective you used. By an automatic repositioning of the table in X, Y and Z, the change of objective will no longer require a manual readjustment to find the point of interest.

Video Raman Matching: Thanks to our VRM sample holder, including a dedicated tag, the optical and Raman images are overlapped and compared. To have a perfect matching between optical and Raman images, an XY adjustment of the green point is performed.

Objective Adjustment (OA)

*Never lose sight
of your points of
interest again!*

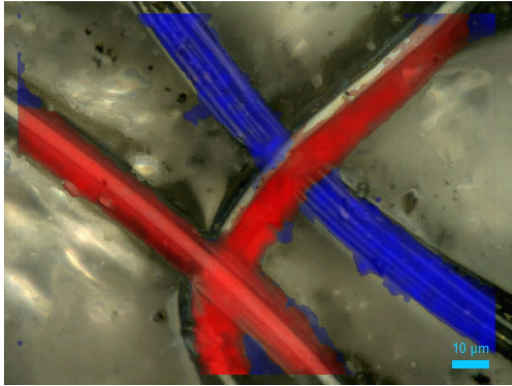


In this example, the nanoGPS propeller was centered and focused using the 50x objective. Then it was observed with the 100x, 10x and 5x objectives with and without OA. Notice that the image remains centered and focused with OA, while it is slightly shifted without OA.

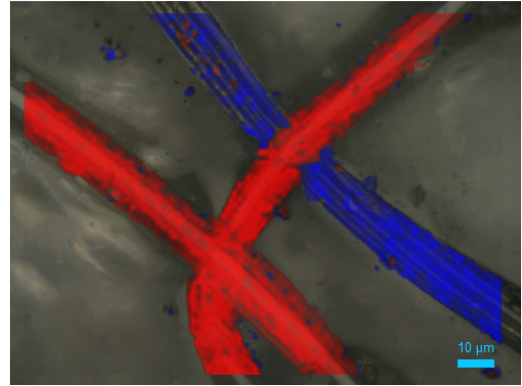
Video Raman Matching (VRM)

Be sure to analyze what you see, even the smallest particles

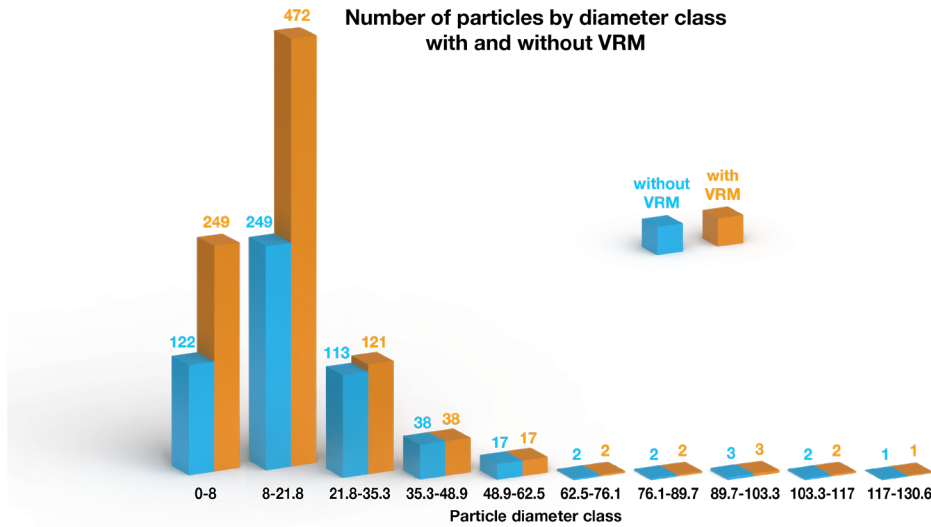
Without VRM



With VRM



In this example, fibers were mapped with and without VRM: the optical image and the Raman images were perfectly aligned with VRM as they are slightly shifted without VRM.



In this example, Polyethylene particles were studied using Particle Finder (PF). The particles were counted and classified by diameter classes. Much more particles are detected, particularly for low diameter when using VRM as the laser beam is perfectly aligned with the optical image used to detect the particle in PF.



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