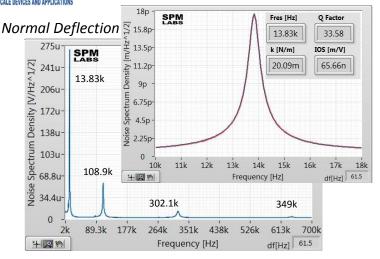
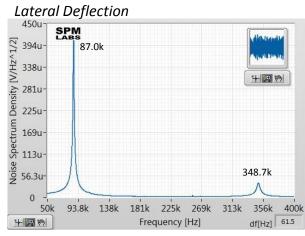
SPM LABS

AFM Probes: $S_3N_4/Si - 100/35/0.2$

Thermal Tune Data obtained with DCC accessory





The $100/35/0.2 \, \mathrm{Si_3N_4/Si}$ probe with k in the $10\text{-}20 \, \mathrm{mN/m}$ range is most suitable for contact mode studies. The example of such imaging of polymer blend (PS/LDPE) is shown below. The height and lateral force images demonstrate a practically non-disturbed surface morphology of this blend, in which LDPE is a much softer ($E = 0.2 \, \mathrm{GPa}$) compared to PS ($E = 3 \, \mathrm{GPa}$). The lateral force contrast obviously differentiates surface locations occupied by the components and substrate. LDPE domains have been damaged when this sample was imaged with stiffer $200/35/0.6 \, \mathrm{probe}$.

Blend of Polystyrene and Low-Density Polyethylene (PS/LDPE) on Si substrate

