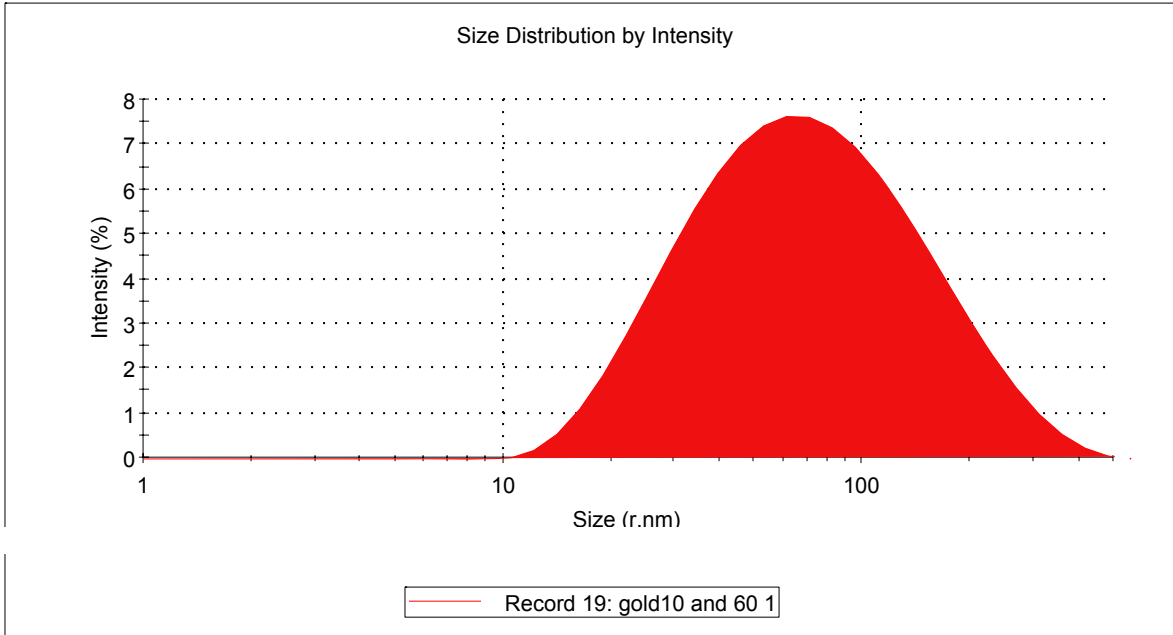


Gold Mixture Application

Particle Mixes can often be very difficult to resolve by Dynamic Light Scattering as these heterogeneous mixes will provide data that is dominated by the large particles. The intensity of the particles are governed by the concentration times the mass of the particle. Therefore if equal concentrations of 10 nm and 60 nm gold particles are mixed together they will not necessarily give a bimodal distribution. The distribution could easily be a large heterogeneous distribution depending on the correlation function fitting routine.



Using the Spinvette we can quickly spin the mix for five minutes at 10,000 g at which point we can then sediment preferentially some of the 60nm. The resultant distribution delivers a bimodal mix. The final picture of the Spinvette after further spinning at 13,000 g visually shows that gold particles have been sedimented out.

