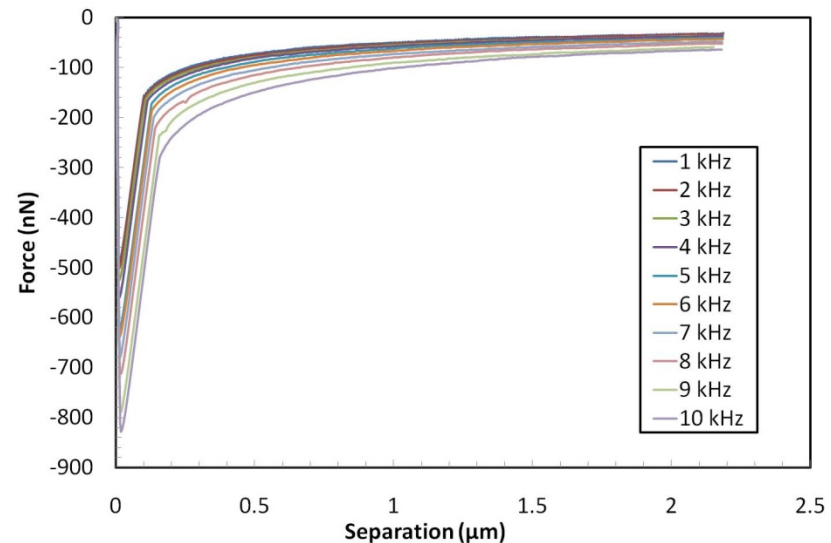
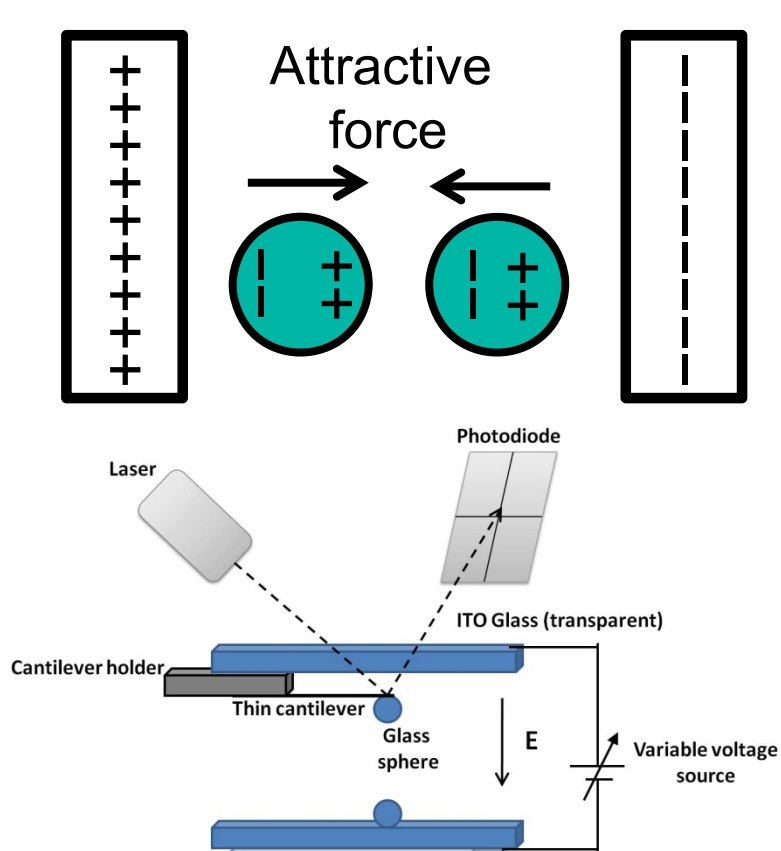


Direct Measurement of the Force between Neutral Dipolar Materials Induced by External Electrostatic Fields

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Dielectrophoresis is a potential candidate for the separation of minerals, oils and emulsions in the mineral and oil industries. In this project we study the frequency-dependent dielectrophoretic force (F_{DEP}) between two particles using Atomic Force Microscopy (AFM).



Frequency-dependent dielectric force, F_{DEP} , between two BaTiO_3 particles
Force increases with frequency of the field