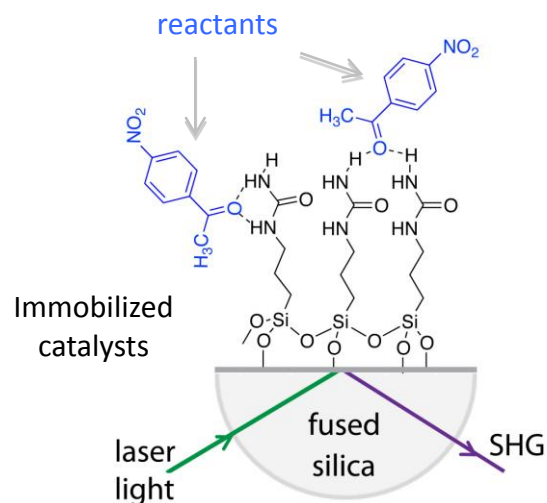


# Correlating Molecular Environment with Performance in Immobilized Green Catalysts Using Nonlinear Optical Techniques

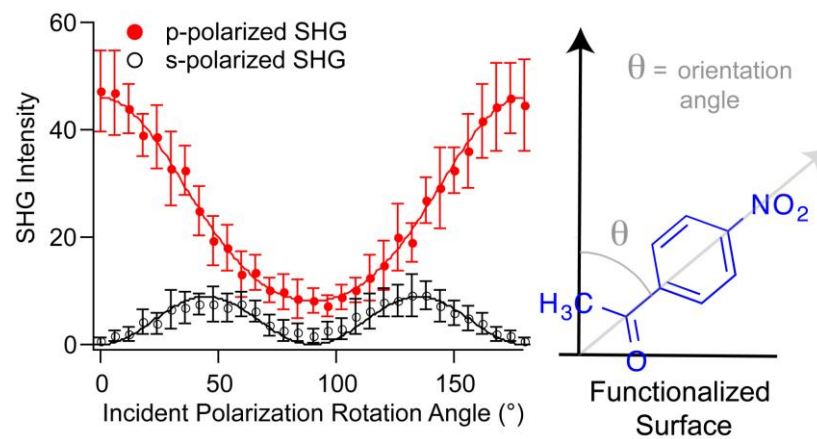


Second harmonic generation (SHG) is a type of measurement that allows us to observe chemistry at *buried surfaces* like those containing immobilized catalysts surrounded by reactants in liquid.



*Recyclable Catalysts*

By changing how the incoming light from the laser is polarized and looking at how that affects the second harmonic signal, we can determine the *orientation* of reactants bound to our catalyst.



*These measurements will allow us to determine what surface properties lead to the best catalysts!*