Monomers Interaction to Collagen Studied by Saturation Transfer Difference NMR

The interaction with collagen is the most important, because the deterioration of collagen fibrils within the hybrid layer compromises the long-term stability of dentin bonding. We examined the molecular/atomic level interactions of dental resin monomers with collagen model. MDP (10-Methacryloyloxydecyl dihydrogen phosphate) has a relatively stable interaction with the collagen matrix because of the hydrophobic interactions between the hydrophobic MDP moieties and the collagen surface.

