The primary aim of this paper is to use simulations to tackle the prob lem of pricing Quanto options on two and three underlying assets under stochastic correlation and volatility driven by different stochastic differential equations (SDEs). The following models are tested and compared: Hes ton, GARCH, GARCH-Jump, 3/2 diffusion, and Bates for volatility, and Jacobi, Wright-Fisher diffusion, Weibull diffusion, and a mean-reverting SC for correlation. The study is focused specifically on Quanto options on two or three foreign equity market indices. These options act like a basket cor relation option with the payoff depending on multiple correlated assets but also on exchange rates between the currencies of the indices. We test three different models of exchange rate dynamics, with both rates being either GBM, a mean reverting SDE inspired by the OU process, or an exponential levy process that incorporates jumps. Applications to water-solvated systems demonstrate that this approach achieves unprecedented, very rapid convergence to chemical accuracy as the size of the QM subsystem increases. We validate the method with several pilot studies, including water bulk, water clusters (prism hexamer and pentamers), solvated glucose, a palladium aqua ion, and a wet monolayer of MoS