Quantum chemistry is a mature science that can be applied to the study of systems containing any atom in the periodic table. In this lecture I will discuss our latest results in actinide chemistry. I will present the study on Pu-oxides [1] that has allowed us to resolve the controversy between different experiments concerning the value of the ionization potential of PuO$_2$. A similar study on Np-oxides is in progress.

I will then describe our ongoing study on actinide-actinide multiply bonded compounds [2] and uranium-polynitrogen species that may represent a way to stabilize all-nitrogen molecules and may open new routes to the formation of high energy density materials.
