

## COMPUTATIONAL AND SPECTROSCOPIC STUDIES OF NITROGEN-CONTAINING DIPOLE BOUND ANIONS

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Nitrogen is an essential ingredient in molecules that support life. Its presence also typically leads to the delocalization of electrons, causing large dipole and quadrupole moments. Such molecules are sometimes able to form negative ions through the electrostatic binding of an excess electron via a process known as Rydberg Charge Exchange. These so-called multipole-bound (dipole-bound, quadrupole-bound, etc.) anions have been shown to be important in radiation damage in biology as well as electron transport processes. Here, we present our recent computational and experimental results studying the creation of new multipole-bound anions.