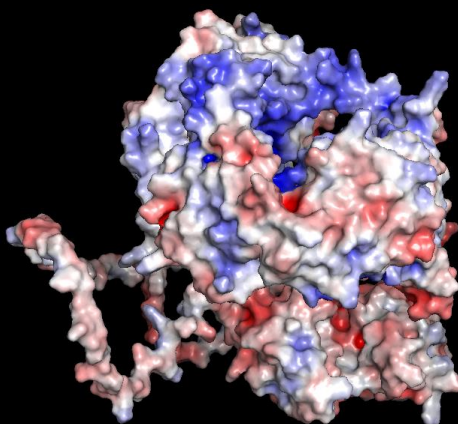
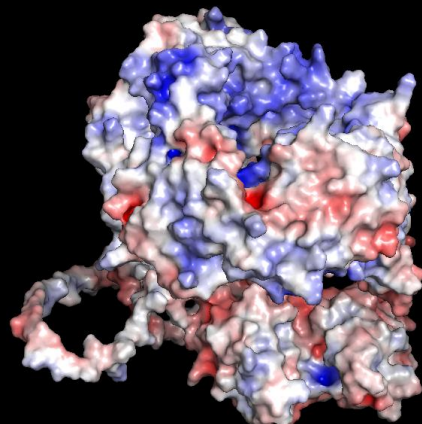


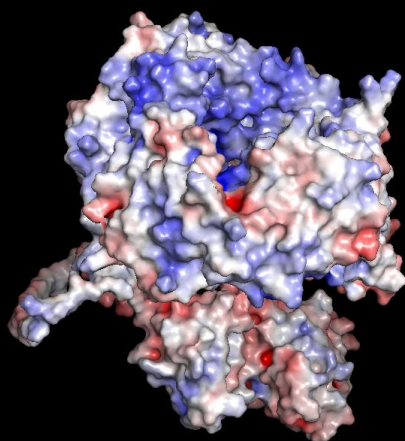
**AyFu**



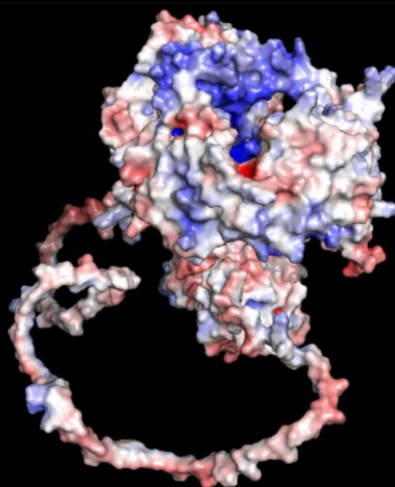
**AnCy**



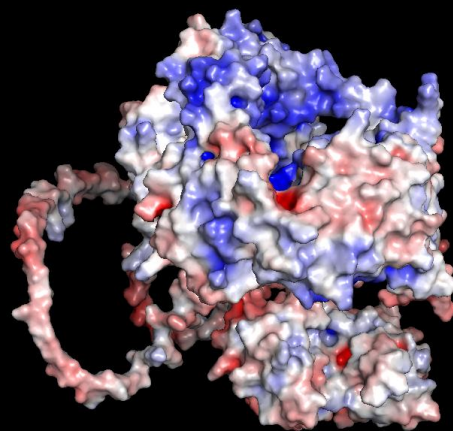
**CaMo**



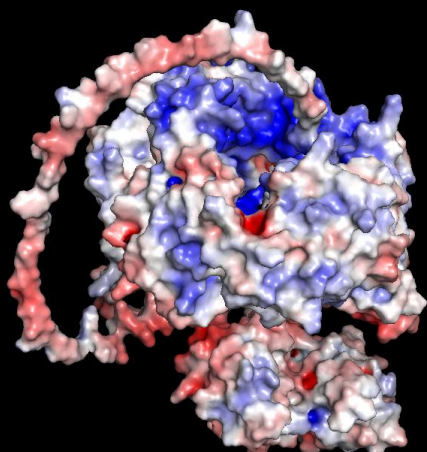
**AnPl**



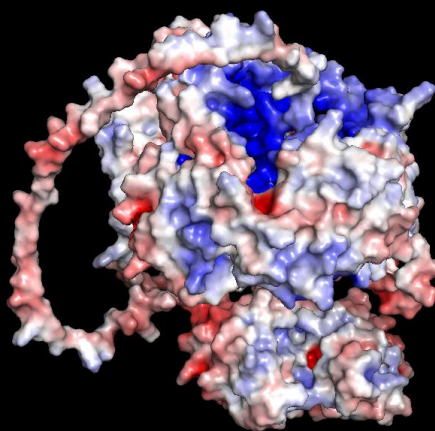
**Alla**



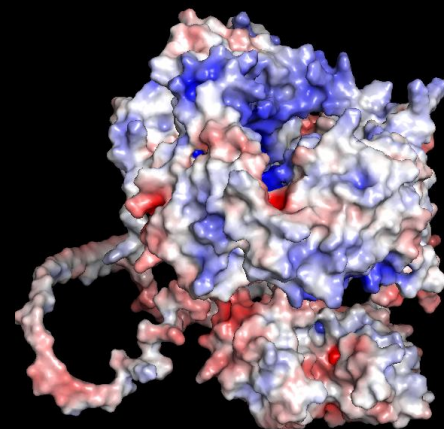
**PePi**



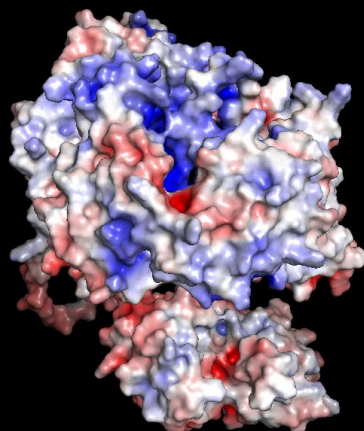
**NuMe**



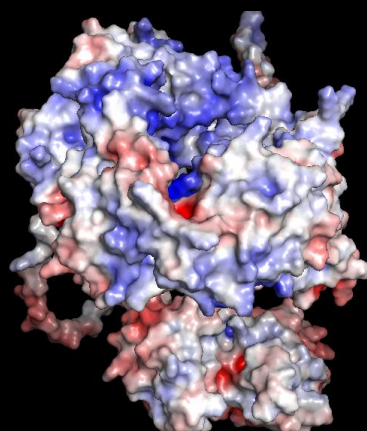
**CoJa**



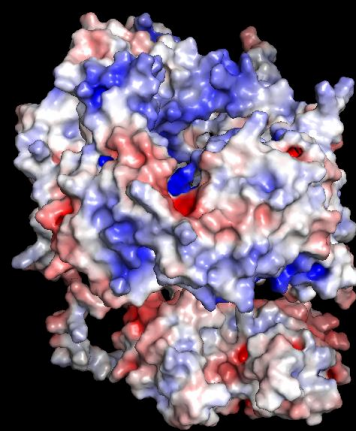
**PhCo**



**GaGa**

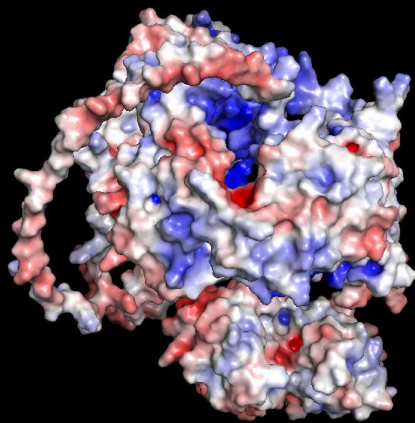


**BaTh**

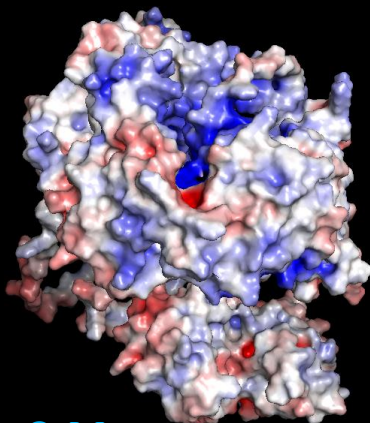


**LaMu**

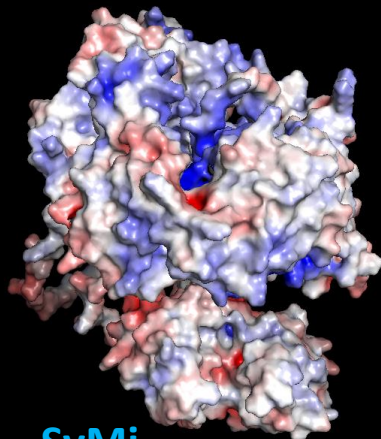




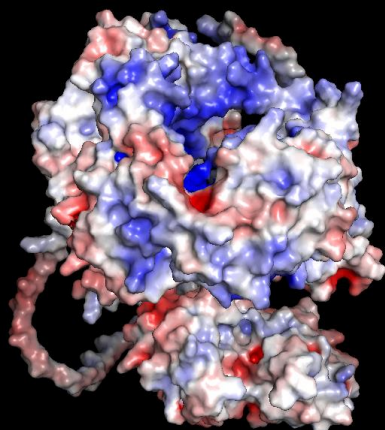
ChPi



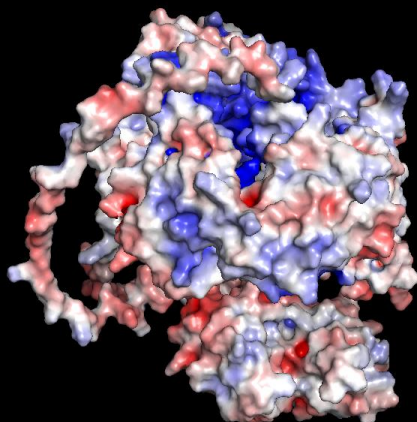
CrMa



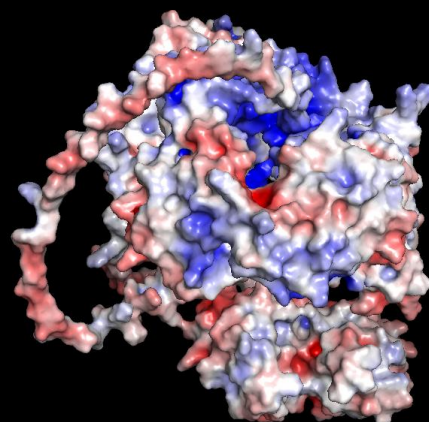
SyMi



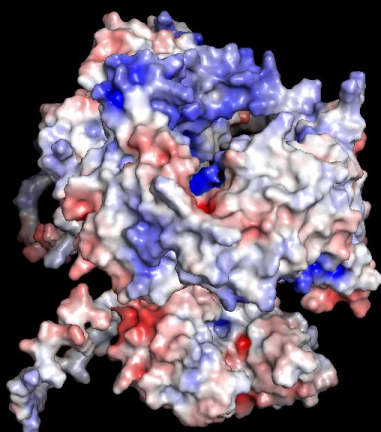
AlRu



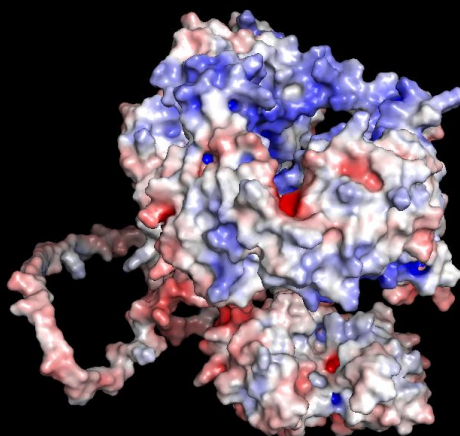
CeMi



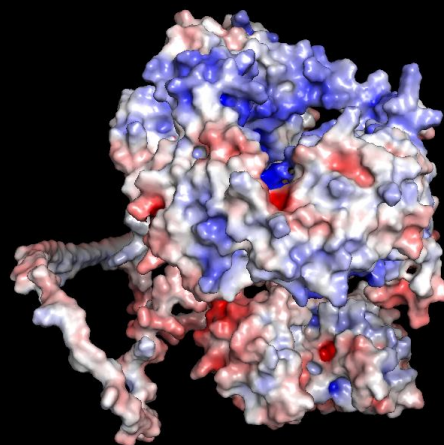
TyCu



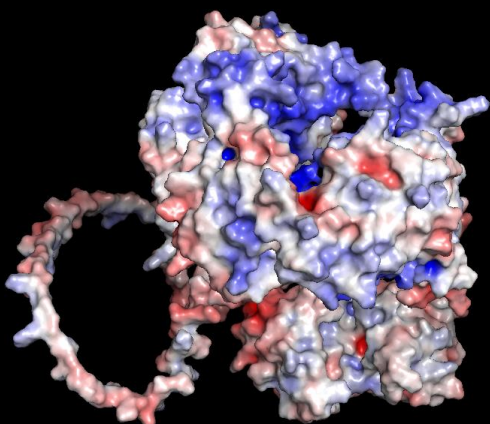
MeGa



OdGu



CaSq



CoVi



*All models are oriented consistently and aligned to the chicken structure. Models are ordered based on their surface charge clustering and different clusters are marked by the color of species name. The electrostatic surface charge distribution pattern is shown in a colour gradient ranging from red (-5, the most negative charge) to blue (5, the most positive charge). AllLa – Alectura lathamii, AlRu – Alectoris rufa, AnCy – Anser cygnoides, AnPl – Anas platyrhynchos, AyFu – Aythya fuligula, BaTh – Bambusicola thoracicus, CaMo – Cairina moschata, CaSq – Callipepla squamata, CeMi – Centrocerus minimus, CoJa – Coturnix japonica, CoVi – Colinus virginianus, CrMa – Crossoptilon mantchuricum, GaGa – Gallus gallus, ChPi – Chrysolophus pictus, LaMu – Lagopus muta, MeGa – Meleagris gallopavo, NuMe – Numida meleagris, OdGu – Odontophorus gujanensis, PePi – Penelope pileata, PhCo – Phasianus colchicus, SyMi – Syrmaticus mikado, TyCu – Tympanuchus cupido. Species abbreviations are colored according to surface electrostatic potential clusters: A – orange and B – blue (see Supplementary file S7).*