

## Answer on question#76468

Phenols are rather easily oxidized despite the absence of a hydrogen atom on the hydroxyl bearing carbon. Among the colored products from the oxidation of phenol by chromic acid is the dicarbonyl compound **para-benzoquinone** (also known as 1,4-benzoquinone or simply quinone); an ortho isomer is also known. These compounds are easily reduced to their dihydroxybenzene analogs, and it is from these compounds that quinones are best prepared. Note that meta-quinones having similar structures do not exist. The redox equilibria between the dihydroxybenzenes hydroquinone and catechol and their quinone oxidation states are so facile that milder oxidants than chromate (Jones reagent) are generally preferred. One such oxidant is **Fremy's salt**, shown on the right.

