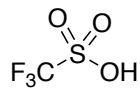
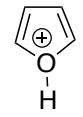
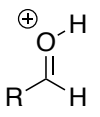
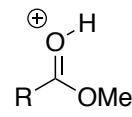
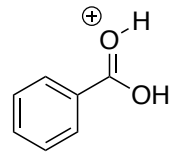
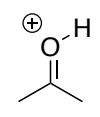
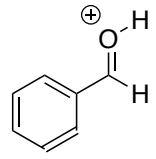
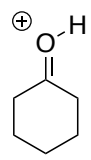
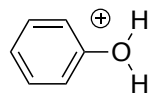
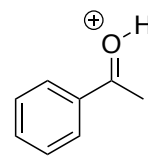


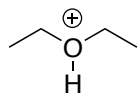
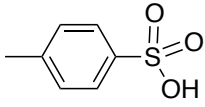
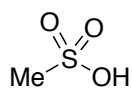
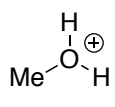
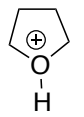
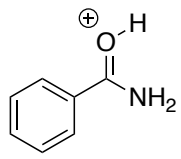
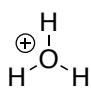
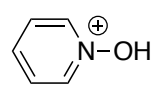
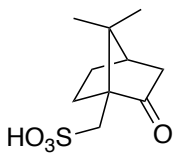
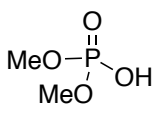
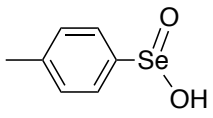
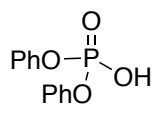
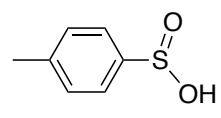
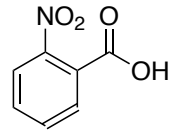
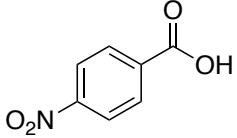
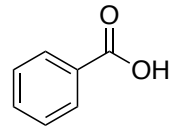
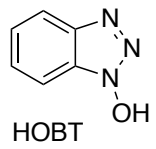
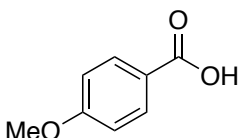

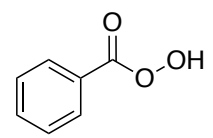
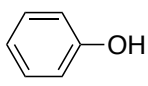
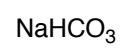
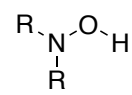
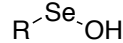
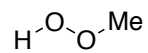
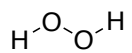
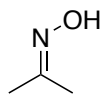
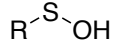
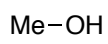
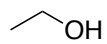
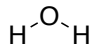
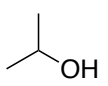
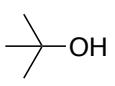
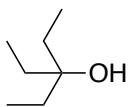

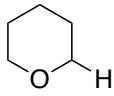
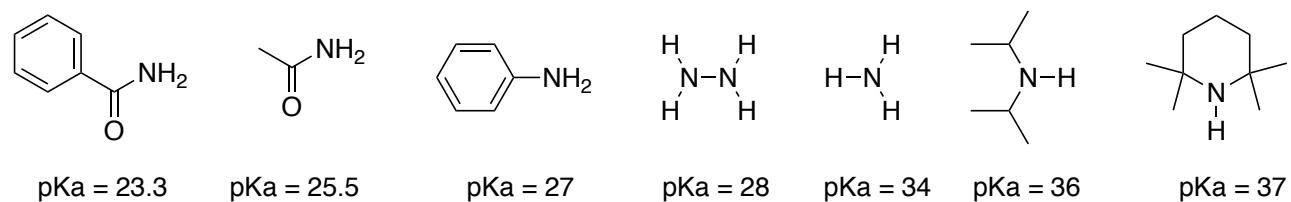
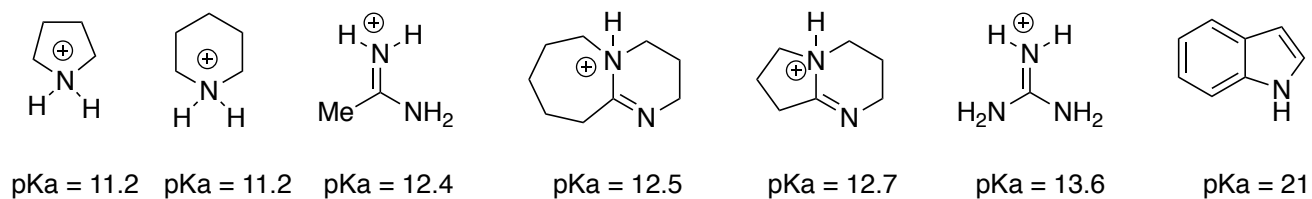
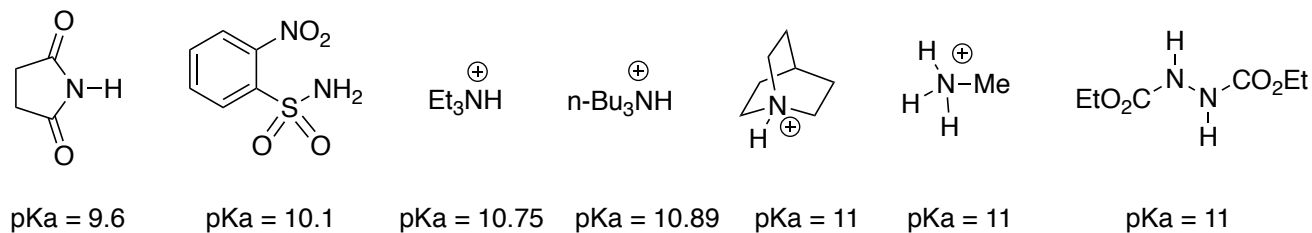
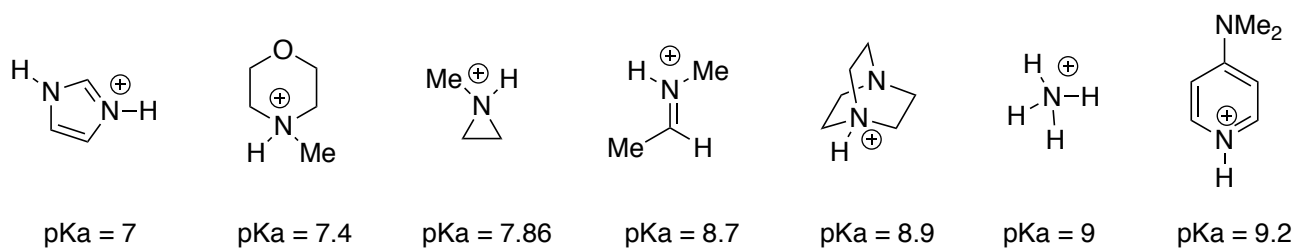
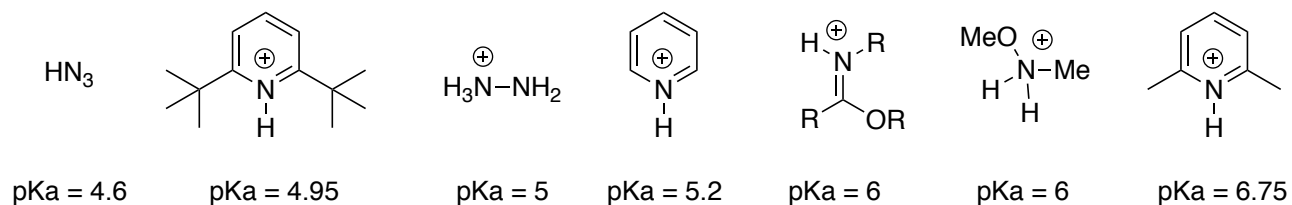
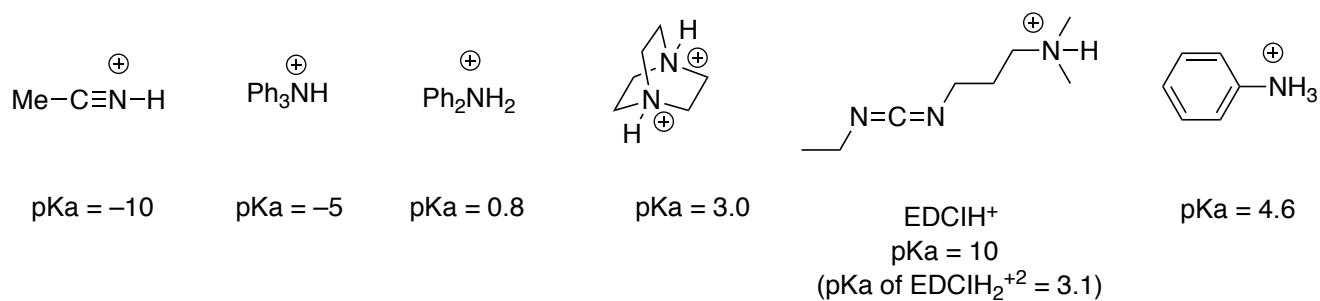


pKa values relevant to CEM 850

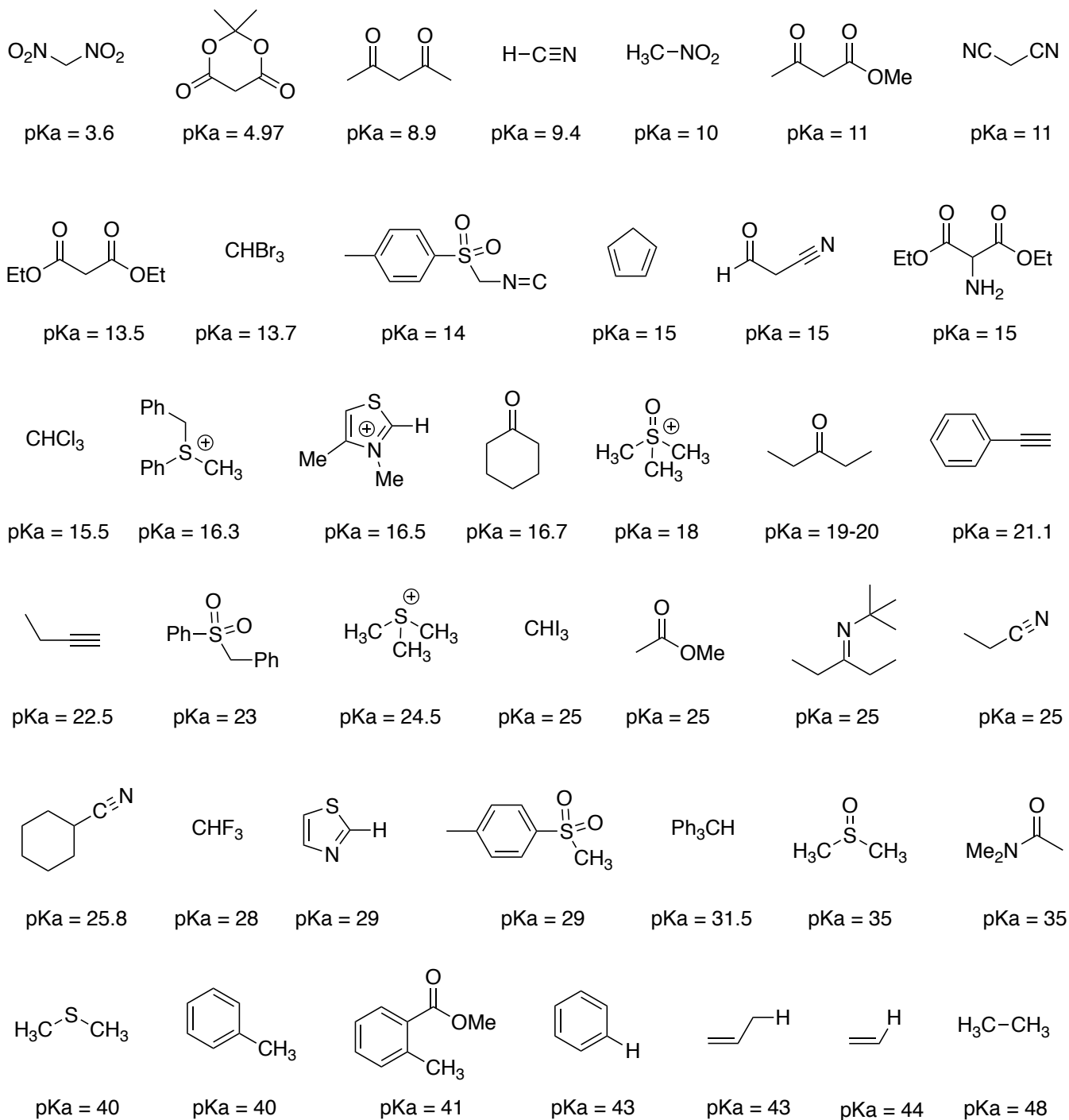
oxygen compounds

							
pKa = -14	pKa = -13	pKa = -8	pKa = -8	pKa = -7.8	pKa = -7.3	pKa = -7	
							
pKa = -6.8	pKa = -6.5	pKa = -6.2	pKa = -4.2*	pKa = -3.8	pKa = -3.8	pKa = -2.8	
							
pKa = -2.6	pKa = -2.2	pKa = -2	pKa = -2	pKa = -1.7	pKa = 0.79	pKa = 1.2	
							
pKa = 1.3	pKa = 1.9	pKa = 1.9	pKa = 2	pKa = 2.2	pKa = 3.49		
							
pKa = 4.2	pKa = 4.3	pKa = 4.47	pKa = 6.3	pKa = 8	pKa = 10		
							
pKa = 10.3	pKa = 11	pKa = 11.5	pKa = 11.5	pKa = 11.7	pKa = 12.4	pKa = 12.5	
							
pKa = 15.5	pKa = 15.5	pKa = 15.7	pKa = 16.5	pKa = 17	pKa = 18	pKa = 33.1*	pKa = 38*

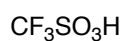
nitrogen compounds



carbon compounds



sulfur compounds



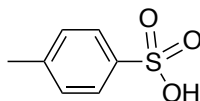
pKa = -14



pKa = -3.0, 1.99



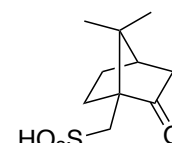
pKa = -2.6



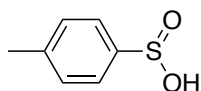
pKa = -2.8



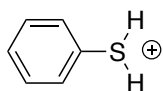
pKa = -1.7



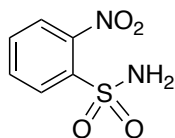
pKa = 1.2



pKa = 2



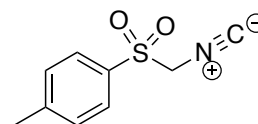
pKa = 7



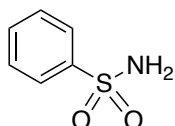
pKa 10.1



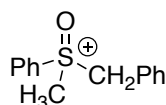
pKa = 10.6



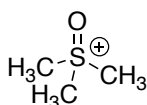
pKa = 14



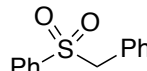
pKa = 16.1



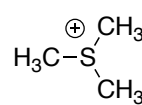
pKa = 16.3



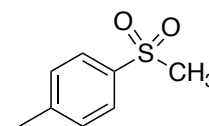
pKa = 18



pKa = 23



pKa = 24.5



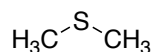
pKa = 29



pKa = 31

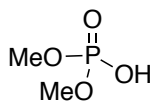


pKa = 35

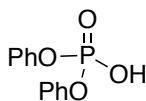


pKa = 39.7

phosphorus compounds



pKa = 1.3



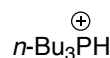
pKa = 1.9



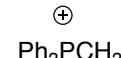
pKa = 2.13, 7.21,
and 12.32



pKa = 2.73

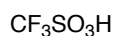


pKa = 8.43



pKa = 22.4

Inorganic Compounds



pKa = -14



pKa = -10



pKa = -9



pKa = -9



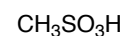
pKa = -9



pKa = -8



pKa = -3.0, 1.99



pKa = -2.6



pKa = -1.7



pKa = -1.3



pKa = 1.64



pKa = 2.13, 7.21,
and 12.32



pKa = 3.2



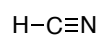
pKa = 4.63



pKa = 6.36, 10.33



pKa = 9.23, 12.7
and 13.8



pKa = 9.4