

Table 28: List of Fe species

FACT	SUPCRT	LLNL	JNC-TDB
Fe[2+], Fe[3+], FeOH[+], FeOH[2+], HFeO ₂ [-], Fe(OH) ₂ [+], FeO ₂ [2-], Fe(OH) ₃ (aq), Fe ₂ (OH) ₂ [4+], Fe(s), Fe(s2), Fe₂O₃(s2), Fe₂O₃(s3), Fe₃O₄(s2), Fe₃O₄(s3), Fe₃O₄(s4), Fe(OH)₂(s), Fe(OH)₃(s), Fe₂O₃(H₂O)(s), FeO (s), Fe₂O₃(s), Fe₃O₄(s)	HFeO ₂ (aq), FeO ₂ [-], FeO(aq), Fe[2+], Fe[3+], FeOH[+], FeOH[2+], HFeO ₂ [-], FeO[+], FeO (Ferrous-oxide), Fe₂O₃(Hematite), Fe₃O₄(Magnetite)	Fe[2+], Fe[3+], Fe(OH) ₂ (aq), Fe(OH) ₂ [+], Fe(OH) ₃ (aq), Fe(OH) ₃ [-], Fe(OH) ₄ [-], Fe ₂ (OH) ₂ [4+], Fe ₃ (OH) ₄ [5+], FeOH[+], FeOH[2+], Fe(OH)₂(ppd), Fe(OH)₃(ppd), FeO(c) Goethite, Hematite, Magnetite, Wustite	Fe[2+], Fe[3+], FeOH[2+], Fe(OH) ₂ [+], Fe(OH) ₃ (aq), FeOH ₄ [-], Fe ₂ (OH) ₂ [4+], Fe ₃ (OH) ₄ [5+], FeOH[+], Fe(OH) ₂ (aq), Fe(OH) ₃ [-], Fe(OH)₃(a) Hematite, Magnetite, Goethite

HATCHES			
Fe[2+], Fe[3+], Fe(OH)[+], Fe(OH) ₂ (aq), Fe(OH) ₂ [+], Fe(OH) ₃ (aq), Fe(OH) ₃ [-], Fe(OH) ₄ [-], Fe(OH) ₄ [2-], Fe ₂ (OH) ₂ [4+], Fe ₃ (OH) ₄ [5+], FeOH[2+], Fe(OH)₂, Fe(OH)₃, FeO(c), Goethite, Hematite, Magnetite, Wustite			

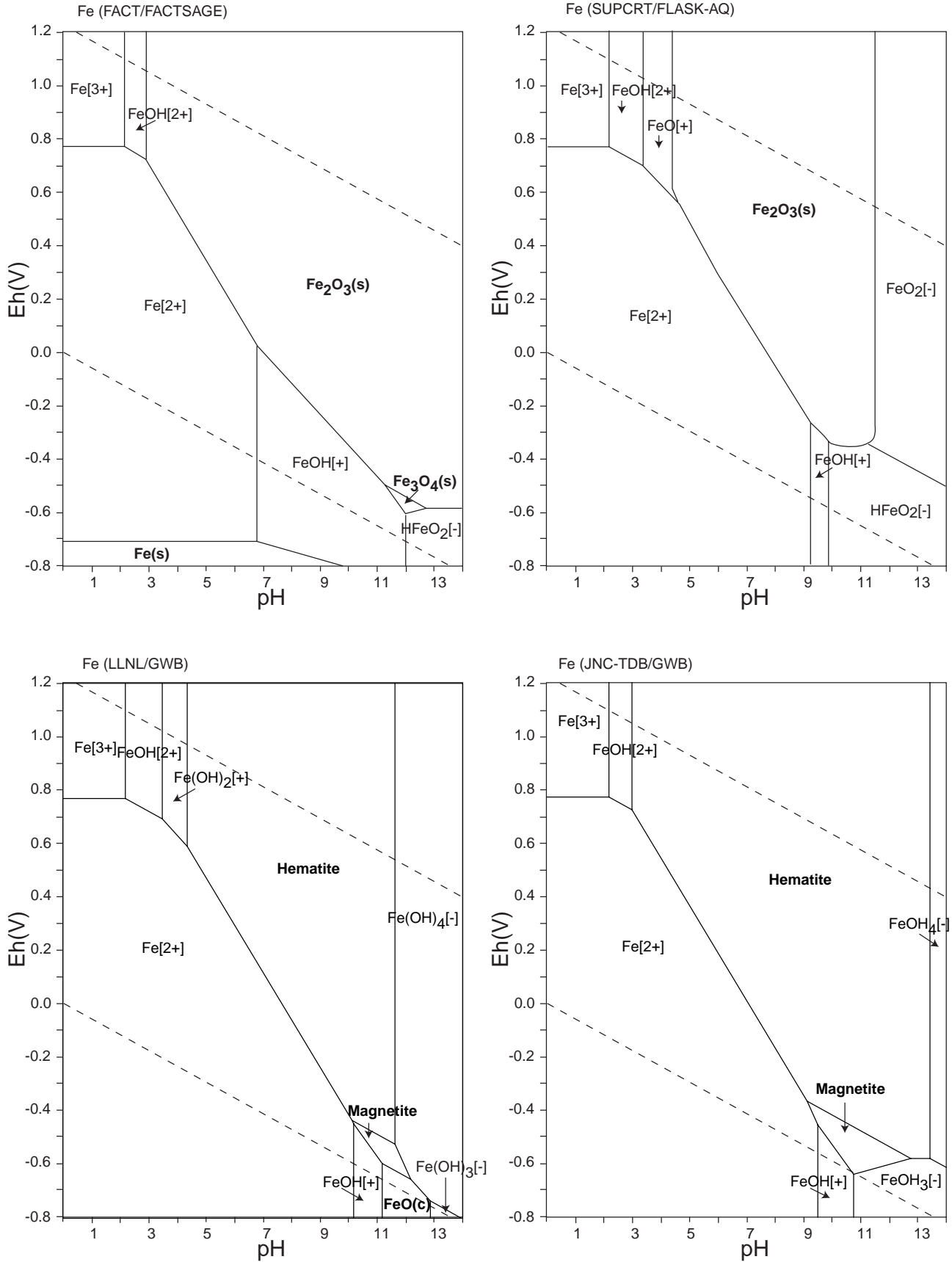


Figure 47: Eh-pH diagrams of the system Fe-O-H (1). $\Sigma \text{Fe} = 10^{-10}$, 298.15K, 10^5 Pa.

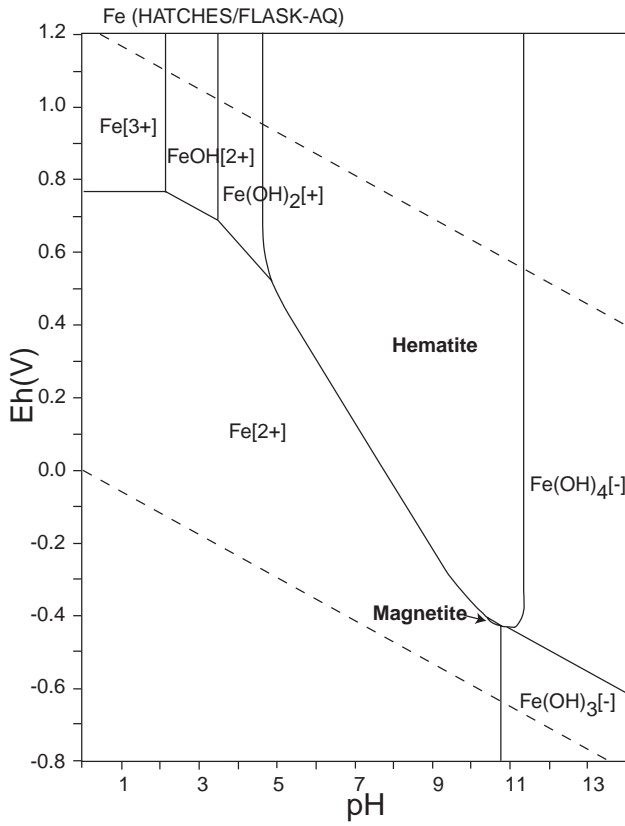


Figure 48: Eh-pH diagrams of the system Fe-O-H (2). $\sum \text{Fe} = 10^{-10}$, 298.15K, 10^5 Pa.