The phase transitions of [M(H$_2$O)$_6$](NO$_3$)$_2$, where M = Mn$^{2+}$, Co$^{2+}$, Ni$^{2+}$, Cu$^{2+}$ or Zn$^{2+}$ have been studied at 100 - 400 K by DSC. Two phase transitions connected with a two-stage melting process have been found for these five compounds. For the compound with M = Co, besides the two melting points a solid-solid phase transition at 272 K has been found.

**Key words:** Hexaaquametal(II) nitrates; Phase Transitions; Melting Points; DSC Method.