



**Figure 2.10.**  $\text{H}_4\text{SiO}_4$  and  $\text{Mg}^{2+}$  concentrations measured in the neck of a “hot smoker” at the East Pacific Rise at the  $21^\circ \text{N}$  hydrothermal area in the North Pacific Ocean. Symbols indicate data from different vents. The range of concentrations vary from the seawater end member on the right-hand side with 53 mmol  $\text{Mg}^{2+}$  and near zero  $\text{H}_4\text{SiO}_4$  to the “hydrothermal end member” with near zero  $\text{Mg}^{2+}$  concentration and between 16 and 20 mmol  $\text{kg}^{-1}$   $\text{H}_4\text{SiO}_4$ . From Von Damm *et al.* (1985).