

Fig. 1. Experimental setup.

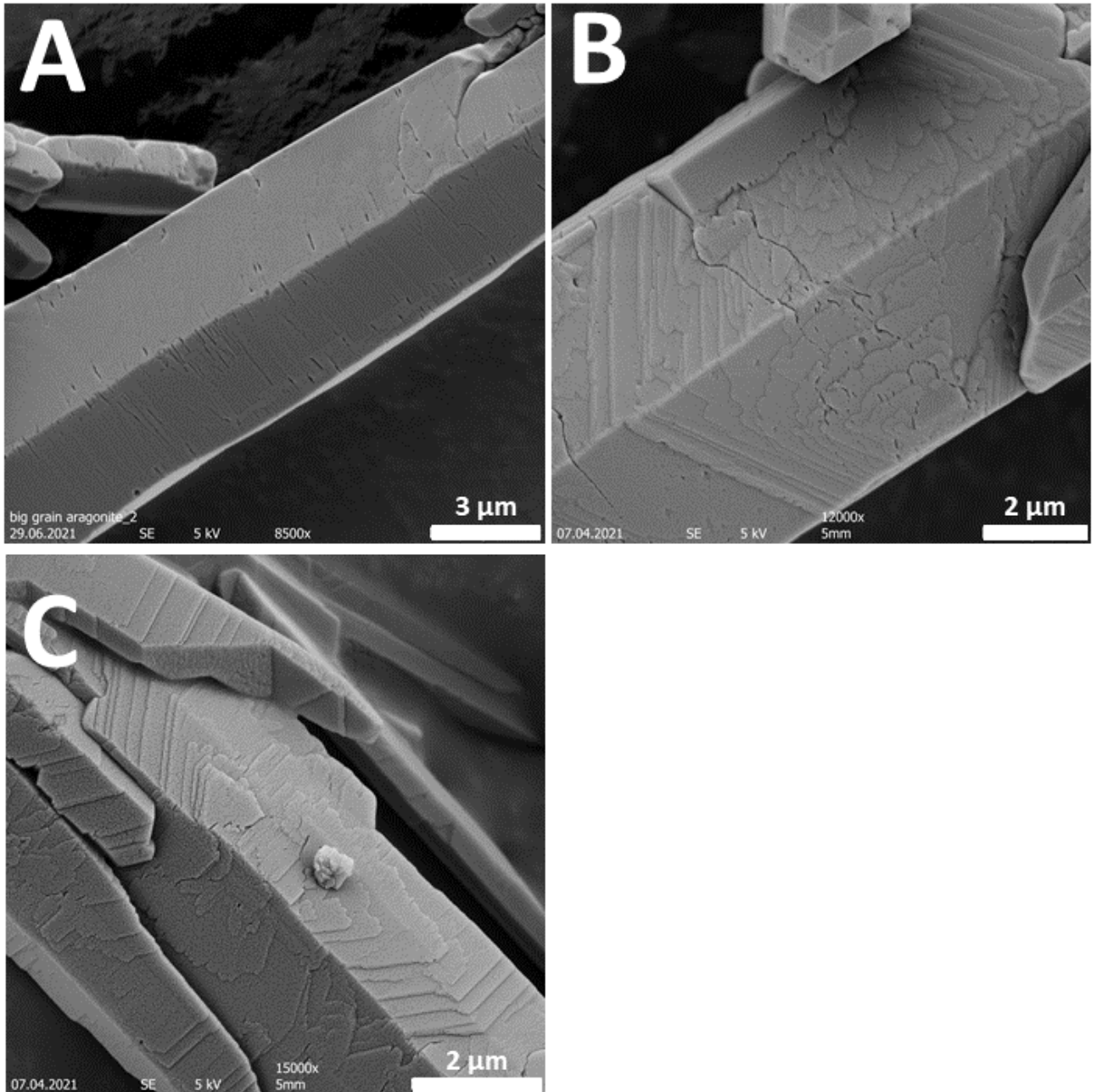


Fig. 2. Scanning electron microscope (SEM) images of (A) the aragonite seeds used in this study, (B) overgrowth aragonite from experiments NiAr-6, and (C) overgrowth aragonite from experiments CoAr-4.

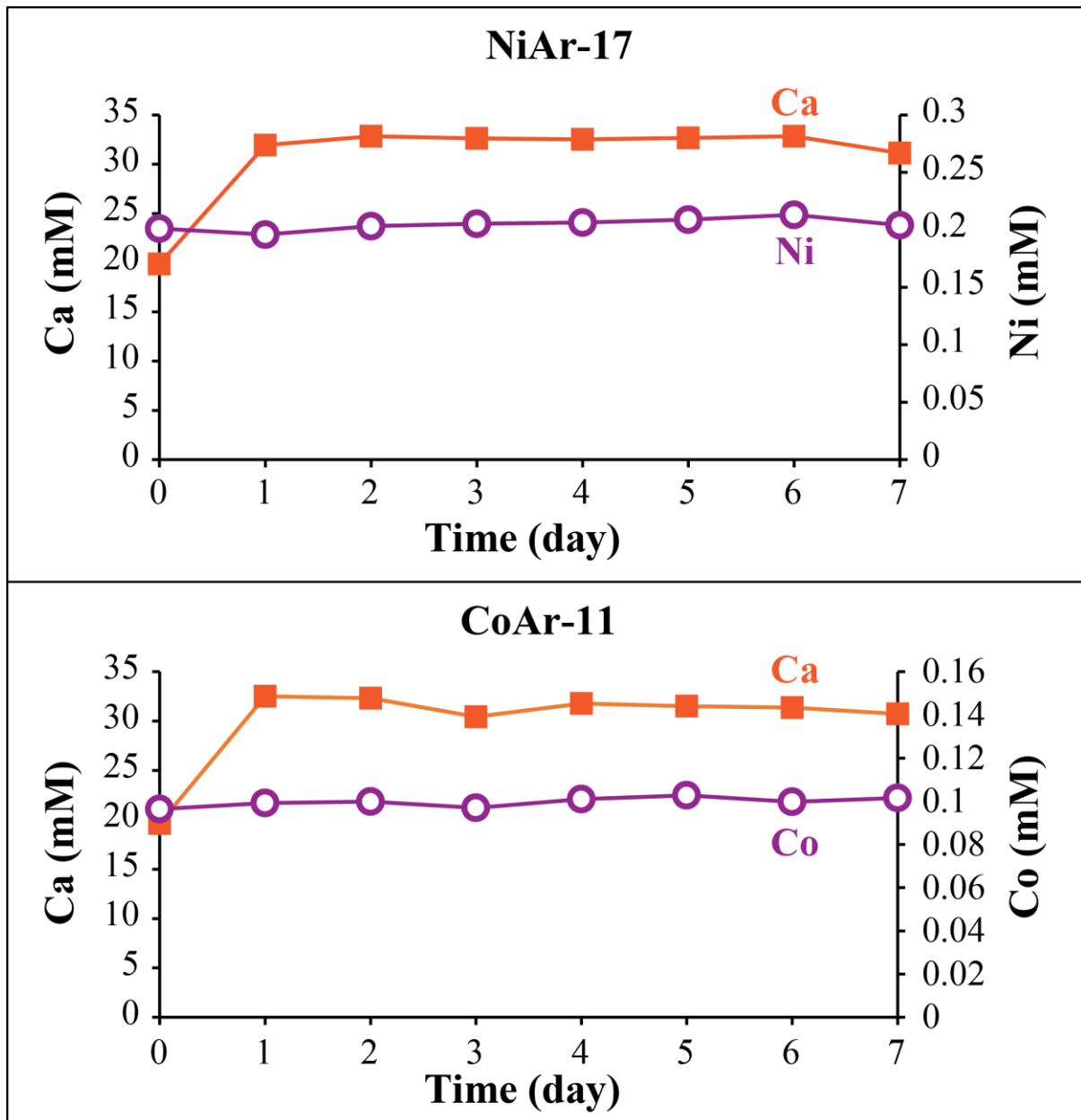


Fig. 3. Example of Ca, Ni and Co concentrations of the reactive fluid for experiments NiAr-17 and CoAr-11.

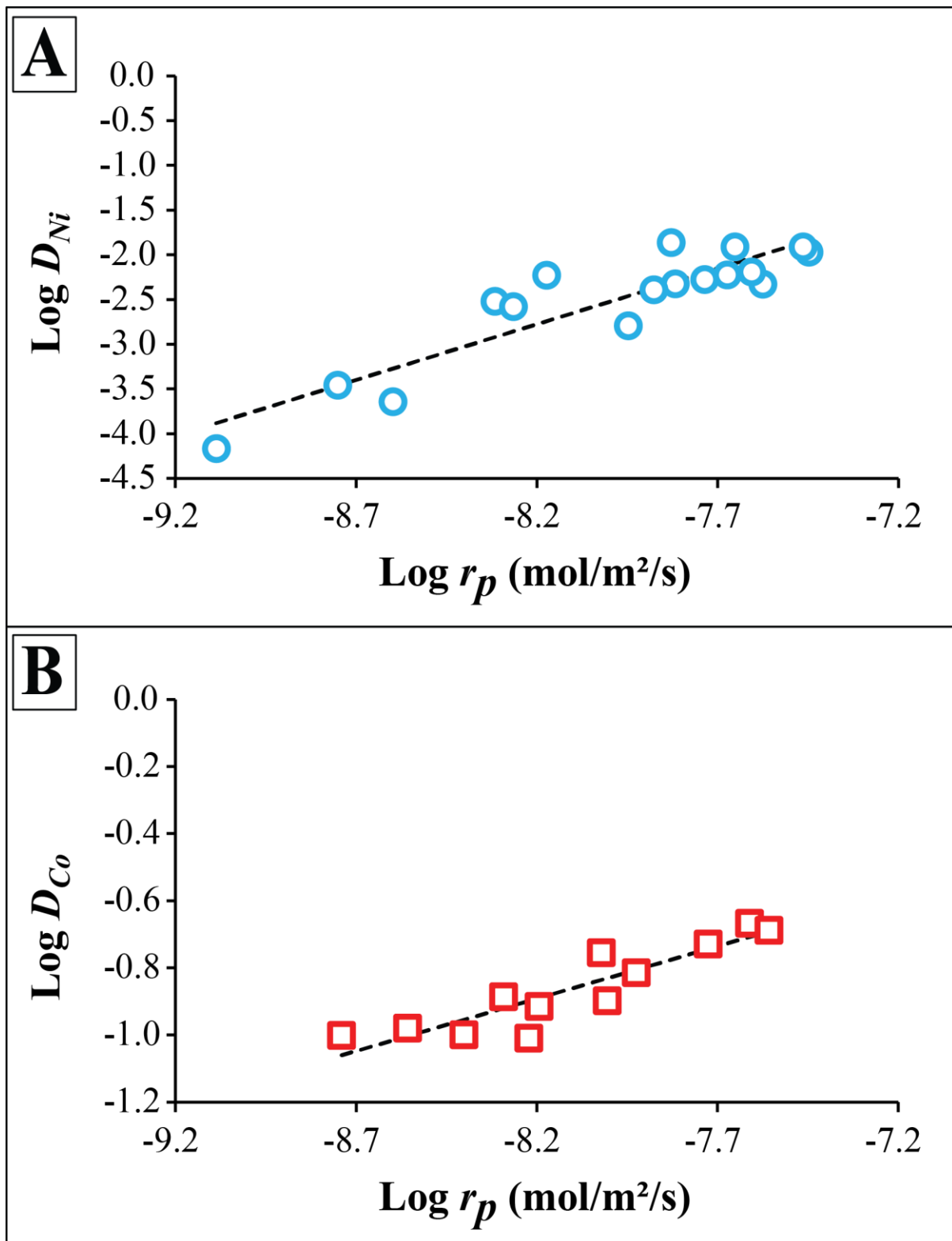


Fig. 4. Dependence of (A) $\text{Log } D_{Ni}$ and (B) $\text{Log } D_{Co}$ on Log aragonite growth rate (r_p). The describing equations are given in the text as Eqs. 4 and 5, respectively.

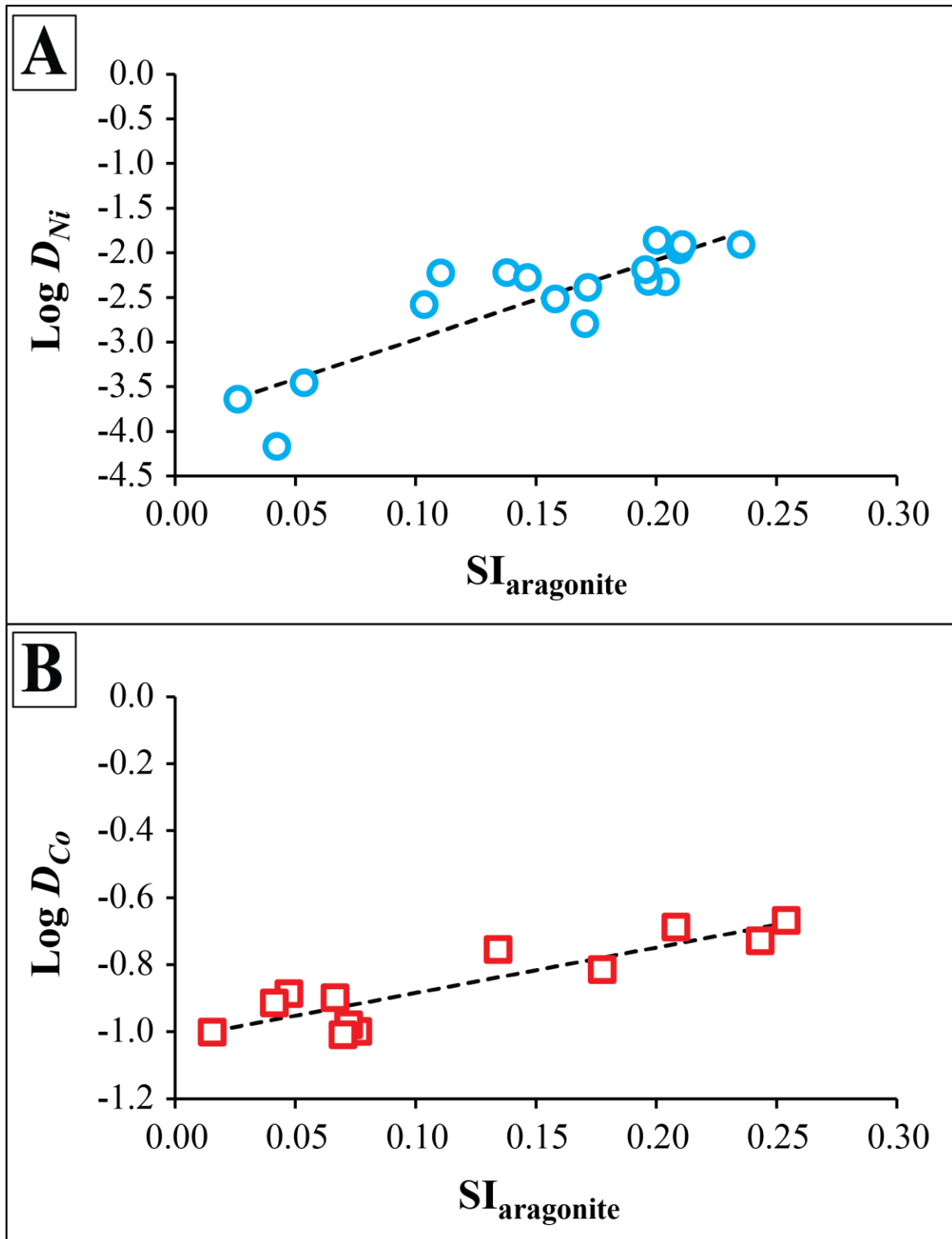


Fig. 5. Dependence of (A) $\text{Log } D_{Ni}$ and (B) $\text{Log } D_{Co}$ on SI of the fluid with respect to aragonite. The describing equations are given in the text as Eqs. 6 and 7, respectively.

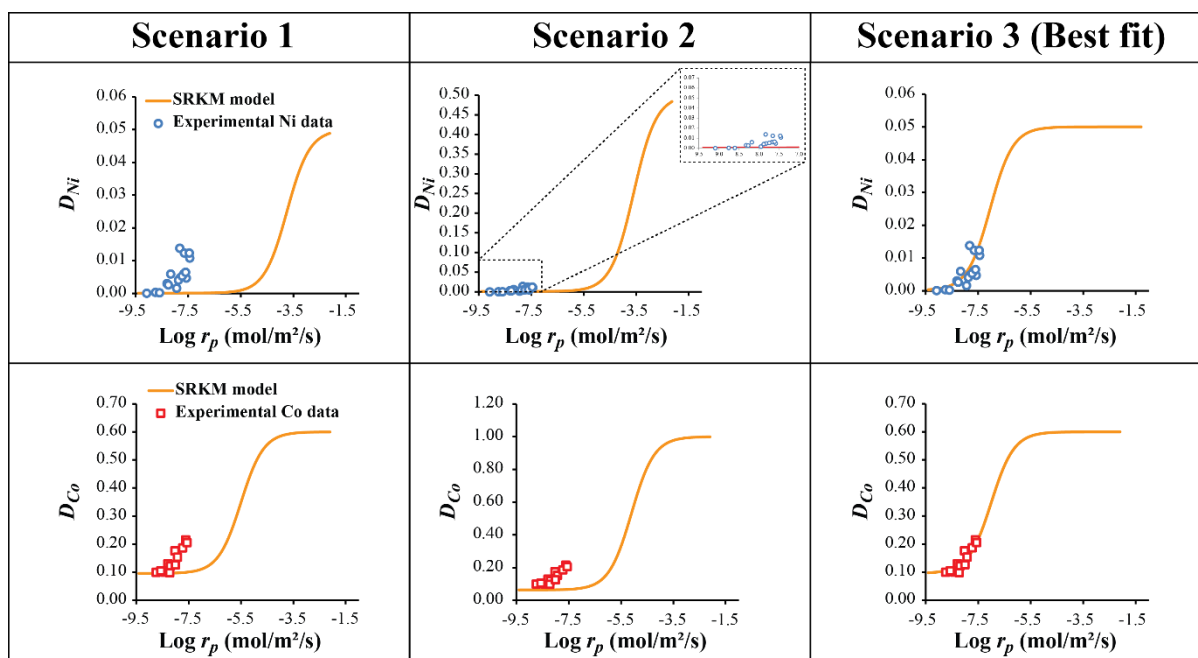


Fig. 6. Experimental D_{Ni} and D_{Co} (blue diamond) plotted against log rate and comparison with the SRKM model predictions (red line). The parameters used for the SRKM model are given in Table 2.