

Figure S1. Pseudo-first-order kinetic plot for the adsorption of Zn (II) on SiO₂ adsorbents: (C₀=10 mg/L, pH= 6, silica dose= 1 g/L, time= 60 min, agitation speed= 180 rpm and temp = 303 K)

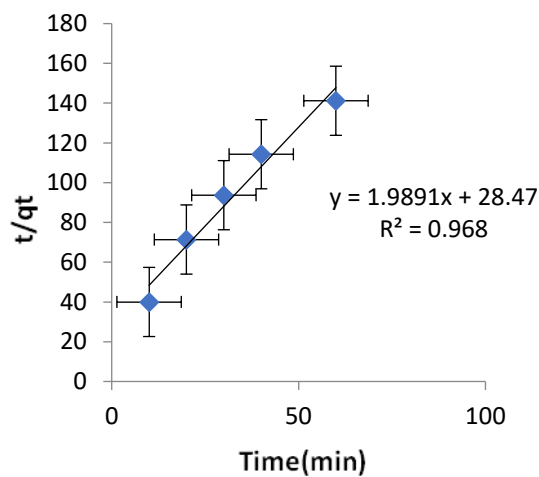


Figure S2. Determination of pseudo-second-order rate constant of Zn (II) adsorption by plot between t/q_t and time (C₀=10 mg/L; pH= 6, silica dose= 1 g/L; time= 60 min, agitation speed= 180 rpm and temp = 303 K)

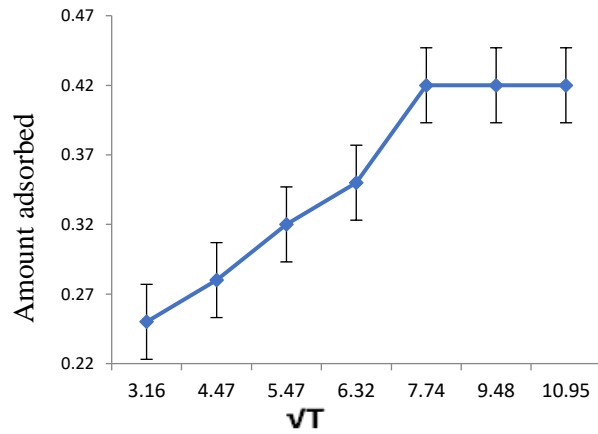


Figure S3. Intra-particle diffusion model of adsorption of Zn (II) ions adsorption by SiO₂ adsorbent ($C_0=10$ mg/L; pH= 6, silica dose= 1 g/L; time= 60 min, agitation speed= 180 rpm and temp = 303 K)

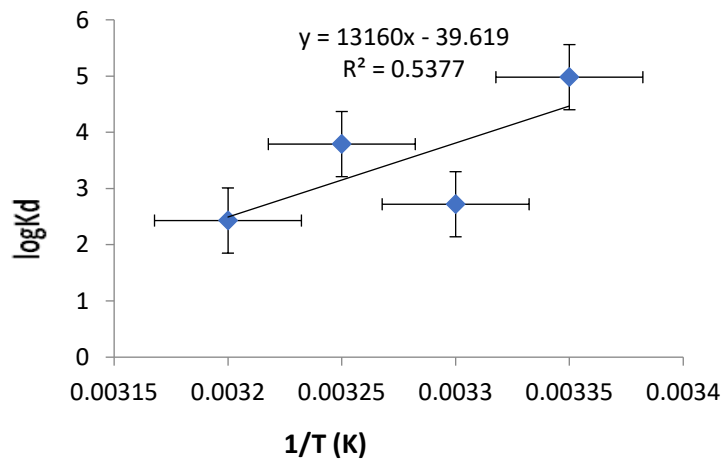


Figure S4. Van't Hoff Plot for the adsorption of Zn (II) ions adsorption by SiO₂. ($C_0=10$ mg/L; pH= 6; silica dose= 1 g/L; time 60 min, agitation speed= 180 rpm, temp = 303 K)