

# **pH-Responsive Cobalt(II)-Coordinated Assembly Containing Quercetin for Antimicrobial Applications**

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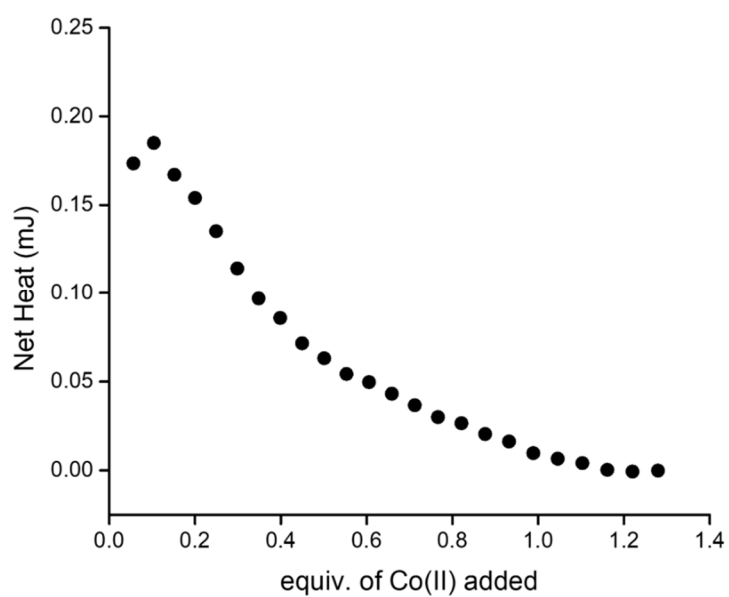
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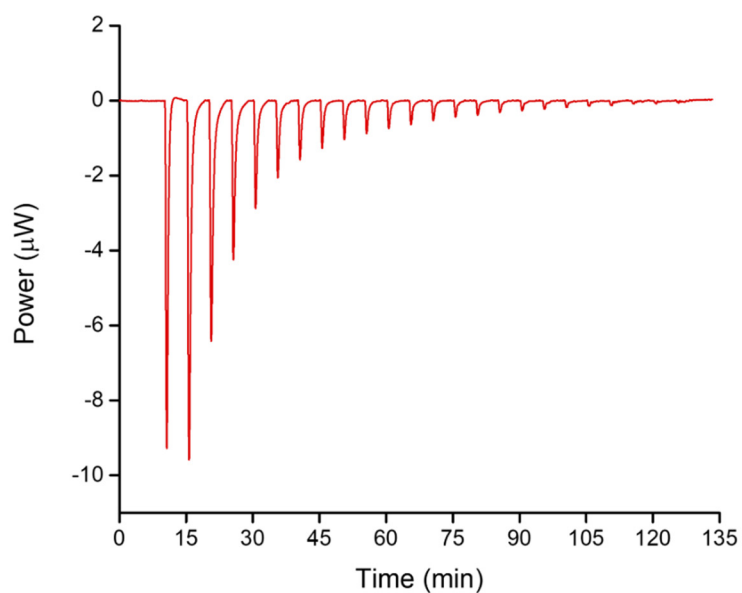
## Supplementary Material

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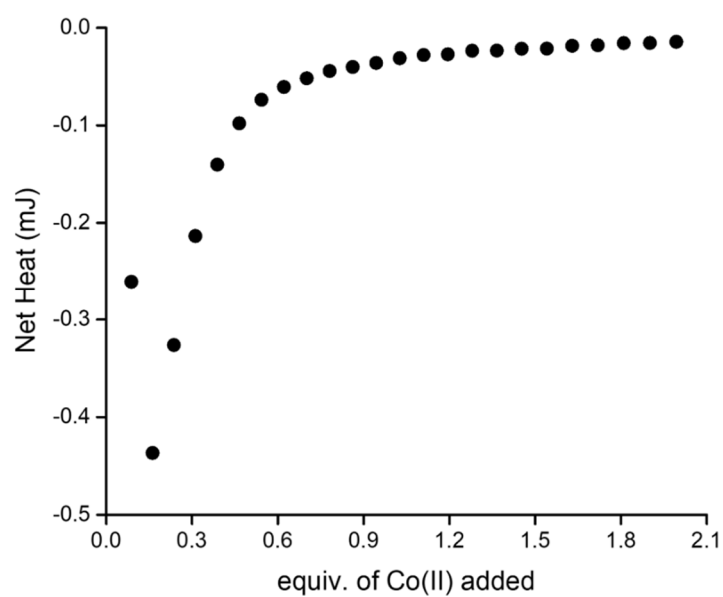
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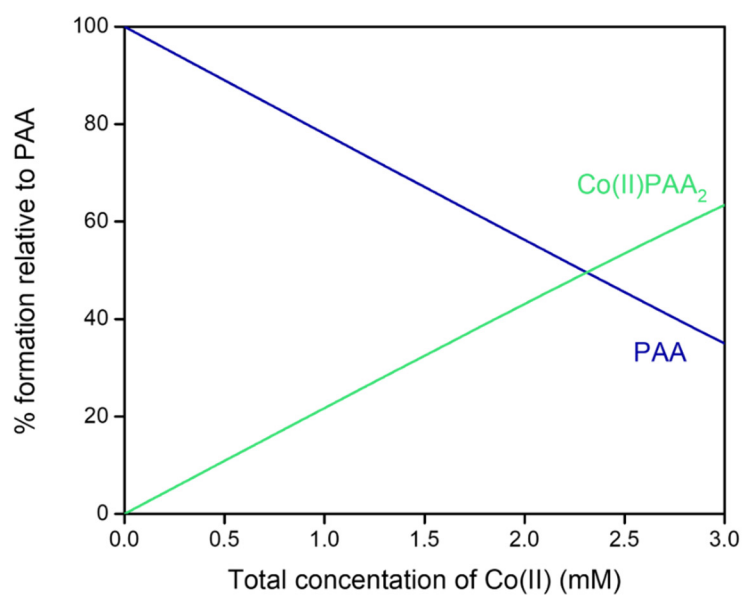
**Figure S1.** Integrated heat data for the cobalt(II) into quercetin ITC titration in Figure 2b.



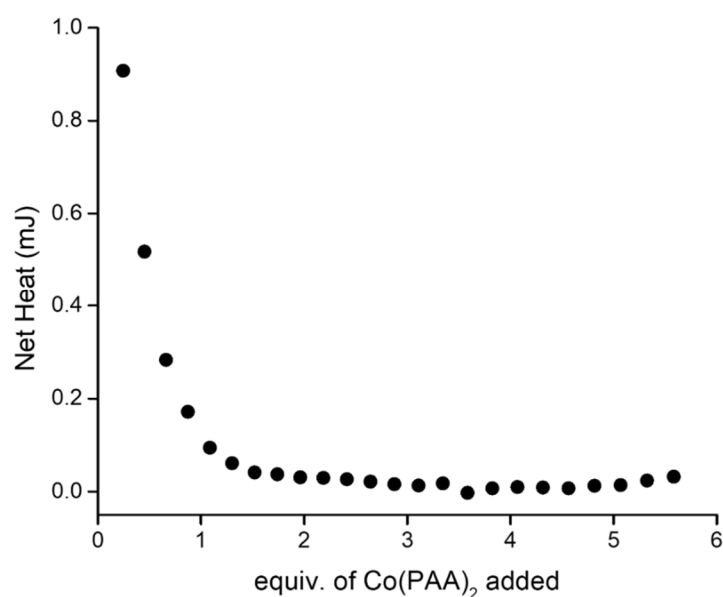
**Figure S2.** ITC titration of cobalt(II) (3.50 mM) into polyacrylic acid (0.50 mM) at 25 °C and pH 7.4.



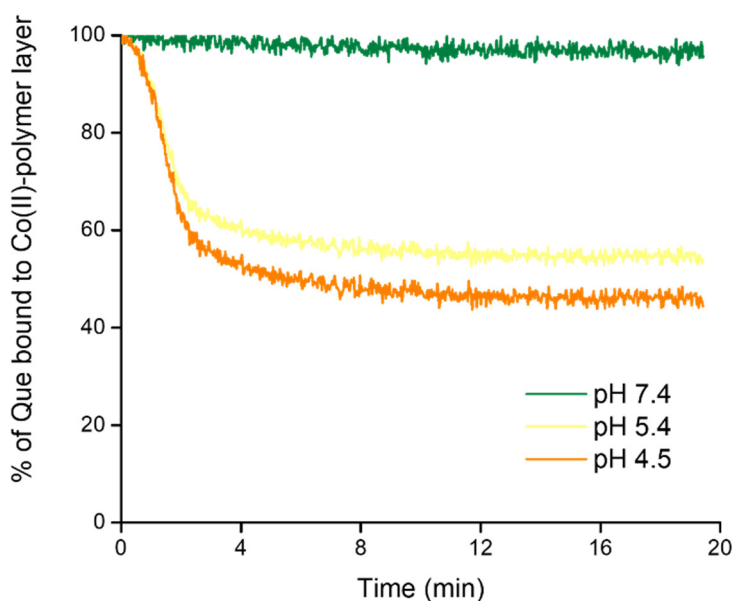
**Figure S3.** Integrated heat data for the cobalt(II) into PAA ITC titration in Figure S2.



**Figure S4.** Distribution diagram for the cobalt(II)-polymer complex species (Co(II):PAA 1:3,  $C_{\text{PAA}} = 9.00 \text{ mM}$ ) computed by using the data in Table 2.



**Figure S5.** Integrated heat data for the cobalt(II)-PAA complex into quercetin ITC titration in Figure 3b.



**Figure S6.** Release profiles of quercetin from the metal-polymer layer at different pH values. The curves of the (%) amount of Que bound are obtained by normalising the mass absorption values (i.e. the mass change curves of step 6 in Figure 5) by the maximum amount of Que bound as a function of time. The curves refer to a single QCM-D

measurement for each pH value. The amount (%) of Que released reported in Table 4 was instead calculated as the average value from at least three experiments.