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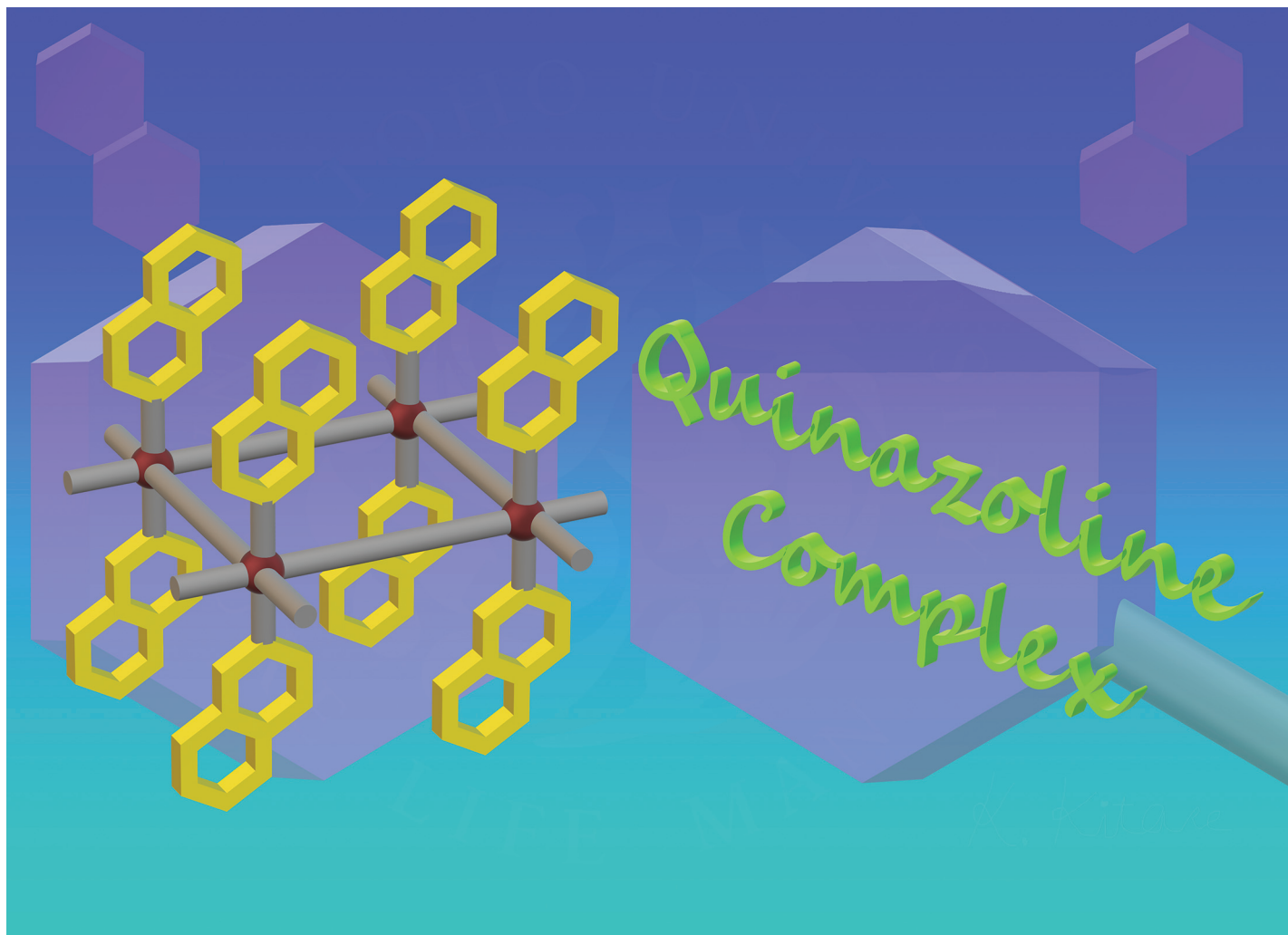
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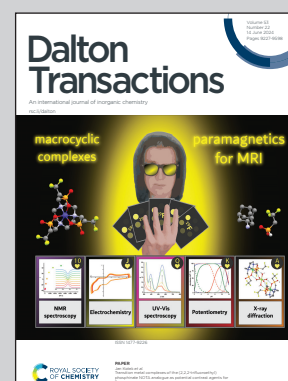


Showcasing research from Professor Kitazawa's laboratory,
Department of Chemistry, Toho University, Chiba, Japan.

Soma-Iwamoto-type SCO complex $\text{Fe}(\text{quinazoline})_2[\text{Au}(\text{CN})_2]_2$ using the quinazoline-type ligand

In our current work, we have synthesized a novel Soma-Iwamoto-type complex, $\text{Fe}(\text{quinazoline})_2[\text{Au}(\text{CN})_2]_2$. This complex shows the Soma-Iwamoto-type bilayer with Au-Au interactions and a gradual spin-crossover (SCO) phenomenon. A small amount of crystals of $\text{Fe}(\text{H}_2\text{O})_2(\text{quinazoline})_2[\text{Au}(\text{CN})_2]_2$ has also been obtained, using the filter method, and found to have a mononuclear structure with a hydrogen-bonding network. The difference between these structures can be explained by the difference between the concentrations of the quinazoline ligand during their syntheses.

As featured in:



See Kosuke Kitase *et al.*,
Dalton Trans., 2024, **53**, 9248.