

Peer Review

Review of: "New Insight into Erythema Reduction Induced by Quercetin–Metal Ion Chelates"

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The paper presents a study on skin treatment using quercetin chelates.

The authors use spectroscopic data to characterize the compounds and determine the position of the ions within the coordination complex.

Overall, the paper is well-structured and has the potential for publication after revisions.

However, there are minor typographical and grammatical errors throughout the draft, for instance, in the sentence:

"The t-student statistical analysis was using Statgraphics"

I guess it might read:

"The t-Student statistical analysis was performed using Statgraphics."

Additionally, the paper lacks a section detailing the experimental sample preparation. In this section, the authors could explain how the samples were selected, mixed, synthesized, weighed, and possibly how they were handled for all measurements.

In the Absorbance Properties section (page 4), the authors state: "Q + Cu²⁺ dissolved in both 50% and 80% 2-propanol, the absorbance spectrum showed a decrease in intensity at 375 nm (Ring B) compared to Q (Figure 1A)." They also note: "However, in 80% 2-propanol, the absorbance spectrum of Q + Fe²⁺ did not show significant changes in intensity at 375 nm (Figure 1A)."

However, in Figure 1A, the red line (Q + Fe²⁺), the black line (Q + Cu²⁺), and the blue line (Q + Cu²⁺ + Fe²⁺) do not coincide at either peak (255 nm and 375 nm).

Instead, if the curves are normalized at the 255 nm peak, all chelates appear to exhibit decreased absorption at 375 nm.

Additionally, the vertical axis is labeled in arbitrary units, and the numerical values may be unnecessary.

Declarations

Potential competing interests: No potential competing interests to declare.