Review of: "Use of the experimental designs as an approach to optimize the inhibition efficiency of a Pyridazine derivative against corrosion of steel in an acidic medium"

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Use of the experimental designs as an approach to optimize the inhibition efficiency of a Pyridazine derivative against corrosion of steel in an acidic medium

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General comment

The paper presents a methodology a model to predict the best conditions in order to obtain maximum inhibitor efficiency while reducing the number of tests required.

Some recommendations and observations remain:

1. It is necessary to discuss a little more about the influence of immersion time and why ~6 hours is considered to be the best immersion time for modeling. It is known that usually as the immersion time increases; the open circuit potential initially decreases and then may increase, depending on the immersion time (the quality of the protective film that forms on the metal surface). With increasing immersion time, the corrosion current density (Icorr) typically decreases, reaches a minimum, and then increases.

2. Present at least an example of validation of proposed model (correlate the experimental data with predicted one from proposed model)