



SDI Review Form 1.6

Journal Name:	<u>International Research Journal of Pure and Applied Chemistry</u>
Manuscript Number:	Ms_IRJPAC_20772
Title of the Manuscript:	Theoretical Study of the Efficiency of some Nitro Benzenamine Derivatives in Acidic Medium to serve as Excellent Organic Corrosion Inhibitors of Mild Steel
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	The manuscript Ms_IRJPAC_20772 titled Theoretical Study of the Efficiency of some Nitro Benzenamine Derivatives in Acidic Medium to serve as Excellent Organic Corrosion Inhibitors of Mild Steel discuss the corrosion inhibitory ability of nitro Benzenamine derivatives in acidic medium. The authors can consider the following comments in order to publish the article in this journal. 1. In this work from Table 1 it is concluded that the $C_{10}H_{11}$ substituted Nitro benzenamine derivatives in acidic medium act as a better organic corrosion inhibitors of mild steel. The Authors compares it with six different substituted Nitro Benzenamine derivatives. But other than Table 1 there is no supporting evidences given in the manuscript. 2. Is there any specific reason for the substituted $C_{10}H_{11}$ have high inhibition? The authors must justify this with supporting evidences. 3. In line 140, it is indicated that in Figure 5, there exist a back donation occurs in the metal surface and amino group. Is it synergic bond type effect or mere physical interaction. Justify. 4. The charge distribution calculated by Mulliken	WE HAVE MADE THEORETICAL CONSIDERATIONS ONLY AND AS SUCH THE DFT CALCULATIONS ARE ENOUGH TO JUDGE EFFICIENCY IN THE DISCUSSION WE SUBMITTED THAT THE HIGH CONJUGATION WAS THE REASON FOR THE HIGHER INHIBITION . WE POSTULATE THAT IT IS A MERE PHYSICAL INTERACTION. JUSTIFICATION CANNOT BE MADE UNTIL THE INHIBITOR IS SYNTHESIZED AND PRACTICAL APPLIED.



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	charge can be tabulated and discussed elaborately in the results and discussion.	IT IS ENOUGH TO SHOW THE MULLIKEN CHARGE ON THE ATOMS (REFER TO Figure 3)
<u>Optional/General</u> comments		