

### Review Form 3

Journal Name:	<a href="#">International Research Journal of Pure and Applied Chemistry</a>
Manuscript Number:	Ms_IRJPAC_130564
Title of the Manuscript:	Synthesis and Biological Evaluations of Prop-2-enone and Penta-1, 4- dien-3-one Chalcones and their Hydrazone Derivatives
Type of the Article	Original Research Article

#### PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	Hydrazones are prepared by reaction of chalcones with substituted hydrazides. Medicinal chemists across the world have done immense work on chalcones and their hydrazone derivatives and developed agents with better activity and low toxicity profiles. Thus, this manuscript will be useful to design and develop new novel drug-like candidates in the field of medicine.	I agree with reviewer's comment
Is the title of the article suitable? (If not please suggest an alternative title)	The title is informative and suitable.	I agree with reviewer's comment
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Abstract is well structured and emphasizes on key findings.	I agree with reviewer's comment
Is the manuscript scientifically, correct? Please write here.	Yes, this study highlights promising therapeutic potential for antioxidant as well as analgesic efficacy.	I agree with reviewer's comment
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	References are up to date.	I agree with reviewer's comment
Is the language/English quality of the article suitable for scholarly communications?	Correct grammatical errors and improve sentence flow.	Grammatical errors have been corrected and highlighted
<u>Optional/General</u> comments	<ol style="list-style-type: none"><li>1. Describe the rationale behind the choice of substituted benzaldehyde used in study.</li><li>2. Discuss how different substitutions influence antioxidant and analgesic activity.</li><li>3. Discuss how all synthesised compounds lack antimicrobial behaviour.</li><li>4. Highlight future directions, such as conducting in vivo studies and toxicity profiling.</li></ol>	<ol style="list-style-type: none"><li>1. Benzaldehydes were chosen based on accessibility and availability</li><li>2. As highlighted in the discussion structural activity relationship have been discussed</li><li>3. Literature indicates not all chalcones and hydrazones possess antimicrobial activities</li><li>4. Recommendation has been made and highlighted in the manuscript</li></ol>

Review Form 3

PART 2:

	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)
Are there ethical issues in this manuscript?	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	