Review Form2

Book Name:	Chemical and Materials Sciences: Developments and Innovations
Manuscript Number:	**Ms_BPR_3814**
Title of the Manuscript:	**Performance of UNS S41427 Supermartensitic Stainless Steel in hydrochloric acid with the addition of propargyl alcohol as corrosion inhibitor**
Type of the Article	**BOOK CHAPTER**

PART 1: Review Comments

Compulsory REVISION comments	**Reviewer's comment**	**Author's Feedback***(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimumof 3-4 sentences may be required for this part.	Propargyl alcohol is a highly effective corrosion inhibitor for stainless steel in acidic mediums due to its ability to form a protective barrier on the metal surface. Its triple-bonded alkyne group adsorbs strongly onto the steel, creating a hydrophobic layer that minimizes contact between the acidic environment and the metal, thereby reducing corrosion rates. Propargyl alcohol has significant industrial applications as a corrosion inhibitor for stainless steel in acidic environments.	
Is the title of the article suitable? (If not please suggest an alternative title)	**yes**	
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.	**To add some analytical techniques for prove inhibitation like Surface characterization techniques, scanning electron microscopy (SEM),Fourier-transform infrared spectroscopy (FTIR),X-ray diffraction (XRD)**	
Are subsections and structure of the manuscript appropriate?		
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimumof 3-4 sentences may be required for this part.	The scientific basis for propargyl alcohol's role as a corrosion inhibitor for stainless steel in acidic media lies in its molecular structure and adsorption properties. The alkyne group in propargyl alcohol strongly adsorbs onto the steel surface through π-electron interactions, forming a protective hydrophobic layer that reduces metal exposure to corrosive agents.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	To add some more references.	
Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**		
Optional/Generalcomments	To add some analytical techniques and Electrochemical investigations	

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?	***(If yes, Kindly please write down the ethical issues here in details)***	

Reviewer Details:

Name:	**Dhara D.Patel**
Department, University & Country	**Sankalchandpatel University, India**