

Review Form2

Book Name:	Research Advances in Environment, Geography and Earth Science
Manuscript Number:	Ms_BPR_2783
Title of the Manuscript:	Spatial variability of mechanical properties of sedimentary rocks in the Jiu Valley Basin: a stress-strain curve analysis
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.	In this study the author conducted laboratory tests for sedmentaory rocks for prediction of rock strength and for evaluation of stress and strain curve. It was concluded that, The properties of the rocks were influenced by geological-tectonic factors, such as mineralogical-petrographic composition, massif structure and texture, hydrological regime, and lithostatic pressure. The rock strength investigation is very useful for designing the excavation projects costs. I recommend this type of research.	
Is the title of the article suitable? (If not please suggest an alternative title)	I recommend the following Title: Stress-strain curve analysis for sedimentary rocks in the Jiu Valley Basin.	
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 general, I recommend please rewrite.	
Are subsections and structure of the manuscript appropriate?	Yes	
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.	Try to improve your manuscript abstract, introduction, methodology. Introduction part is short. Please revise the same	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =	The introduction section could be enhanced by using some recent relevant works. Some more recent papers can be used: * Multiple regression model for prediction of rock properties using acoustic frequency during core drilling operations. Geomechanics and Geoengineering, (2019), pp.1-16. https://doi.org/10.1080/17486025.2019.1641631 .	

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	* Estimating rock properties using sound signal dominant frequencies during diamond core drilling operations. Journal of Rock Mechanics and Geotechnical Engineering (2019). Vol.11 (4), pp. 850-859. * Quantification of rock properties using frequency analysis during diamond core drilling operations." Journal of The Institution of Engineers (India): Series D, (2019), 100 (1), pp. 67-81. * Prediction of specific energy using dominant frequency of acoustics produced during diamond core drilling operations. AIP Conference Proceedings 2204, 040003 (2020); https://doi.org/10.1063/1.5141576. * Artificial neural network for prediction of rock properties using acoustic frequencies recorded during rock drilling operations. Model. Earth Syst. Environ. 8, 141-161 (2022). https://doi.org/10.1007/s40808-021-01103-w. * New approach for prediction of specific energy using sound levels produced during core drilling operations. Geomechanics and Geoengineering, 1-16. https://doi.org/10.1080/17486025.2021.1940312. *Pasupuleti, V., Avnl, S., &Chodavarapu, V. K. (2023). Influence of rock properties on thrust and torque during rock coring operations a case study. <i>Petroleum Science and Technology</i>, 1-25.	
<u>Minor</u> REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The English language, grammar and syntax correction needs to be done throughout the paper.	
<u>Optional/General</u>comments	The manuscript has scholarly importance, and it seems very interesting, can consider for publication but following revisions is needed.	

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PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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