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Due on 2020-03-13, 23:59 IST

Answer the Following questions.

Q1 . A researcher would like to know concentration of a chemical he had synthesized to determine the overall yield. However, since it is a liquid that couldn't be purified further and he knows that the impurities, if any, do not absorb UV light he is resorting to using UV-visible spectrophotometry for this purpose. Fortunately, he is able to obtain the same chemical (a liquid) from a chemical inventory with which he calibrates the instrument. For the values given below, perform a linear fit using a spreadsheet program and provide the slope, intercept and R^2 value.**Upload the spreadsheet with the obtained fit**. (5 marks)

c (M) = 0.012, 0.020, 0.052, 0.072, 0.092, 0.100
A (units) = 0.090, 0.150, 0.390, 0.540, 0.690, 0.750

Q2 . Would it be wise to use the above calibration curve for concentrations less than 0.010 M or greater than 0.150 M? Hint: this point of linearity of Lambert Beers law was discussed at length in the live session. **Upload a text/document file with your answer in not more than 150 words**. (2 marks).

Your Submission:

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.