

## Paper-based Chemometer Device for the estimation of $\alpha$ -amylase, a biomarker for Pancreatitis

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This supplementary information contains data is obtained from Figure 5 in Table 1. The distance covered by the colour change of each chemometer device is entered in the table. This data is then used to make the calibration curve and the scattered plot in the main manuscript. It also contains the serial dilution Fourier Transform Infrared Spectroscopy (FTIR) of the various concentration of amylase in starch triiodide solution. Figure 1 (supplementary file) shows FTIR of the serial dilution of  $\alpha$ -amylase from 70-420 U/L. The FTIR of these concentrations were taken from solutions used in the absorbance spectrum and not directly in the chemometer device and done in Figure 4 (of the manuscript). As amylase concentration decreases, there are observable shifts and changes in the intensity of the peaks, indicating alterations in the chemical environment and interactions between the molecules.

Table 1: Data derived from the Figure 5 in the manuscript which is plotted in the calibration curve and the scattered plot

<b>Conc</b> <b>(U/L)</b>	<b>D1</b> <b>(mm)</b>	<b>D2</b> <b>(mm)</b>	<b>D3</b> <b>(mm)</b>	<b>Average</b> <b>(mm)</b>	<b>SD</b>
<b>0</b>	0	0	0	0	0
<b>70</b>	5.882	7.061	10.084	7.68	2.17
<b>140</b>	17.984	17.482	18.151	17.87	0.35

<b>210</b>	26.219	33.284	36.302	31.94	5.18
<b>280</b>	36.472	34.034	37.311	35.94	1.70
<b>350</b>	46.386	43.868	45.883	45.38	1.33
<b>420</b>	54.79	54.453	55.127	54.79	0.337

Table 1 data is obtained from Figure 5. The distance covered by the colour change of each chemometer device is entered in the table. This data is then used to make the calibration curve and the scattered plot in the main manuscript.

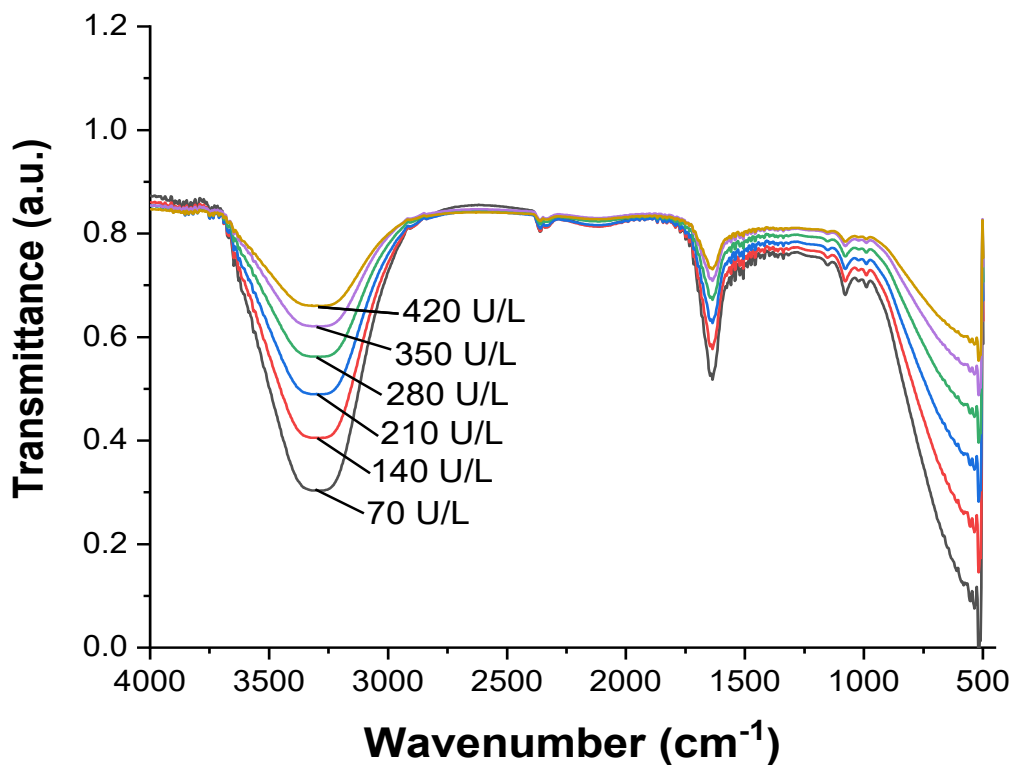


Figure 1: FTIR of the serial dilution of the amylase concentration in the reaction with starch triiodide.