## **Supplementary information**

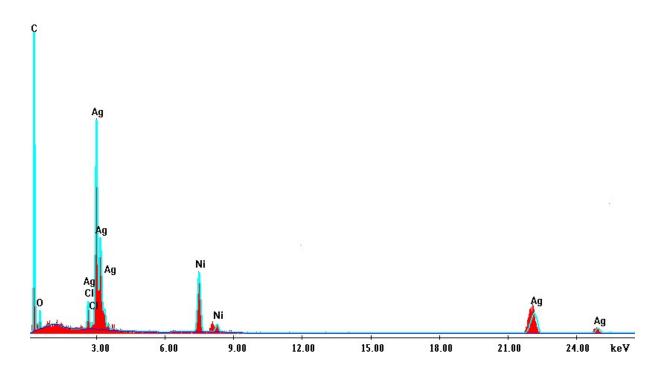


Fig. 1 EDX showing the presence of Ag, C and O

## pH effect

The effect of pH on the response for 1  $\mu$ M of serotonin over the pH range 3-12 and data (Figure below). The peak current of 5-HT increasing with the decreasing the pH of the solution. However, there are no big change in signal over the range (3 to 7). Compared with other pH solutions, pH 7 solution (PBS) is considered as a physiological pH; hence it has been used as an optimum pH for the determination of 5-HT. For this reason, we choose to work with pH around 7.

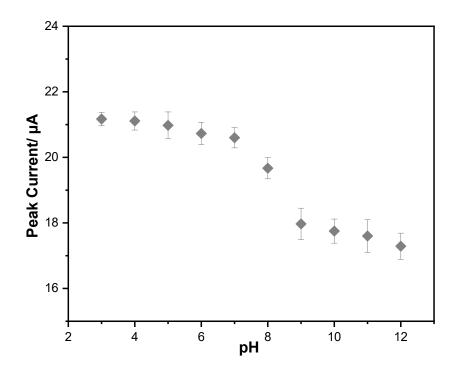


Fig. 2: Effect of pH on the peak current (ip) of 1  $\mu$ M 5-HT (n= 3) in 0.1 M phosphate buffer