







**Figure 1:** Cyclic voltammograms of 0.2 M Phosphate Buffer Solution (PBS) at solid line for blank and dashed line for 4 mg of extract using carbon paste electrode at 100 mvs<sup>-1</sup>.

repetitive for 20 times, the results showed good reproducibility of the modified electrode with a relative standard deviation of 5.6%. After each determination the carbon paste electrode was washed with phosphate buffer solution and scanned using cyclic voltammetry in the blank phosphate buffer solution. After one week exposure of the electrode in air, it was found that the electrochemical activity of the carbon paste electrode remain almost same to the determination of resorcinol which indicated the good reproducibility and stability of the electrode.

## Conclusion

The voltammetric behavior of crude ethanol extract was similar to that of voltammetric behavior of resorcinol. It is noteworthy that, the two-electron single step redox process was occurred at bare carbon paste electrode. On varying sweep rate and concentration of the extract suggests that overall electrode process is diffusion-controlled. Therefore with its low cost and ease of preparation of the carbon paste electrode approach can readily be applied to the determination of resorcinol and other related catechol amines.

## References

1. Maurya R, Ray AB, Duah FK, Slatkin DJ, Schiff PL Jr (1984) Constituents of *Pterocarpus marsupium*. J Nat Prod 47: 179-181.
2. McCreery RL, Kline KK (1995) Carbon electrodes. In: Laboratory Techniques in electroanalytical chemistry. Chapter 10, 2<sup>nd</sup> edition, Kissinger PT, Heineman WR (ed) Dekker, New York.
3. McCreery RL (1991) Carbon Electrodes: Structural effects on electron transfer kinetics. In: Electroanalytical chemistry Bard AJ (ed), Volume 17, Dekker, New York, 221-374.
4. Hoskeri JH, Krishna V, Santhosh KH, Kumar VS, Mallikarjuna G (2011) CNS depressant activity of extracts from *Flaveria trinervia* Spring C. Mohr. Phytopharmacology 1: 100-107.
5. Lingaraju GM, Hoskeri HJ, Krishna V, Babu PS (2011) Analgesic activity and acute toxicity study of *Semecarpus anacardium* stem bark extracts using mice. Pharmacognosy Res 3: 57-61.
6. Kissinger PT, Heineman WR (1984) Laboratory Techniques in Electroanalytical chemistry. Academic Press Marcel Dekker, New York.
7. Hibbert DB (1993) Introduction to Electrochemistry. Macmillan, London.
8. Noel JM, Vasu KI (1990) Cyclic Voltammetry and the Frontiers of Electrochemistry. Oxford and IBH Publishing Co. Pvt. Ltd, New Delhi.

