

CHAPTER V

CONCLUSIONS

1. Laccase was isolated from Pleurotus sapidus and partially purified resulted in 40 folds, resulting in the enzyme having a specific activity of 15 unit/mg. protein.

2. Electrophoresis Method, partially purified laccase consisted of at least 4 isoenzymes. The enzyme solution absorbed light at around 600 nm and was able to oxidise catechol, hydroquinone as well as syringaldazine. P. sapidus laccase exhibited an optimum pH of around 6 and was relatively stable at 45°C.

3. Laccase was immobilized on polymer supports involving two methods.

3.1 The first method employed epichlorohydrin as linking agent. In this case laccase was covalently linked to the polymer of Amberite IRA-68.

3.2 The second method involved the entrapment of laccase within the network of polyacrylamide gel.

4. It was suggested that laccase in its soluble form would have potential application in the process of lacquer drying. Another potential application of laccase could be in the field of waste water treatment. The laccase could be used economically in its immobilized form.