CONCLUSION

From the study undertaken herein, it has become evident that polymer immobilized reagents do have enormous synthetic utility. Diazonium ions have been immobilized for the first time and diazo-coupling reactions have been carried out under biphasic condition with the substrate in an organic solvent. This procedure has several advantages as it is evident from the experiments carried out. The reactions have been found to be site-specific and consequently one product has been obtained simplifying work up procedures. The diazopoupling reactions could be carried out in neutral conditions which was not possible earlier. Further, using immobilized diazonium ions some products such as the N-arylazoindoles could be synthesized which was not possible by the homogeneous phase reactions. The utility of BER as a versatile reducing agent has also been exemplified by the reduction of azo compounds to the hydrazo compounds although the reduction of oxazolones have remained inconclusive . Further, studies in this aspect may be worth undertaking. Finally, a simple aspect of synthetic utility of immobilized enzymes was also investigated.

As has already been mentioned in the text, three different immobilized reagents were selected for investigation. This was done to emphasize the widespread utility of the polymer immobilized reagents. It is expected that further studies on these systems specially on the immobilized diazonium ions may open up new horizon of Scientific and Industrial Research.