CHAPTER IV
PHOTOCATALYTIC APPLICATIONS OF TITANIA NANOSTRUCTURES

4.1 Titania nanostructures for environmental clean up

4.2 Photocatalytic activity of co catalyst modified mesoporous assembled titania nanocuboids and titania nanotube towards hydrogen production by water splitting

4.3 Conclusions

Industrialisation and population growth not only resulted in the world wide environmental pollution but also in the energy crisis for present an upcoming generations. Thus, emergence of new and renewable technologies for environmental pollution remediation and energy production is highly welcomed at this stage. If the developing technologies rely on principles which never futher secondary pollute the nature by adopting environmentally friendly and inexpensive materials it is a boon to mankind. In this direction, semiconductor mediated photocatalysis mainly using Titania is found to be successful in meeting the requirements of energy and environmental issues.