CHAPTER 9
RECOMMENDATIONS

1. This biosynthesis method can be a promising method for the preparation of other metals and metal oxide nanoparticles and can be valuable in environmental, biotechnological, pharmaceutical and medical applications.

2. The nanoparticles produced by conventional chemical methods may toxic to living beings. Biologically synthesized nanoparticle may not be toxic because there is no used of chemical reducing and capping agent.

3. *S. platensis* has been commercially used in several countries as health foods because of its valuable constituents such as Phycobilliproteins, vitamins, minerals, carbohydrates, lipids and polyunsaturated fatty acids.

4. Biological nanoparticles synthesized by aqueous extracts of *S. platensis* can be used in biomedical and therapeutic applications because these NPs are non-toxic.

5. Now days silver nanoparticles technology used in water purification system as antibacterial activity. Here nanoparticle synthesized by conventional chemical may cause toxic effect in human. So in this technology biologically synthesized nanoparticle would be recommended.

6. Nanocoating is recent application in field of nanoparticle. Because nanoparticle comes in direct contact with human beings may cause harmful effect. So biologically synthesized nanoparticle may reduce the risk of hazards related to nanoparticles.

7. Nanoparticle also used in fabrics as enhance antibacterial effects. If biologically synthesized nanoparticles use in fabrics the toxic effects may decline risk to human beings.

8. NPs may also provide various important applications in food packaging and food safety i.e polymer/clay nanocomposites as high barrier packaging materials, AgNPs as potent antimicrobial agents, and nanosensors and nanomaterial-based assays for the detection of foodrelevant analytes (gasses, small organic molecules and food-borne pathogens.