List of tables

Table 4.1: Morphological and biochemical characteristics of isolated fungal species

Table 5.1: Seasonal physico-chemical parameters of water at study site I (S-I) during the study

 period (July, 2012-June, 2014)

Table 5.2: Seasonal physico-chemical parameters of water at study site II (S-II) during the study period (July, 2012-June, 2014)

Table 5.3: Seasonal physico-chemical parameters of water at study site III (S-III) during the study period (July, 2012-June, 2014)

Table 5.4: Seasonal variations of soil parameters at three sites during the study period (July, 2012-June, 2014)

 Table 5.5: Seasonal variations of different heavy metals in water and soil at S-I site during the study period (July, 2012-June, 2014)

Table 5.6: Seasonal variations of different heavy metals in water and soil at S-II site during the study period (July, 2012-June, 2014)

Table 5.7: Seasonal variations of different heavy metals in water and soil at S-III site during the study period (July, 2012-June, 2014)

Table 5.8: Variables and their levels employed in a BB design for optimization of heavy metal

 absorption percentage by fungal exo-polysaccharide (EPS)

Table 5.9: Analysis of variance (ANOVA) for a fitted response surface quadratic model of the percentage of absorption

 Table 5.10: The set of experimental variables based on box-behnken design and observed

 response of fungal absorption

Table 5.11: EDEX data of heavy metals (Pb and Cd) absorption by fungal mycelium

Table 5.12: EDEX data of heavy metals (Pb, Cd and Hg) absorption by fungal mycelium

Table 5.13: EDEX data of heavy metals (Pb, Cd and Hg) absorption by fungal EPS

Table 5.14: EDEX data of heavy metals (Pb, Cd) absorption by fungal EPS

Table 5.15: Emulsification activities of EPS and xanthan gum with hydrocarbons and oils

Table 5.16: Emulsification activities of EPS at different concentrations with n-hexane

Table 5.17: The effects of EPS concentrations on flocculating activity and flocculation rate using kaolin suspension and MgO suspension at pH 7.0

 Table 5.18: Antimicrobial activity of F12 fungus against Gram negative and Gram positive

 bacteria

Table 5.19: Total fungi at different selected sites

Table 5.20: Results of correlation co-efficient of physico-chemical parameters and fungal

 count of water at pre-monsoon

Table 5.21: Results of correlation co-efficient of physico-chemical parameters and fungal

 count of water at monsoon

Table 5.22: Results of correlation co-efficient of physiological parameters and fungal count of water at post-monsoon