The aim of the research work is to find out a novel, safe and eco-friendly antifouling agent haloprotease as an alternative to current toxic antifoulants from an extreme halophile isolated from a Thalassohaline environment.

OBJECTIVES

- Isolation and screening of haloprotease producing extreme halophile from saltern soil sample
- Identification of the isolates by Microscopic, Macroscopic and Biochemical characterisation
- Production, Assay and Optimisation of physical and chemical parameters
- Partial purification of haloprotease
- Molecular weight determination of haloprotease by SDS-PAGE and Zymogram
- Physical and chemical characterisation of haloprotease
- Molecular characterisation of the isolate by 16srRNA sequencing
- Isolation and Characterisation of Biofouling organisms
- Evaluation of haloprotease as antifouling agent
- *Insilico* study of Biofilm formation protein with Protease Enzyme.