## POTENTIAL UTILIZATION OF POD SHELL AND BIVALVE SHELL IN METAL IONS / ANION SORPTION FROM AQUEOUS MATRICES AND INDUSTRIAL EFFLUENTS

Thesis submitted to the Bharathiar University in partial fulfillment of the requirements for the award of the degree of

## DOCTOR OF PHILOSOPHY IN CHEMISTRY

By

Ms. N. SHYAMALA DEVI M.Sc., M.Phil.,

Under the Guidance of

## Dr. N. MUTHULAKSHMI ANDAL M.Sc., Ph.D.,

**Assistant Professor** 





## DEPARTMENT OF CHEMISTRY PSGR KRISHNAMMAL COLLEGE FOR WOMEN

College of Excellence 2018 – 16th Rank

An Autonomous Institution - Affiliated to Bharathiar University

Reaccredited with 'A' Grade by NAAC

An ISO 9001: 2015 Certified Institution

**Coimbatore - 641 004** 

**DECEMBER 2018**