

# A Green procedure for Synthesis of Biologically Active Amino Acids

**Dr.P.K.Sreekumar, Associate Prof, Dept of Chemistry, NSS college, Pandalam**

## **Abstract**

Aziridine- $\gamma$ -lactones is an important synthons for the enantiospecific synthesis of a wide variety of substituted active amino acids. The present work gives a more efficient and green method for the synthesis of this synthon. A shorter and environmentally friendly method for preparing aziridinolactone in good yield was carried out by microwave irradiation of 4-azidocrotonolactone in solvent free conditions. The starting compound used for the preparation of 4-azidocrotonolactone was mucobromic acid, a cheap and highly functionalized molecule. Finally ring opening of the aziridino lactone by  $\text{LiAlH}_4$  gives the amino acid, Homoserine which is a class of signaling molecule involved in bacterial quorum sensing.