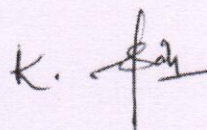


CERTIFICATE

This is to certify that the dissertation entitled "**Atom economic one pot multicomponent synthesis of bioactive spiro-indenoquinoxaline pyrrolo[3,4-a]pyrrolizines and their *in silico* approach**" submitted to the Karpagam Academy of Higher Education in partial fulfillment of the requirements for the award of the degree of **Master of Science in Chemistry** is a bonafide record of original research work done by **Maheswari. M** during the period 2019-20 of their study in the Department of Chemistry at Karpagam Academy of Higher Education, Coimbatore, under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree/Diploma/Associate/Fellowship or similar title to any candidate of any University.

**Signature of Head of the Department**

Head of the Department
Department of Chemistry
Faculty of Arts, Science and Humanities
Karpagam Academy of Higher Education
Coimbatore – 641 021, Tamil Nadu, India.

**Signature of the Guide**

Assistant Professor
Department of Chemistry
Faculty of Arts, Science and Humanities
Karpagam Academy of Higher Education
Coimbatore – 641 021, Tamil Nadu, India.