# BLEND POLYMER ELECTROLYTE BASED ON POLYVINYL ALCOHOL (PVA) AND NELUMBO NUCIFERA (LOTUS LEAF) WITH LITHIUM CHLORIDE

A dissertation Submitted to

## FATIMA COLLEGE (AUTONOMOUS)

(Affiliated to MADURAI KAMARAJ UNIVERSITY, Madurai)

To partial fulfillment of the requirements for the award of the degree

#### MASTER OF SCIENCE IN PHYSICS

Submitted by

## S.IRUDAYA NICHOMI (Reg.No.2019MSCP29)

External Guide

Internal Guide

Dr.S.SELVASEKARAPANDIYAN

Dr. M. V. LEENA CHANDRA M.Sc., M.Phil, Ph.D.,

Director Materials Research Center (Madurai branch)
Madurai

Associate Professor, Research centre of physics, Fatima College, Madurai.



## FATIMA COLLEGE (AUTONOMOUS)

(RE-ACCREDITED WITH 'A' GRADE BY NAAC)

(74th Rank in India Ranking 2021 (NIRF) by MHRD)

Mary Land

MADURAI - 625 018

**MARCH 2021** 

#### **BONAFIDE CERTIFICATE**

This is to certify that this project work entitled "CHARACTERIZATION OF POLYMER ELECTROLYTE BASED ON POLYVINYL ALCOHOL AND NELUMBO NUCIFERA DOPED WITH LITHIUM CHLORIDE" submitted in partial fulfillment of the requirements for the Degree of Master of Science in Physics, is a bonafide record of the work done by S.Irudaya Nichomi under the guidance of Dr. M.V. Leena Chandra, M.Sc., M.Phil., Ph.D., The Research Centre of Physics, Fatima college (Autonomous), Madurai and Dr.S.SELVASEKARAPANDIYAN Director, Materials Research center (Madurai branch) Madurai during 2020-2021.

S. Selva Researchanda.

Director Materials

Research Center

( Madurai branch)

Madurai

phuaChaudm Dr. M. V. Leena Chandra

Research Centre of Physics,

Fatima College,

Madurai.

A. Sheela Vimala Rani

Head, Research Centre of Physics,

Fatima College,

Madurai

#### DECLARATION

I hereby declare that the project entitled CHARACTERIZATION OF POLMER ELECTROLYTE BASED ON POLYVINYL ALCOHOL AND NELUMBO NUCIFERA DOPED WITH LITHIUM CHLORIDE submitted by me to Fatima College (Autonomous), Madurai-625018 for the award of the Degree of Master of Science in Physics is the record of original project work carried out in the Materials Research Centre, Madurai under the supervision of Dr. M. V. Leena Chandra M.Sc., M.Phil., Ph.D., Assistant Professor, Research center of Physics, Fatima College (Autonomous), Madurai and Dr. S. SELVA SEKARAPANDIYAN Director, Materials Research Center, Madurai branch, Madurai and has not formed the thesis for the award of any other degree.

Place: Madurai

Date: 27/03/2021

S. Iendaya Mechoni

S.Irudaya Nichomi

Reg.no.2019MSCP29