

**CHARACTERIZATION OF PROTON CONDUCTING POLYMER  
ELECTROLYTE BASED ON POLYVINYL ALCOHOL (PVA) AND  
LOTUS LEAF POWDER DOPED WITH AMMONIUM FORMATE**

A dissertation Submitted to

**FATIMA COLLEGE (AUTONOMOUS)**

(Affiliated to **MADURAI KAMARAJ UNIVERSITY**, Madurai)

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

**MASTER OF SCIENCE IN PHYSICS**

Submitted by

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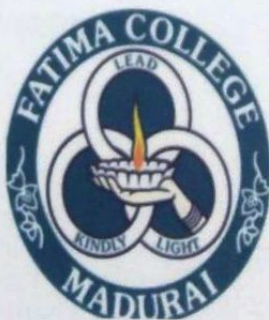
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(RE-ACCREDITED WITH 'A' GRADE BY NAAC)

(74<sup>th</sup> Rank in India Ranking 2020 (NIRF) by MHRD)

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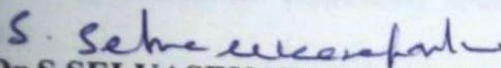
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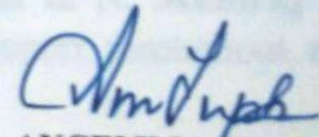


## BONAFIDE CERTIFICATE

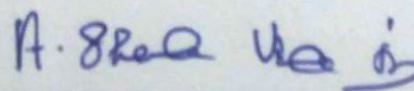
This is to certify that this project work entitled "**CHARACTERIZATION OF PROTON CONDUCTING POLYMER ELECTROLYTE BASED ON POLYVINYL ALCOHOL (PVA) AND LOTUS LEAF POWDER DOPED WITH AMMONIUM FORMATE**" submitted in partial fulfilment of the requirements for the Degree of Master of Science in Physics, is a bonafide record of the work done by **V.VINOTHA** under the guidance of **Dr. ANCEMMA JOSEPH** Assistant Professor, Research centre of physics, Fatima College,(Autonomous), Madurai and **Dr.S.SELVASEKARAPANDIAN**, Director ,Materials Research center (Madurai branch) Madurai during 2020-2021.

  
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## **DECLARATION**

I declare that the project work incorporated in this dissertation entitled **“CHARACTERIZATION OF PROTON CONDUCTING POLYMER ELECTROLYTE BASED ON POLYVINYL ALCOHOL (PVA) AND LOTUS LEAF POWDER DOPED WITH AMMONIUM FORMATE”** is based on the original work, carried out by me for the degree of MASTER OF SCIENCE under the supervision of **Dr. ANCEMMA JOSEPH**, Associate Professor, Research Centre of Physics, Fatima College and **Dr. S. SELVASEKARAPANDIAN**, Materials Research Centre, Madurai. I also hereby declare that this work, in part or full, has not been submitted for any degree or diploma of Madurai Kamaraj University or any Institution.

Place: Madurai

Date: 27/03/2021

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