



# सीएसआईआर - राष्ट्रीय रासायनिक प्रयोगशाला

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

डॉ. होमी भाभा मार्ग, पुणे - 411 008, भारत



## CSIR - NATIONAL CHEMICAL LABORATORY

(Council of Scientific & Industrial Research)

Dr. Homi Bhabha Road, Pune - 411 008, India

### CERTIFICATE

This is to certify that the project entitled “Nafion ionomer membrane based aqueous Zn/MnO<sub>2</sub> battery: a comparative study on the impact of various electrolytes towards cycling stability” is a bonafide work carried out by Ms. Maria Kurian, student of M.Sc. Chemistry, Sacred Heart college, Thevara, Kochi, under my supervision and guidance during the period of April 2019 to June 2019 in the Physical and Materials Chemistry Division of CSIR-National Chemical Laboratory, Pune. The present work or any part of it has not been submitted to any other university or institution for the award of any degree or diploma.

Date: 28-06-2019

Place: Pune

**Dr. Sreekumar Kurungot**

Principal Scientist

Dr. Sreekumar Kurungot  
Principal Scientist  
Physical & Materials Chemistry Division  
CSIR-National Chemical Laboratory  
Pune - 411 008

#### Communication Channels

NCL Level DID : 2590  
NCL Board No. : +91-20-25902000  
EPABX : +91-20-25893300  
: +91-20-25893400



#### FAX

Director's Office : +91-20-25902601  
COA's Office : +91-20-25902660  
SPO's Office : +91-20-25902664

#### WEBSITE

[www.ncl-india.org](http://www.ncl-india.org)