SYNTHESIS AND CHARACTERIZATION OF BISMUTH INCORPORATED MULTIWALLED CARBON NANOTUBES.

A Project report submitted for partial fulfillment of the Requirement for the degree of

MASTER OF SCIENCE IN CHEMISTRY

By

Ms. R.SRIJAA

(Register No: 2019MSCC25)



FATIMA COLLEGE (AUTONOMOUS)

DEPARTMENT OF CHEMISTRY

[Re-Accredited with 'A' Grade by NAAC (3rd cycle)

74th Rank in India Ranking 2020(NIRF) by MHRD]

Mary land, MADURAI - 625018

Under the Guidance of

Dr. J.ANNARAJ

Assistant professor and Head



Department of Materials science

School of Chemistry

Madurai Kamaraj university

University with Potential for Excellence

Re-Accredited with A++ Grade by NAAC (CGPA: 3.54) in the Fourth Cycle]

Madurai- 625021.

April - 2021

BONAFIDE CERTIFICATE

This is to certify that Ms. R.SRIJAA, M.Sc., (Chemistry) student of Fatima College, Madurai has done the project work entitled "Synthesis and characterization of bismuth incorporated multiwalled carbon nanotubes" during the academic year 2020-2021 under the supervision of Dr. J.ANNARAJ ,Assistant professor and Head i/c ,Department of Materials Science, Kamaraj University, Madurai—625021.

This is to certify that no part of the work has been presented for any degree / diploma in any other form.

Rm. M.

Mrs. R.M. Nagalakshmi, M.Sc., M.Phil, B.Ed

Internal guide
Assistant Professor
Department of Chemistry
Fatima College
Madurai- 625018

Dr. J. Annaraj

External guide
Assistant professor and Head i/c
Department of Materials Science
School of Chemistry
Madurai Kamaraj University
Madurai- 625021.

S. Tedoro.

Dr. B.Medona Head & Associate Professor, Department of Chemistry, Fatima College, Madurai -625018.

External examiner

DECLARATION

I do here by declare that this dissertation entitled "Synthesis and characterization of bismuth incorporated multiwalled carbon nanotubes" submitted to Fatima College in partial fulfillment of requirement for the award of MASTER OF SCIENCE IN CHEMISTRY, is a record of original research work done by me. I also declare that this dissertation or part of work has not been published earlier elsewhere in any manner.

R. Srijaa

Place: Madurai - 18. Signature of the candidate

Date: 15. 04.2021 R.SRIJAA (Register2019MSCC25)