

## **MATERIALS RESEARCH CENTER**

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Email : [mrckovai@gmail.com](mailto:mrckovai@gmail.com)

Dr. S. Selvasekarapandian  
Director

Date: 15.06.2023

### **CERTIFICATE**

This is to certify that D. ANEE JOSEPHA (2022MSCP01), Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University), Madurai has successfully completed her Internship under the mentorship of Dr. S. Selvasekarapandian, Emeritus Professor, Bharathiar University & Director, Materials Research Center, Coimbatore. She worked on the title "FABRICATION OF PRIMARY SODIUM ION CONDUCTING BATTERY USING *CASSIA FISTULA* (SARAKONDRAI) FLOWER AS BIOMATERIAL BASED ELECTROLYTE" in Materials Research Center, Coimbatore during the period of 15.05.2023 to 15.06.2023.

MARKS OBTAINED: 58/60

*S. Selvasekarapandian*

Director

**The Director**  
**Materials Research Center**  
Coimbatore - 641 045

---

**Main Branch:** 200A, Thiruvalluvar Nagar, Ramanathapuram, Coimbatore – 641 045

**Madurai Branch:** 7A, Veerabathirayar lane, South Gate, Madurai – 625 001

INDIA.



SRI SIVASUBRAMANIYA NADAR COLLEGE OF ENGINEERING (AUTONOMOUS),  
KALAVAKKAM-603 110  
(DEPARTMENT OF PHYSICS)

Phone No: 9566759835

E-Mail: [chandrasekarana@ssn.edu.in](mailto:chandrasekarana@ssn.edu.in)

Dr. A. Chandrasekaran, M.Sc., M.Phil., Ph.D., PGDCA.,

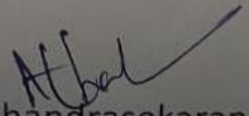
Assistant Professor

Date: 15.06.2023

CERTIFICATE

This is to certify that K. APARNA (2022MSCP02), Research Center of Physics, Fatima College (Affiliated with Madurai Kamaraj University), Madurai, has successfully completed her internship under the mentorship of Dr. A. Chandrasekaran, Assistant Professor, Department of Physics, Kalavakkam. She worked on the title "**MEASUREMENT OF EXTERNAL AND INTERNAL GAMMA DOSE ASSESSMENT IN CONCRETE HOLLOW BLOCKS**" in Sri Sivasubramaniya Nadar College of Engineering (Autonomous), Kalavakkam, during the period of May 29, 2023 to June 16, 2023.

**MARKS OBTAINED: 58/60**

  
Dr. A. Chandrasekaran

Assistant Professor

Dr. A. Chandrasekaran, M.Sc., M.Phil., Ph.D., PGDCA.,

Assistant Professor

Department of Physics

SSN College of Engineering

Kalavakkam - 603 110.

Rajiv Gandhi Salai (OMR), Kalavakkam-603110, Tamil Nadu, India.

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Dr. S. Selvasekarapandian

Date: 15.06.2023

Director

## CERTIFICATE

This is to certify that D. AVILA FRANCINA (2022MSCP03), Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University), Madurai has successfully completed her Internship under the mentorship of Dr. S. Selvasekarapandian, Emeritus Professor, Bharathiar University & Director, Materials Research Center, Coimbatore. She worked on the title "FABRICATION OF PRIMARY SODIUM ION CONDUCTING BATTERY USING CASSIA FISTULA (SARAKONDRAI) FLOWER AS BIOMATERIAL BASED ELECTROLYTE" in Materials Research Center, Coimbatore during the period of 15.05.2023 to 15.06.2023.

MARKS OBTAINED: 58/60

*S. Selvasekarapandian*

Director

**The Director  
Materials Research Center  
Coimbatore - 641 045**

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Main Branch: 200A, Thiruvalluvar Nagar, Ramanathapuram, Coimbatore – 641 045

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Email : [mrckovai@gmail.com](mailto:mrckovai@gmail.com)

Dr. S. Selvasekarapandian  
Director

Date: 15.06.2023

### CERTIFICATE

This is to certify that S. BALAMEENA (2022MSCP04), Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University), Madurai has successfully completed her Internship under the mentorship of Dr. S. Selvasekarapandian, Emeritus Professor, Bharathiar University & Director, Materials Research Center, Coimbatore. She worked on the title "FABRICATION OF PRIMARY SODIUM ION CONDUCTING BATTERY USING *CASSIA FISTULA* (SARAKONDRAI) FLOWER AS BIOMATERIAL BASED ELECTROLYTE" in Materials Research Center, Coimbatore during the period of 15.05.2023 to 15.06.2023.

MARKS OBTAINED: 58/60

*S. Selvasekarapandian*

Director

**The Director**  
**Materials Research Center**  
**Coimbatore - 641 045**

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Main Branch: 200A, Thiruvalluvar Nagar, Ramanathapuram, Coimbatore – 641 045

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Phone No: 9566759835

E-Mail: [chandrasekarana@ssn.edu.in](mailto:chandrasekarana@ssn.edu.in)

Dr. A. Chandrasekaran, M.Sc., M.Phil., Ph.D., PGDCA.,

Assistant Professor

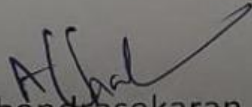
Date: 15.06.2023

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CERTIFICATE

*This is to certify that J. DHARSHINI (2022MSCP05), Research Center of Physics, Fatima College (Affiliated with Madurai Kamaraj University), Madurai, has successfully completed her internship under the mentorship of Dr. A. Chandrasekaran, Assistant Professor, Department of Physics, Kalavakkam. She worked on the title "HEAVY AND LIGHT MINERAL ANALYSIS OF INDUSTRIALLY POLLUTED LAKE SEDIMENTS" in Sri Sivasubramaniya Nadar College of Engineering (Autonomous), Kalavakkam, during the period of May 29, 2023 to June 16, 2023.*

**MARKS OBTAINED: 58/60**

  
Dr. A. Chandrasekaran

Assistant Professor

Dr. A. ChandraSekaran, M.Sc., M.Phil., Ph.D., PGDCA.,  
Assistant Professor  
Department of Physics  
SSN College of Engineering  
Kalavakkam - 603 110.

---

Rajiv Gandhi Salai (OMR), Kalavakkam-603110, Tamil Nadu, India.

# MADURAI KAMARAJ UNIVERSITY

*(University with Potential for Excellence)*



**Dr. J. ANNARAJ**  
Associate Professor & Head  
Department of Materials Science  
School of Chemistry



Date: 08.07.2023

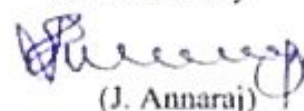
## CERTIFICATE

This is to certify that, Ms. M. DHIYA SHREE, Reg. No. 2022MSCP06, PG Student from Department of Physics, Fatima College, Madurai has visited our lab and done the work entitled "Chemical synthesis and characterization of Silver nanoparticles" from 08.05.2023 to 08.06.2023 (30 days) under the guidance of Dr. M. Jeyanthinath in the Department of Materials Science, School of Chemistry, Madurai Kamaraj University, Palkalai Nagar, Madurai -625021.

During the internship, we found her to be dedicated, hardworking individual and her performance was good. We wish her all the best in her future endeavors.

MARKS OBTAINED: 58/60

Yours sincerely

  
(J. Annaraj)

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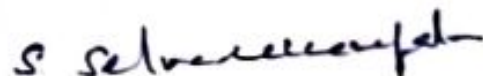
**Dr. S. Selvasekarapandian**  
Director

Date: 15.06.2023

### **CERTIFICATE**

This is to certify that **N. S. ISHWARIYA RANI (2022MSCP08)**, Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University), Madurai has successfully completed her Internship under the mentorship of **Dr. S. Selvasekarapandian**, Emeritus Professor, Bharathiar University & Director, Materials Research Center, Coimbatore. She worked on the title "**FABRICATION OF PRIMARY SODIUM ION CONDUCTING BATTERY USING CASSIA FISTULA (SARAKONDRAI) FLOWER AS BIOMATERIAL BASED ELECTROLYTE**" in Materials Research Center, Coimbatore during the period of 15.05.2023 to 15.06.2023.

**MARKS OBTAINED: 58/60**



**Director**

**The Director**  
**Materials Research Center**  
**Coimbatore - 641 045**

---

**Main Branch: 200A, Thiruvalluvar Nagar, Ramanathapuram, Coimbatore – 641 045**

**Madurai Branch: 7A, Veerabathirayar lane, South Gate, Madurai – 625 001**

**INDIA.**

# MADURAI KAMARAJ UNIVERSITY

*(University with Potential for Excellence)*



**Dr. J. ANNARAJ**  
Associate Professor & Head  
Department of Materials Science  
School of Chemistry



Date: 08.07.2023

## CERTIFICATE

This is to certify that, **Ms. S. JENO**, Reg. No. 2022MSCP10, PG Student from Department of Physics, Fatima College, Madurai has visited our lab and done the work entitled "**Green synthesis and characterization of silver nanoparticles**" from **08.05.2023 to 08.06.2023 (30 days)** under the guidance of **Dr. M. Jeyanthinath** in the Department of Materials Science, School of Chemistry, Madurai Kamaraj University, Palkalai Nagar, Madurai -625021.

During the internship, we found her to be dedicated, hardworking individual and her performance was good. We wish her all the best in her future endeavors.

**MARKS OBTAINED: 57/60**

Yours sincerely

(J. Annaraj)

**Madurai Kamaraj University**

(University with the Potential for Excellence)

Madurai 625 021

Tamil Nadu, India



**Dr. Sujin P Jose**

Assistant Professor & Head

Department of Computational Physics

School of Physics

[sujamystica@yahoo.com](mailto:sujamystica@yahoo.com)

+917806920005, +91 9344632141

Date: 06.10.2023


### CERTIFICATE

This is to certify that **Ms. S. JESWIL (2022MSCP11)**, PG student, Research Center of Physics, Fatima College, Madurai, 625018 has successfully completed her internship under the mentorship of Dr. Sujin P. Jose, Assistant Professor and Head, Department of Computational Physics, School of Physics, Madurai Kamaraj University. Ms. S. Jeswil worked on the title **“SYNTHESIS AND CHARACTERIZATION OF COBALT TUNGSTATE FOR SUPERCAPACITOR APPLICATION”** at the Advanced Materials Laboratory, School of Physics in Madurai Kamaraj University, Madurai, 625021 during the period from 15.05.2023 to 14.06.2023.

During the internship, I found her to be dedicated, hardworking and her performance was good. I wish her all the best in her future endeavors.

**MARKS OBTAINED: 56 / 60**

Yours faithfully

  
(Dr. Sujin P Jose) 6/10/23

**Dr. SUJIN P. JOSE**

Assistant Professor & Head

Department of Computational Physics

School of Physics

Madurai Kamaraj University

Madurai - 625 021.

**SRI SIVASUBRAMANIYA NADAR COLLEGE OF ENGINEERING (AUTONOMOUS),  
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E-Mail: [chandrasedkarana@ssn.edu.in](mailto:chandrasedkarana@ssn.edu.in)

Dr. A. Chandrasekaran M.Sc., M.Phil., Ph.D., PGDCA.,

Assistant Professor

Date:15.06.2023

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**CERTIFICATE**

*This is to certify that JEYAMEENA.P (2022MSCP12), Research Center of Physics, Fatima College (Affiliated with Madurai Kamaraj University), Madurai, has successfully completed her internship under the mentorship of Dr. A. Chandrasekaran, Assistant Professor, Department of Physics, Kalavakkam. She worked on the title "STUDY ABOUT THE EFFECTS OF CHROMATE INDUSTRIES ON NATURAL RADIOACTIVITY IN SOIL SAMPLES" in Sri Sivasubramaniya Nadar College of Engineering (Autonomous), Kalavakkam, during the period of May 29, 2023 to June 16, 2023.*

**MARKS OBTAINED: 58/60**

  
Dr. A. Chandrasekaran

Assistant Professor  
Dr.A.ChandraSekaran,M.Sc.,M.Phil.,Ph.D.,PGDCA.,  
Assistant Professor  
Department of Physics  
SSV College of Engineering  
Kalavakkam - 603 110

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Rajiv Gandhi Salai(OMR), Kalavakkam-603110, Tamil Nadu, India.



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Dr. M. Gulam Mohamed, M.Sc., M.Phil., Ph.D., M.B.A (Edn.Mgt).,  
HOD In-charge & Dean of Research  
PG & Research Department of Physics

☎+919444227181  
✉gulammohamed@thenewcollege.edu.in

Date: 16/06/2023

This is to certify that Ms. **JOSHINI H [Reg no. 2022MSCP13]** M.Sc., PHYSICS student of Fatima College, Mary Land, Madurai - 625018 has undergone an internship programme from 30<sup>th</sup> May – 16<sup>th</sup> June 2023 at Department of Physics 'The New College', Royapettah, Chennai - 600014. During the internship training she has interacted with Dr. M. GULAM MOHAMED, HOD IN-CHARGE AND DEAN OF RESEARCH and has worked on a project entitled on, **"HYDROTHERMAL SYNTHESIS OF NANO-SIZED NICKEL FERRITE NANOPARTICLES AND IT'S MAGNETIC BEHAVIOUR"**. She has successfully completed the internship programme and we have found that she is sincere, open to learn and punctual during the internship. She has been awarded a mark of **57/60** for her internship and we wish her all the best for future endeavours.



*M. M. 16/06/2023*  
Signature with Date and Seal

Head of the Department 1/c  
PG & Research Department of Physics  
The New College (Autonomous)  
Chennai-600 014.



Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam-603 110  
(An Autonomous Institution, Affiliated to Anna University, Chennai)

**(DEPARTMENT OF PHYSICS)**

Phone No : +9194441 39760

E-MAIL: [kennedysmm@ssn.edu.in](mailto:kennedysmm@ssn.edu.in)

**Dr. S. Masilla Moses Kennedy , M.Sc., M. Phil., Ph.D.**

**Professor and Head**

**DATE: 16.06.2023**

**CERTIFICATE**

This is to certify that **S.R. LARA KUMARI (2022MSCP14)**, **Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University) , Madurai**, has successfully completed her Internship under the mentorship of **Dr. S.Masilla Moses Kennedy**, Professor and Head, Department of Physics, Kalavakkam. She worked on the title “**SYNTHESIS AND CHARACTERIZATION OF  $\text{Sm}^{3+}$  DOPED  $\text{Ca}_2\text{KZn}_2\text{V}_2\text{O}_5$  PHOSPHORS**” in Sri Sivasubramaniya Nadar College of Engineering (Autonomous, Affiliated to Anna University, Chennai) Kalavakkam, during the period of 29.05.2023 to 16.06.2023.

**MARKS OBTAINED: 56/60.**

  
**Signature of Supervisor**

**(Dr. S. Masilla Moses Kennedy)**

Dr. S. MASILLA MOSES KENNEDY  
Professor and Head  
Department of Physics  
SSN College of Engineering  
Kalavakkam-603 110



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Dr. M. Gulam Mohamed, M.Sc., M.Phil., Ph.D., M.B.A (Edn.Mgt).,  
HOD In-charge & Dean of Research  
PG & Research Department of Physics

☎+919444227181  
✉gulammohamed@thenewcollege.edu.in

Date: 16/06/2023

This is to certify that Ms. **MANJUPARKAVI R [Reg no. 2022MSCP15]** M.Sc., PHYSICS student of Fatima College, Mary Land, Madurai - 625018 has undergone an internship programme from 30<sup>th</sup> May – 16<sup>th</sup> June 2023 at Department of Physics 'The New College', Royapettah, Chennai - 600014. During the internship training she has interacted with Dr. M. GULAM MOHAMED, HOD IN-CHARGE AND DEAN OF RESEARCH and has worked on a project entitled on, **"SYNTHESIS AND STRUCTURAL CHARACTERIZATION OF CADMIUM SULPHIDE NANOPARTICLES BY CO- PRECIPITATION METHOD"**. She has successfully completed the internship programme and we have found that she is sincere, open to learn and punctual during the internship. She has been awarded a mark of **58/60** for her internship and we wish her all the best for future endeavours.

*M. M.* 16/06/2023  
Signature with Date and Seal



Head of the Department i/c  
PG & Research Department of Physics  
The New College (Autonomous)  
Chennai-600 014.



Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam-603 110  
(An Autonomous Institution, Affiliated to Anna University, Chennai)

## **DEPARTMENT OF PHYSICS**

PHONE NO: +9194441 39760

E-MAIL : [kennedysmm@ssn.edu.in](mailto:kennedysmm@ssn.edu.in)

(Dr. S. Masilla Moses Kennedy)

M.Sc, M. Phil, Ph.D

Professor and Head

DATE:16.06.2023

### **CERTIFICATE**

This is to certify that **K.S. PADMHA PRIYA (2022MSCP16)**, **Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University), Madurai**, has successfully completed her Internship under the mentorship of **Dr. S. Masilla Moses Kennedy**, Professor and Head, Department of Physics, Kalavakkam. She worked on the title **“SYNTHESIS AND CHARACTERIZATION OF LANTHANIDE DOPED VANADATE PHOSPHORS”** in Sri Sivasubramaniya Nadar College of Engineering (Autonomous, Affiliated to Anna University, Chennai), Kalavakkam, during the period of 16.05.2023 to 16.06.2023.

**MARKS OBTAINED: 55/60.**

  
**Signature of Supervisor**

**(Dr. S. Masilla Moses Kennedy)**

Dr. S. MASILLA MOSES KENNEDY  
Professor and Head  
Department of Physics  
SSN College of Engineering  
Kalavakkam-603 110



Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam-603 110  
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**(DEPARTMENT OF PHYSICS)**

Phone No : +9194441 39760

E-MAIL: [kennedysmm@ssn.edu.in](mailto:kennedysmm@ssn.edu.in)

**Dr. S. Masilla Moses Kennedy , M.Sc., M. Phil., Ph.D.**

**Professor and Head**

**DATE: 16.06.2023**

**CERTIFICATE**

This is to certify that **M.PRIYADHARSHINI (2022MSCP17)**, **Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University) , Madurai**, has successfully completed her Internship under the mentorship of **Dr. S.Masilla Moses Kennedy**, Professor and Head, Department of Physics, Kalavakkam. She worked on the title “ **SYNTHESIS AND CHARACTERIZATION OF  $Tb^{3+}$  and  $Sm^{3+}$  DOPED  $Sr_3Bi(PO_4)_3$  PHOSPHATE PHOSPHOR**” in Sri Sivasubramaniya Nadar College of Engineering (Autonomous, Affiliated to Anna University, Chennai) Kalavakkam, during the period of 29.05.2023 to 16.06.2023.

**MARKS OBTAINED: 55/60.**

  
**Signature of Supervisor**

**(Dr. S. Masilla Moses Kennedy)**

Dr. S. MASILLA MOSES KENNEDY  
Professor and Head  
Department of Physics  
SSN College of Engineering  
Kalavakkam-603 110

**SRI SIVASUBRAMANIYA NADAR COLLEGE OF ENGINEERING (AUTONOMOUS),  
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Dr. A. Chandrasekaran, M.Sc., M.Phil., Ph.D., PGDCA.,

Assistant Professor

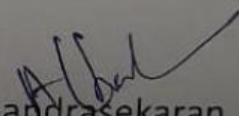
Date:15.06.2023

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**CERTIFICATE**

This is to certify that C. SABARNIKKA (2022MSCP19), **Research Center of Physics, Fatima College (Affiliated with Madurai Kamaraj University), Madurai**, has successfully completed her internship under the mentorship of **Dr. A. Chandrasekaran**, Assistant Professor, Department of Physics, Kalavakkam. She worked on the title "**ANALYSIS OF RECENTLY EXCAVATED ARCHEOLOGICAL TERRACOTTA POTTERY SAMPLES OF TAMIL NADU BY SPECTROSCOPIC TECHNIQUES**" in Sri Sivasubramaniya Nadar College of Engineering (Autonomous), Kalavakkam, during the period of May 29, 2023 to June 16, 2023.

**MARKS OBTAINED: 58/60**

  
Dr. A. Chandrasekaran

Assistant Professor

Dr.A.ChandraSekaran,M.Sc.,M.Phil.,Ph.D.,PGDCA.,  
Assistant Professor  
Department of Physics  
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Rajiv Gandhi Salai (OMR), Kalavakkam-603110, Tamil Nadu, India.



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HOD In-charge & Dean of Research  
PG & Research Department of Physics

☎+919444227181  
✉gulammohamed@thenewcollege.edu.in

Date: 16/06/2023

This is to certify that Ms. SALEITH EVANJALINE S [Reg no. 2022MSCP20] M.Sc., PHYSICS student of Fatima College, Mary Land, Madurai - 625018 has undergone an internship programme from 30<sup>th</sup> May – 16<sup>th</sup> June 2023 at Department of Physics 'The New College', Royapettah, Chennai - 600014. During the internship training she has interacted with Dr. M. GULAM MOHAMED, HOD IN-CHARGE AND DEAN OF RESEARCH and has worked on a project entitled on, **"PREPARATION AND CHARACTERIZATION OF SILICA NANOPARTICLES BY SOL-GEL METHOD"**. She has successfully completed the internship programme and we have found that she is sincere, open to learn and punctual during the internship. She has been awarded a mark of 57/60 for her internship and we wish her all the best for future endeavours.

*M. M.* 16/06/2023

Signature with Date and Seal



Head of the Department 1/c  
PG & Research Department of Physics  
The New College (Autonomous)  
Chennai-600 014.

# MADURAI KAMARAJ UNIVERSITY

*(University with Potential for Excellence)*



**Dr. J. ANNARAJ**  
Associate Professor & Head  
Department of Materials Science  
School of Chemistry



Date: 08.07.2023

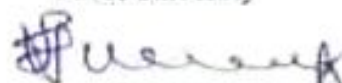
## CERTIFICATE

This is to certify that, **Ms. S. SARUMATHI**, Reg. No. 2022MSCP21, PG Student from Department of Physics, Fatima College, Madurai has visited our lab and done the work entitled "**Synthesis and characterization of Copper oxide nanoparticles**" from **08.05.2023 to 08.06.2023 (30 days)** under the guidance of **Dr. M. Jeyanthinath** in the Department of Materials Science, School of Chemistry, Madurai Kamaraj University, Palkalai Nagar, Madurai -625021.

During the internship, we found her to be dedicated, hardworking individual and her performance was good. We wish her all the best in her future endeavors.

**MARKS OBTAINED: 57/60**

Yours sincerely

  
(J. Annaraj)

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Website : [www.mrckovai.in](http://www.mrckovai.in)

Email : [mrckovai@gmail.com](mailto:mrckovai@gmail.com)

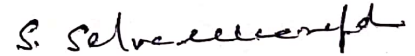
Dr. S. Selvasekarapandian  
Director

Date: 15.06.2023

### **CERTIFICATE**

This is to certify that M. SHIVADHARINI (2022MSCP22), Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University), Madurai has successfully completed her Internship under the mentorship of Dr. S. Selvasekarapandian, Emeritus Professor, Bharathiar University & Director, Materials Research Center, Coimbatore. She worked on the title "FABRICATION OF PRIMARY SODIUM ION CONDUCTING BATTERY USING *CASSIA FISTULA* (SARAKONDRAI) FLOWER AS BIOMATERIAL BASED ELECTROLYTE" in Materials Research Center, Coimbatore during the period of 15.05.2023 to 15.06.2023.

MARKS OBTAINED: 58/60



Director

**The Director**  
**Materials Research Center**  
**Coimbatore - 641 045**

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**Main Branch:** 200A, Thiruvalluvar Nagar, Ramanathapuram, Coimbatore – 641 045

**Madurai Branch:** 7A, Veerabathirayar lane, South Gate, Madurai – 625 001

INDIA.



## MATERIALS RESEARCH CENTER

RUN BY

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Website : [www.mrckovai.in](http://www.mrckovai.in)

Email : [mrckovai@gmail.com](mailto:mrckovai@gmail.com)

Dr. S. Selvasekarapandian  
Director

Date: 15.06.2023

### CERTIFICATE

This is to certify that S. SUBASHINI (2022MSCP23), Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University), Madurai has successfully completed her Internship under the mentorship of Dr. S. Selvasekarapandian, Emeritus Professor, Bharathiar University & Director, Materials Research Center, Coimbatore. She worked on the title "FABRICATION OF PRIMARY SODIUM ION CONDUCTING BATTERY USING *CASSIA FISTULA* (SARAKONDRAI) FLOWER AS BIOMATERIAL BASED ELECTROLYTE" in Materials Research Center, Coimbatore during the period of 15.05.2023 to 15.06.2023.

MARKS OBTAINED: 58/60

*S. Selvasekarapandian*

Director

**The Director**  
**Materials Research Center**  
**Coimbatore - 641 045**

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Main Branch: 200A, Thiruvalluvar Nagar, Ramanathapuram, Coimbatore – 641 045

Madurai Branch: 7A, Veerabathirayar lane, South Gate, Madurai – 625 001

INDIA.



# MADURAI KAMARAJ UNIVERSITY

*(University with Potential for Excellence)*



**Dr. J. ANNARAJ**  
Associate Professor & Head  
Department of Materials Science  
School of Chemistry



Date: 08.07.2023


## CERTIFICATE

This is to certify that, **Ms. V. SUBHASHINI**, Reg. No. 2022MSCP24, PG Student from Department of Physics, Fatima College, Madurai has visited our lab and done the work entitled **"Synthesis and characterization of Zinc oxide nanoparticles"** from **08.05.2023 to 08.06.2023 (30 days)** under the guidance of **Dr. M. Jeyanthinath** in the Department of Materials Science, School of Chemistry, Madurai Kamaraj University, Palkalai Nagar, Madurai -625021.

During the internship, we found her to be dedicated, hardworking individual and her performance was good. We wish her all the best in her future endeavors.

**MARKS OBTAINED: 58/60**

Yours sincerely

  
(J. Annaraj)



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**Dr. M. Gulam Mohamed, M.Sc., M.Phil., Ph.D., M.B.A (Edn.Mgt),**  
**HOD In-charge & Dean of Research**  
**PG & Research Department of Physics**

☎+919444227181  
✉gulammohamed@thenewcollege.edu.in

Date: 16/06/2023

This is to certify that Ms. SUSAN KEZIAH A [Reg no. 2022MSCP25] M.Sc., PHYSICS student of Fatima College, Mary Land, Madurai - 625018 has undergone an internship programme from 30<sup>th</sup> May – 16<sup>th</sup> June 2023 at Department of Physics 'The New College', Royapettah, Chennai - 600014. During the internship training she has interacted with Dr. M. GULAM MOHAMED, HOD IN-CHARGE AND DEAN OF RESEARCH and has worked on a project entitled on, "CAYRATIA PEDATA LEAF EXTRACT ASSISTED GREEN SYNTHESIS OF ZINC OXIDE NANOPARTICLES AND IT'S OPTICAL ACTIVITY". She has successfully completed the internship programme and we have found that she is sincere, open to learn and punctual during the internship. She has been awarded a mark of 58/60 for her internship and we wish her all the best for future endeavours.



*M. M.* 16/06/2023  
Signature with Date and Seal

Head of the Department *1/2*  
PG & Research Department of Physics  
The New College (Autonomous)  
Chennai-600 014.



Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam-603 110  
(An Autonomous Institution, Affiliated to Anna University, Chennai)

## DEPARTMENT OF PHYSICS

PHONE NO: +9194441 39760

E-MAIL : [kennedysmm@ssn.edu.in](mailto:kennedysmm@ssn.edu.in)

Dr. S. Masilla Moses Kennedy ,M.Sc, M. Phil, Ph.D

Professor and Head

DATE:16.06.2023

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### CERTIFICATE

This is to certify that **R.M.THIVYAVANI (2022MSCP26)**, Research Center of Physics, Fatima College (Affiliated to Madurai Kamaraj University), Madurai, has successfully completed her Internship under the mentorship of **Dr. S. Masilla Moses Kennedy** , Professor and Head, Department of Physics, Kalavakkam. She worked on the title “**SYNTHESIS AND CHARACTERIZATION OF  $\text{Eu}^{3+}$  AND  $\text{Dy}^{3+}$  DOPED  $\text{Sr}_3\text{Bi}(\text{PO}_4)_3$  PHOSPHATE PHOSPHORS**” in Sri Sivasubramaniya Nadar College of Engineering(Autonomous, Affiliated to Anna University, Chennai), Kalavakkam, during the period of 16.05.2023 to 16.06.2023.

**MARKS OBTAINED: 56/60.**

  
Signature of Supervisor  
(Dr. S. Masilla Moses Kennedy)  
Dr. S. MASILLA MOSES KENNEDY  
Professor and Head  
Department of Physics  
SSN College of Engineering  
Kalavakkam-603 110

**Madurai Kamaraj University**

(University with the Potential for Excellence)

Madurai 625 021

Tamil Nadu, India



**Dr. Sujin P Jose**

Assistant Professor & Head

Department of Computational Physics

School of Physics

[sujamystica@yahoo.com](mailto:sujamystica@yahoo.com)

+917806920005, +91 9344632141

Date: 10.08.2023

## **CERTIFICATE**

This is to certify that **Ms. M. YOGADHARSHINI (2022MSCP27)**, PG student, Research Center of Physics, Fatima College, Madurai, 625018 has successfully completed her internship under the mentorship of Dr. Sujin P. Jose, Assistant Professor and Head, Department of Computational Physics, School of Physics, Madurai Kamaraj University. Ms. M. Yogadharshini worked on the title **“SYNTHESIS AND CHARACTERIZATION OF TITANIUM CARBIDE FOR SUPERCAPACITOR APPLICATION”** at the Advanced Materials Laboratory, School of Physics in Madurai Kamaraj University, Madurai, 625 021 during the period from 15.05.2023 to 14.06.2023.

During the internship, I found her to be dedicated, hardworking and her performance was good. I wish her all the best in her future endeavors.

**MARKS OBTAINED: 56/60**

Yours faithfully



10/8/23

(Dr. Sujin P Jose)

**Dr. SUJIN P. JOSE**

Assistant Professor & Head

Department of Computational Physics

School of Physics

Madurai Kamaraj University

Madurai - 625 021.