

# REMOVAL OF FLUORIDE ION IN POTABLE WATER USING COFFEE GROUND

SUBMITTED BY

- ANAGHA C (PWATSCH005)
- ANVITHA SHYAM (PWATSCH007)
- SMRUTHI N (PWATSCH015)
- GOPIKA M (PWATSCH029)
- NEAMAH FATHIMA MR (PWATSCH032)

DEPARTMENT OF CHEMISTRY  
PROVIDENCE WOMEN'S COLLEGE  
CALICUT – 09

Submitted to the University of Calicut in Partial Fulfilment of the Requirements  
For the award of the Degree of BACHELOR OF SCIENCE in CHEMISTRY



**Under the Guidance of**

**MS. ANEESHA KP**

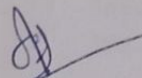
Junior Chemist, Water Lab.

# CERTIFICATE

Certified that this project entitled "REMOVAL OF FLUORIDE ION IN POTABLE WATER " is based on the bonafide work done by ANAGHA C (PWATSCH005), ANVITHA SHYAM (PWATSCH007), SMRUTHI N (PWATSCH015), GOPIKA M (PWATSCH029), NEAMAH FATHIMA MR (PWATSCH032) under my supervision and guidance in partial fulfilment of the requirements for the award of the DEGREE OF BACHELOR OF SCIENCE in CHEMISTRY in the year 2021-2022.

Place: Malaparamba

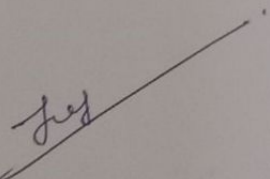
Date: May 2022



Dr. Sr. Asha Thomas

Head of the department

Department of chemistry



*Jeeja Rani A.T*  
Assistant Professor  
P.G. & Research Dept. of Chemistry  
Malabar Christian College, Calicut - 1

# **COMPARITIVE STUDY OF DIFFERENT HONEY SAMPLES**

## **SUBMITTED BY**

- |  |              |
|--|--------------|
| <input type="checkbox"/> RAMEESHA JARHAN V | (PWATSCH034) |
| <input type="checkbox"/> MEGHA KT          | (PWATSCH003) |
| <input type="checkbox"/> MUFEEDA PARVIN MP | (PWATSCH031) |
| <input type="checkbox"/> THASNI A          | (PWATSCH041) |

## **Under the Guidance of**

**GOPIKA A**

**Senior Chemist (Water Lab Calicut)**

Submitted to the University of Calicut in Partial Fulfillment of the  
Requirements

For the award of the Degree of  
**BACHELOR OF SCIENCE in CHEMISTRY**



**DEPARTMENT OF CHEMISTRY  
PROVIDENCE WOMEN'S COLLEGE  
CALICUT - 09  
2021-22**

## CERTIFICATE

This is to certify that **Ms. Rameesha Jarhan V, Mufeeda Parvin MP, Thasni A, Megha KT** Department of Chemistry, Providence Women's College, Calicut has undergone internship Training and Project entitled "**Comparitive Study of Different Honey sample**" is an original work done by them at Water lab under my guidance.

Date: 8/02/2022

Place: Calicut



Gopika A  
Senior Chemist  
Water Lab



**Sr. ASHA THOMAS**  
Assistant Professor & Head  
Dept. of Chemistry  
Providence Women's College  
Calicut-9



**Jeeja Rani A.T**  
Assistant Professor  
P.G. & Research Dept. of Chemistry  
Malabar Christian College, Calicut - 1



# MINIMIZATION OF COD AND BOD IN DOMESTIC WASTE WATER USING CHLORELLA

**SUBMITTED BY**

- ❖ DEVAMITHRA M ( PWATSCH026 )
- ❖ FATHIMA SHIRIL V ( PWATSCH028 )
- ❖ MARIYAM BINTH JAHFAR ( PWATSCH030 )
- ❖ NILA S ( PWATSCH012 )

**Under the guidance of**

**MS. GOPIKA A**

**Senior chemist, Water lab Calicut**

Submitted to the University of Calicut in Partial Fulfilment of the Requirements

For the award of the Degree of

**BACHELOR OF SCIENCE in CHEMISTRY**



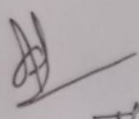
**DEPARTMENT OF CHEMISTRY  
PROVIDENCE WOMEN'S COLLEGE**

**CALICUT-09, 2021-22**

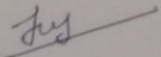
## CERTIFICATE

This is to certify that this project entitled "MINIMIZATION OF COD AND BOD USING CHLORELLA" is submitted to the University of Calicut in partial fulfilment of the requirements for the award of the Degree of BACHELOR OF SCIENCE in CHEMISTRY at Providence Women's College, is a bonafide reward of the project carried out by DEVAMITHRA M (PWATSCH026), FATHIMA SHIRIL V (PWATSCH028), MARIYAM BINTH JAHFAR (PWATSCH030), NILA S (PWATSCH012) under guidance and supervision of Ms. Gopika A, Water lab, in the year 2021-2022.

DATE: May 2022

  
Dr. Asha Thomas  
HEAD OF THE DEPARTMENT

EXAMINERS:

1. 
- 2.

Jeeja Rani A.T  
Assistant Professor  
P.G. & Research Dept. of Chemistry  
Malabar Christian College, Calicut - 1

# **A Computational Study On Global Parameters Of Polyphenolic Compounds**

*Project report submitted to University of Calicut in partial fulfilment of the requirement for the award of the degree*

*Bachelor of Science in CHEMISTRY*

**Submitted by**

**AYSHA ZERIN**

**PWATSCH001**

**MEGHNA BABU**

**PWATSCH010**

**SONA K S**

**PWATSCH016**

**AMAYA N**

**PWATSCH021**

**SAHNA P T**

**PWATSCH035**



**Department of Chemistry**

**Providence Women's College, Calicut**

**May 2022**

# CERTIFICATE

This is to certify that the project titled "A Computational Study on Global Parameters of Polyphenolic Compounds" is the original work carried out by, Aysha Zerine (PWATSCH001), Meghna Babu (PWATSCH010), Sona K S (PWATSCH016), Amaya N (PWATSCH021), Sahna P T (PWATSCH035) for the award of the degree of Bachelor of Science in Chemistry of University of Calicut under my supervision and guidance at Department of Chemistry, Providence Women's College, Calicut.



Dr. Deepthi Jose  
Assistant professor  
Department of Chemistry  
Providence Women's College Calicut



Dr. Sr. Asha Thomas  
Head of the Department of Chemistry  
Providence Women's College Calicut.

May 2022



*Jeeja Rani A.T*  
Assistant Professor  
P.G. & Research Dept. of Chemistry  
Malabar Christian College, Calicut - 1



# **PROJECT REPORT**

**TOPIC: EXTEND OF POLLUTION IN CHALIYAR RIVER BANK AND  
REMEDIES FOR ITS MINIMISATION**

Submitted to the University of the Calicut in partial fulfilment of the  
requirements for the award of Degree of  
**Bachelor of Science in Chemistry**

**By**

**Alphonsa P J                      Reg. No PWATSCH020**

**Anjali Krishna T H            Reg. No PWATSCH024**

**Sreelakshmi Vinay A P      Reg. No PWATSCH039**

**Suriya Thomas                Reg. No PWATSCH017**

**Dept. of Chemistry**

**Providence Women's College, Calicut**



**Under the Guidance of:**

**Gopika A,**

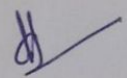
**Senior Chemist**

**Water Lab, Kozhikode.**

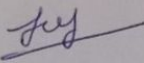
## CERTIFICATE

This is to certify that the project work entitled "Extend of pollution in Chaliyar River Bank and Remedies for its Minimization" is submitted to the university of Calicut in partial fulfilment of the requirements for the award of the degree of Bachelor of Science in Chemistry at Providence Women's College, is a bonafide reward of the project work carried out by **Alphonsa P J, Anjali Krishna T H, Sreelakshmi Vinay A P, Suriya Thomas**, under the supervision and guidance of Gopika A.

DATE: May 2022

  
Sr. Asha Thomas  
HEAD OF THE DEPARTMENT

### EXAMINERS

1. 
- 2.

*Jeeja Rani A.T*  
Assistant Professor  
P.G. & Research Dept. of Chemistry  
Malabar Christian College, Calicut -

# **PROJECT REPORT**

**TOPIC: EFFECTIVE DYE REMOVAL USING RICE HUSK IN TEXTILE EFFLUENT**

Submitted to the University of the Calicut in partial fulfillment of the requirements for the award of Degree of

**Bachelor of Science in Chemistry**

**By**

**RIYA SUNIL**

**Reg.no. PWATSCH004**

**EMIL MARY BINU**

**Reg.no. PWATSCH008**

**GAYATHRI KRISHNA M G**

**Reg.no. PWATSCH009**

**NANDA S**

**Reg.no. PWATSCH011**

**SANIKHA DINESH**

**Reg.no. PWATSCH014**

**Dept. of Chemistry**

**Providence Women's College, Calicut**

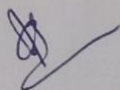




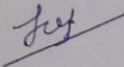
## CERTIFICATE

This is to certify that the project work entitled " Effective dye removal using Rice husk in textile effluent" is submitted to the university of Calicut in partial fulfillment of the requirements for the award of the degree of Bachelor of Science in Chemistry at Providence Women's College, is a bonafide reward of the project work carried out by Riya Sunil, Emil Mary Binu, Gayathri Krishna M G, Nanda S and Sanikha Dinesh under the supervision and guidance of Gopika A.

DATE: May 2022

  
Sr Asha Thomas  
HEAD OF THE DEPARTMENT

### EXAMINERS

1. 
- 2.

*Jeeja Rani. A.T*  
Assistant Professor  
P.G. & Research Dept. of Chemistry  
Malabar Christian College, Calicut - 1



# **Synthesis of Schiff Bases and Study of Solvent Effects on Absorption Maxima**

*Project report submitted to University of Calicut in partial fulfillment of the requirement for the award of the degree*

*Bachelor of Science in CHEMISTRY*

**Submitted by**

<b>DILSHANA VK</b>	<b>PWATSCH002</b>
<b>RAMYASREE K</b>	<b>PWATSCH013</b>
<b>AISWARYA O</b>	<b>PWATSCH019</b>
<b>ANAMIKA K UDAY</b>	<b>PWATSCH023</b>
<b>FATHIMA HANAN E K</b>	<b>PWATSCH027</b>



**Department of Chemistry**  
**Providence women's College, Calicut**

**March 2022**

## CERTIFICATE

This is to certify that the project titled “**Synthesis of Schiff Bases and Study of Solvent Effects on Absorption Maxima**” is the original work carried out by **Dilshana V K (PWATSCH002), Ramyasree K (PWATSCH013), Aiswarya O (PWATSCH019), Anamika K Uday (PWATSCH023), Fathima Hanan E K (PWATSCH027)** for the award of the degree of Bachelor of Science in Chemistry of University of Calicut under my supervision and guidance at Department of Chemistry, Providence Women's College, Calicut.

Station: Calicut

Date: 28/03/2022



Dr. (Sr.) Asha Thomas  
Head of the department  
Department of chemistry



Dr. Anu Jose  
Assistant Professor  
Department of Chemistry



Jeeja Rani A.T  
Assistant Professor  
P.G. & Research Dept. of Chemistry  
Malabar Christian College, Calicut - 1

# **WATER QUALITY ANALYSIS OF SIXTEEN WELL WATER SAMPLES**

## **PROJECT REPORT**

SUBMITTED TO

**UNIVERSITY OF CALICUT**

In partial fulfillment of the requirement for the award of degree of  
**BACHELOR OF SCIENCE in CHEMISTRY**

BY

<b>ANJU THOMAS</b>	<b>- PWATSCH006</b>
<b>AISWARYA A O</b>	<b>- PWATSCH018</b>
<b>AMEESHA C M</b>	<b>- PWATSCH022</b>
<b>APARNA P S</b>	<b>- PWATSCH025</b>
<b>SANDRA T P</b>	<b>- PWATSCH036</b>
<b>SWETHA SATHEESH V</b>	<b>- PWATSCH040</b>

UNDER THE GUIDANCE OF  
Dr.(Sr.) ASHA THOMAS  
Assistant Professor in Chemistry




**DEPARTMENT OF CHEMISTRY  
PROVIDENCE WOMEN'S COLLEGE, CALICUT**

**MAY 2022**

## CERTIFICATE

This is to certify that the project titled “ **WATER QUALITY ANALYSIS OF SIXTEEN WELL WATER SAMPLES**” is the original work carried out by Anju Thomas PWATSCH006 , Aiswarya A O - PWATSCH018,Ameesha C M-PWATSCH022, Aparna P S - PWATSCH025,Sandra T P-PWATSCH036, Swetha Satheesh V- PWATSCH040 B.Sc Chemistry, Providence Women’s College, Calicut under the guidance of **Dr.(Sr.) Asha Thomas** Ph.D, Head of Department of Chemistry, Providence Women’s College,Calicut for the award of the Degree of Bachelor of Science in Chemistry in the year 2021-22.

Calicut  
04/05/2022

  
Dr.(Sr.)Asha Thoms  
Department of Chemistry  
Providence Women’s College

  
*Jeeja Rani. A.T*  
Assistant Professor  
P.G. & Research Dept. of Chemistry  
Malabar Christian College, Calicut - 1