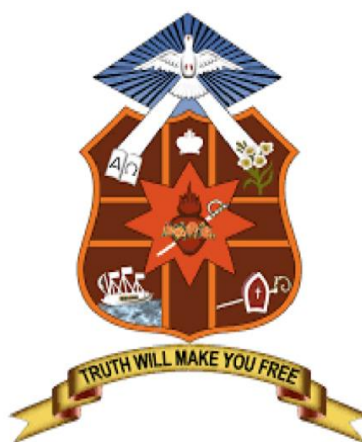


**PG DEPARTMENT OF CHEMISTRY**  
**DEVA MATHA COLLEGE, KURAVILANGAD**

**Affiliated to Mahatma Gandhi University, Kottayam**



**REPORT**  
**ON**  
**ADD-ON COURSE**  
**Instrumental Methods of Analysis**

- **DMCK/ SFCHEM/AD 28/2022**

**Academic Year: 2022-2023**



## **DEVA MATHA COLLEGE KURAVILANGAD**

**DEPARTMENT OF SELF FINANCE CHEMISTRY PG**

*Add on Courses offered for Students : 2022-2023*

**1. Chemical Lab Safety, Management and Some Analytical Applications in Chemistry**

**DMCK/ SFCHEM/AD 27/2022**

**2. Instrumental Methods of Analysis**

**DMCK/ SFCHEM/AD 28/2022**

**Course Coordinator : Ms. Riya Tresa**



### ***Brochure***

<b>Academic Year</b>	<b>: 2022-2023</b>
<b>Title</b>	<b>: Instrumental Methods of Analysis</b>
<b>Instructional Hours</b>	<b>: 30 Hours</b>
<b>Duration</b>	<b>: 2 months</b>
<b>Mode of Instruction</b>	<b>: Offline</b>
<b>Intake Capacity</b>	<b>: 25 students</b>
<b>Eligibility</b>	<b>: BSc Chemistry</b>
<b>Beneficiaries</b>	<b>: II PG students</b>
<b>Date(s) on which Programme was Conducted</b>	<b>: 13<sup>th</sup> Feb 2023- 17<sup>th</sup> Feb 2023</b>
<b>Collaborating Agency Inside/Outside the Institute</b>	<b>: No</b>
<b>Organizing Dept. /Club &amp; Name of the Coordinator:</b>	<b>PG DEPARTMENT OF CHEMISTRY Ms Riya Tresa</b>

**Number of Students Participated in the Programme :18**

**Number of Students Completed the Programme :18**

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**7. Students List : 6**

**8. Attendance Sheet of Students with Signature : 7**

**(Should be signed & Sealed by HOD)**

**9. Geotagged Photos of all Sessions : 8**

**10. Mark List : 9**

**11. Feed Back : 10**

**12. Model Certificate Issued to the Students : 11**

**(Scanned / Digital copy of all issued certificates should be uploaded in the respective folder provided for each department)**

**Signature**

**Name of the Coordinator**

**Department**

**NB: Hard copy of all the documents should be kept in the department**

## **1. A Brief Report**

An add-on course was organized by the PG Department of Chemistry, Deva Matha College Kuravilangad from **13<sup>th</sup> Feb 2023- 17<sup>th</sup> Feb 2023** on the topic “**Instrumental Methods of Analysis**”. The practical and theory sessions were taken by Neenumol K.K, Roopesh Michael and Riya Tresa. Theory classes were conducted by offline mode and practical classes in our department lab. 18 students from our I PG completed this course. An examination was conducted after the course and the certificates were distributed.

## **2.Course Objectives**

1. To introduce instrumentation and practical aspects of various spectroscopy techniques.
2. Exposure to advanced instrumentation facilities and maintenance.

### **3.Syllabus**

#### **Module 1 (10 Hours)**

Introduction of instrumental techniques and hands on experience rotary evaporator, immersion coolers, Thermal instruments such as TGA-DTA, DSC etc,

#### **Module 2 (10 Hours)**

Chromatography- HPLC, Ion – exchange chromatography – Theory, Gas chromatography–Qualitative and quantitative studies using GC. Important applications of chromatographic techniques

#### **Module 3 (5 Hours)**

Electron microscopy- SEM and TEM

#### **Module 4 (5 Hours)**

Industrial visit

### **4. Assessment Procedures**

Descriptive examination

#### **Grading**

5 point scale (A,B,C,D,failed)

## **5. Outcome**

- CO1: The study of instrumentation and practical aspects of various spectroscopy techniques.
- CO2: Learn more about advanced instrumentation facilities and maintenance.

## **6. List of Resource Persons**

1. Neenumol K.K
2. Roopesh Michael
3. Riya Tresa

## **7. Students List**

1. AKHILA JOHNY
2. AMULYA ELIZABETH WILSON
3. ANJANA P
4. ARYA P J
5. CHRISTY GIGI
6. CHRISTY SEBASTIAN
7. EBIN SURESH
8. GEETHU KRISHNAN J
9. HARILAL C S
10. JAYAKRISHNAN V
11. KAVYA M PRAMOD
12. REEBA THYAGARAJAN
13. SANDRA ANN KUNJU
14. SEBIN SEBASTIAN
15. SREELAKSHMI SUDHAKARAN
16. STEPHY SAJI
17. SUSMIN A J
18. THERESA MATHEW

PG DEPARTMENT OF CHEMISTRY (AY: 2022-2023)

Course title: INSTRUMENTAL METHODS OF ANALYSIS

Adm no.	Name of the student	Department	class	13/2/23	14/2/23	15/2/23	16/2/23	17/2/23	Remarks
1 2633	AKHILA JOHNY	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
2 2701	AMULYA ELIZABETH WILSON	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
3 2707	ANJANA P	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
4 2686	ARYA P J	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
5 2667	CHRISTY GIGI	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
6 2600	CHRISTY SEBASTIAN	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
7 2631	EBIN SURESH	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
8 2632	GEETHU KRISHNAN J	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
9 2626	HARILAL C S	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
10 2622	JAYAKRISHNAN V	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
11 2645	KAVYA M PRAMOD	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
12 2630	REEBA THYAGARAJAN	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
13 2678	SANDRA ANN KUNJU	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
14 2621	SEBIN SEBASTIAN	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
15 2709	SREELAKSHMI SUDHAKARAN	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
16 2681	STEPHY SAJI	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
17 2651	SUSMIN A J	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>
18 2620	THERESA MATHEW	MSc Chemistry	2nd PG	x	x	x	x	x	<i>[Signature]</i>



*[Handwritten Signature]*

HEAD OF THE DEPARTMENT  
P.G. DEPARTMENT OF CHEMISTRY  
DEVAMATHA COLLEGE  
KURAVILANGAD





PG DEPARTMENT OF CHEMISTRY (AY: 2022-2023)

Course title: INSTRUMENTAL METHODS OF ANALYSIS

Sl o.	Adm no.	Name of the student	Department	class	Grade	Remarks
1	2633	AKHILA JOHNY	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
2	2701	AMULYA ELIZABETH WILSON	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
3	2707	ANJANA P	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
4	2686	ARYA P J	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
5	2667	CHRISTY GIGI	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
6	2600	CHRISTY SEBASTIAN	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
7	2631	EBIN SURESH	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
8	2632	GEETHU KRISHNAN J	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
9	2626	HARILAL C S	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
10	2622	JAYAKRISHNAN V	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
11	2645	KAVYA M PRAMOD	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
12	2630	REEBA THYAGARAJAN	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
13	2678	SANDRA ANN KUNJU	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
14	2621	SEBIN SEBASTIAN	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
15	2709	SREELAKSHMI SUDHAKARAN	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
16	2681	STEPHY SAJI	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
17	2651	SUSMIN A J	MSc Chemistry	2nd PG	A	<i>[Signature]</i>
18	2620	THERESA MATHEW	MSc Chemistry	2nd PG	A	<i>[Signature]</i>



*[Handwritten Signature]*

HEAD OF THE DEPARTMENT  
P.G. DEPARTMENT OF CHEMISTRY  
DEVA MATHA COLLEGE  
KURAVILANGAD



Name of the student	Department	Class	Class no.	Email ID	Course title	Contact number	Feedback
Sandra Mariya	MSc chemistry	1st PG	22PG 561	sandrasaji76@gmail.com	SAFETY,MANAGEMENT	7306206148	Very good class
Jisna saji	Chemistry	1st PG	22PG 568	janasajjohn@gmail.com	SAFETY,MANAGEMENT	8078016612	Class was very beneficial.
Krishnapriya M	Chemistry	1st PG	22PG 560	krishnapriyamis@gmail.com	SAFETY,MANAGEMENT	8714031168	Good class
ARYA P J	Chemistry	2nd PG	21PG10	aryajayan.puthoor@gmail.com	INSTRUMENTAL METH	9074746792	Good
Stephy Saji	Msc chemistry	2nd PG	21PG17	Stephykadackal10@gmail.com	INSTRUMENTAL METH	6238173277	Good
Anjana P	MSc Chemistry	2nd PG	21PG09	anjanapsby@gmail.com	INSTRUMENTAL METH	9074326613	Good
Ebin Suresh	M Sc Chemistry	2nd PG	21PG02	ebinsuresh08@gmail.com	INSTRUMENTAL METH	7735712171	Useful for my career.
Reeba Thyagarajan	Chemistry	2nd PG	21pg14	reebatheeba@gmail.com	INSTRUMENTAL METH	09995247208	Good
Christy Gigi	Chemistry	2nd PG	21PG11	christygigi148@gmail.com	INSTRUMENTAL METH	8943825958	Nice
Akhila Johny	Chemistry	2nd PG	PG2107	akhilajohny001@gmail.com	INSTRUMENTAL METH	6238576071	Good
Susmin A.J	Chemistry	2nd PG	21pg18	susminjackson@gmail.com	SAFETY,MANAGEMENT	9497564036	This course makes as to inculcate learning by doing experient
JITHIN JAYAN	Msc CHEMISTRY	1st PG	22 PG559	jithinjayan5656@gmail.com	SAFETY,MANAGEMENT	9383443277	Not so good but its good
Gopika G	Msc chemistry	1st PG	22PG557	gopikag1909@gmail.com	SAFETY,MANAGEMENT	7994536497	Good
Chithra c s	Msc chemistry	1st PG	22PG 555	chithraanjalsunil2000@gmail.com	SAFETY,MANAGEMENT	9846157634	Good
Aswathy v s	Msc chemistry	1st PG	22PG 554	aswathyvs2001@gmail.com	SAFETY,MANAGEMENT	7593071281	Good
ARDRA M ANIL	MSc CHEMISTRY	1st PG	22PG 553	ardramanil1210@gmail.com	SAFETY,MANAGEMENT	9495434034	Good
Anil poly	MSc chemistry	1st PG	22 PG 552	anilpoly123@gmail.com	SAFETY,MANAGEMENT	9946524520	Good
SREYA K K	Msc chemistry	1st PG	22PG 562	sreyakk645@gmail.com	SAFETY,MANAGEMENT	9446047916	Good
Delecia Antony	MSc chemistry	1st PG	22PG 566	deleciaantony2001@gmail.com	SAFETY,MANAGEMENT	8111876168	Good
Abin Baby	MSc CHEMISTRY	1st PG	22PG551	babyabin21@gmail.com	SAFETY,MANAGEMENT	9539388178	Excellent
Christy Sebastian	MSc Chemistry	2nd PG	21PG01	christysebastian0411@gmail.com	INSTRUMENTAL METH	8589054364	Very good and informative
Hanilal C S	M.Sc Chemistry	2nd PG	21PG03	hanilalcschilte11@gmail.com	INSTRUMENTAL METH	9744532696	Phenomenal class
Sreelakshmi Wilson	Chemistry	2nd PG	21pg08	amulyawilson416@gmail.com	INSTRUMENTAL METH	9656869416	Nice
JAYAKRISHNAN V	Chemistry	2nd PG	21PG04	sreelakshmis33333@gmail.com	INSTRUMENTAL METH	8089504098	Good one
Sebin Sebastian	Chemistry	2nd PG	21PG06	sebinsebastian175@gmail.com	INSTRUMENTAL METH	7025310032	Good
Theresa Mathew	Chemistry	2nd PG	21PG19	theresamathew11696@gmail.com	INSTRUMENTAL METH	6238242032	Nice
KAVYA M PRAMOD	MSc. CHEMISTRY	2nd PG	21PG13	Kavyampromod72@gmail.com	INSTRUMENTAL METH	9207083801	Very informative course
Sandra Ann Kunju	MSc. Chemistry	2nd PG	21PG15	sandraannkunju2000@gmail.com	INSTRUMENTAL METH	9400280278	Good
Geethu Krishnan J	Chemistry	2nd PG	21pg12	krishnangeethu566@gmail.com	INSTRUMENTAL METH	9748936518	Good
						9645115926	Good



# DEVA MATHA COLLEGE KURAVILANGAD

Re-Accredited with 'A' Grade (CGPA 3.23) by NAAC in 2017  
Affiliated to Mahatma Gandhi University, Kottayam

Website: [www.devamatha.ac.in](http://www.devamatha.ac.in), E-Mail: [principaldmck@gmail.com](mailto:principaldmck@gmail.com)



## Certificate

This is to certify that ..... has successfully completed the Add-on Programme titled **Instrumental Methods of Analysis (DMCK/SFCHEM/AD 28/2022)** conducted by the Department of Chemistry (SF), Deva Matha College Kuravilangad during the academic year 2022-23 with 'A' grade.

Certificate No: 961

Kuravilangad  
31-03-2023

*Ms. Riya Tresa*  
Programme Co-ordinator

*Dr. Brincy Mathew*  
General Co-ordinator

*Dr. Sunil C. Mathew*  
Principal



~~Riya~~  
Riya Teesa

Add-On-Course  
Department Coordinator

PG Department of Chemistry (SF)  
Deva Matha College, Kuravilangadu

Brincy Mathew

Dr. Brincy Mathew  
Add-on Course General Coordinator



Prinith Mathew  
Principal  
Deva Matha College  
Kuravilangadu - 686 633