# PG DEPARTMENT OF CHEMISTRY DEVA MATHA COLLEGE, KURAVILANGAD

Affiliated to Mahatma Gandhi University, Kottayam



# SYLLABUS ON

## **ADD-ON COURSE**

CHEMICAL LAB SAFETY, MANAGEMENT AND SOME ANALYTICAL APPLICATIONS IN CHEMISTRY (DMCK/ SFCHEM/AD 27/2022)

Academic Year: 2022-2023

#### **Brochure**



### 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

Academic Year : 2022-2023

Title : CHEMICAL LAB

SAFETY, MANAGEMENT AND SOME ANALYTICAL APPLICATIONS IN

**CHEMISTRY** 

Instructional Hours : 30 Hours

Duration : 2 months

**Mode of Instruction** : **Offline** 

Intake Capacity : 25 students

Eligibility : Plus two

#### Beneficiaries : I PG students

#### **Course Objectives**

- 1. To introduce good lab practices, lab safety.
- 2. To introduce awareness of waste disposal managements.
- **3.** To introduce basic non-instrumental laboratory techniques.
- **4.** To introduce basic instrumental laboratory techniques.

#### Module 1 (10 Hours)

Good lab practices, lab safety, method of storing chemicals, solvents and glassware, procedures and maintenance of stock, purchase and distribution registers; Data analysis - MS Office; Literature – Scifinder.

#### Module 2 (10 Hours)

Waste disposal and management methods.

#### Module 3 (10 Hours)

Analytical applications in chemistry - pesticide analysis, water analysis and purification techniques, to find out the content of acids in citrus fruits.

#### References

- **1.** Laboratory Waste Management: A Guidebook by ACS Task Force on Laboratory Waste Management, ACS Miscellaneous, **1994**
- 2. Margaret-Ann Armour, Hazardous Laboratory Chemicals Disposal Guide, 2<sup>nd</sup> Edition,

1996

- 3. Svehla, G: Vogel's qualitative inorganic analysis, 7<sup>th</sup> Edition, Prentice Hall, 1996
- **4.** Vogel, A.I., Tatchell, A.R., Furnis, B.S., Hannaford, A.J., Smith, P.W.G., Vogel's Practical Organic Chemistry, 5th edition, Pearson education Ltd, **1996**

#### **Assessment Procedure**

Descriptive examination

#### **Grading**

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



