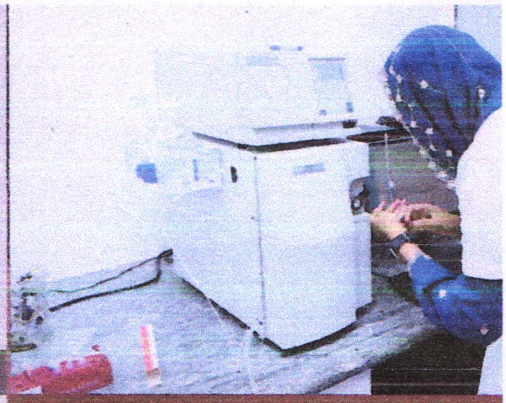
Marudhar Kesari Jain College for Women, Autonomous

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2 Weeks DST- FIST Supported Internship on

Sample Analysis using GCMS AND HPLC



The Internship will cover the vast applications of GC-MS and HPLC and their importance in societal and environmental benefits that concerns health, sustainability of resources, revitalizing biological and chemical resources.

The Internship will also provide a demonstration with hands-on-training from sample preparation to chromatogram analysis to provide a complete understanding on the working principle of GC-MS and HPLC

Limited seats only. Batch will be filled on first-come basis

Internship Highlights

- Principles of Chromatographic techniques
- GC-MS and HPLC instrumentation
- GC-MS and HPLC runtime parameters
- Sample preparation and injection
- GC-MS and HPLC result analysis
- GC-MS and HPLC Report preparation
- GC-MS and HPLC troubleshooting

Venue:
DST-FIST Instrumentation Facility LAB
Sri Arihant Block
Marudhar Kesari Jain College for Women, (Autonomous), Vaniyambadi
Time: 9:30am- 2:30pm

Workshop Kit and Certificate will be provided

Scan the QR code or click the link to register

https://forms.gle/AxumynS1jG3WhMhv7

Students, Scholars and Faculty from all disciplines of Life Sciences are eligible

Registration Fee

Student - Rs. 1000/-
Scholar - Rs. 1500/-
Faculty - Rs. 2000/-
Industry - Rs. 3000/-

Internship Dates

Batch I- 18th Apr to 30th Apr
Batch II- 25th Apr to 9th May
Batch III- 9th May to 22nd May
Batch IV- 13th May to 26th May
Batch V- 27th May to 9th June
Internship & Project- 27th Apr to 30th May

For further details contact :
Dr. R. Jesu Jaya Sudan
Associate Dean-Research, DST-FIST Lab Incharge
Marudhar Kesari Jain College for Women, Vaniyambadi
Ph. No. +91 9894170894; Email ID:drjesu2016@gmail.com

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Vaniyambadi - 635 751.
Tirupattur District

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DST–FIST Supported two weeks Internship on Sample analysis using GCMS and HPLC

Date: 13-05-2026 – 30-05-2026

Agenda

Day	Date	Topic	Theory Sessions	Practical Sessions
1	13-05-2026	Introduction to Chromatography	Overview of basic chromato graphic techniques	-
2	14-05-2026	Sample preparation for HPLC	Process in sample preparation	Sample preparation
3	15-05-2026 to 16-05-2026	HPLC Operation	HPLC Instrumentation and handling	Method setting, Sample Injection and Sample run
4	18-05-2026	Result Analysis and Report preparation	Post run analysis- HPLC	Phyto chemical analysis using in-built software
5	19-05-2026 to 20-05-2026	Sample preparation for GC- MS	Process in sample preparation	Maceration using solvent
6	21-05-2026 to 23-05-2026	GC- MS Operation	GC- MS Instrumentation and handling	Method setting, Sample Injection and Sample run
7	25-05-2026 to 29-05-2026	Result Analysis and Report preparation	Post run analysis- GC-MS	Phyto chemical analysis using compound library and in-built software
8	30-05-2026	Valediction and Certificate Distribution		

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RESEARCH & DEVELOPMENT

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Activity Report

Name of the Department /Club / Cell	**Research and Development Cell**		
Title of the Programme / Event	**"DST-FIST supported two weeks Internship on sample analysis using GCMS and HPLC"**		
Alignment of this Programme with	SDGs ☐ Viksit Bharat 2047 ☐ State / National Schemes ☐ NEP 2020 ☐ MOU activity ☐ Others ✓		
Mode	Physical mode		
Type of Activity	Internship		
Level	Institutional level		
Date	13-05-2026 to 30-05 -2026	**Time**	09:30am-1.00pm
Venue	**DST-FIST LAB**		
Resource Person Details	**Dr. R. Jesu Jaya Sudan** **Associate Dean – Research** **Department of Research and Development** **Marudhar Kesari Jain College For Women (Autonomous), Vaniyambadi.**		
Objective of the programme	To provide a hands-on-training and impart theoretical knowledge on phytochemical analysis using GC-MS and HPLC.		
Internal Participants count	**Students: 26** **Faculty:** Nil	**External Participants count**	**Students:** Nil **Faculty:** Nil

Report:

A "DST-FIST supported two-week internship on Sample Analysis Using GC-MS and HPLC" was organized by the Research and Development Cell from 13-05-2026 to 30-05-2026 Around twenty six students from the Department of Biotechnology,Chemistry participated in the internship. The theory and practical sessions, including demonstrations of

the GC-MS and HPLC instruments, were conducted by Dr. R. Jesu Jaya Sudan. The internship provided participants with deeper insights into the working principles of GC-MS and HPLC and highlighted their significance in modern research practices. It also covered herbal sample preparation, processing techniques, and analytical procedures using both instruments. The program helped students develop confidence in instrument handling, sample analysis, and analytical data processing. Each session concluded with an interactive Q&A segment to clarify participants queries. On the valedictory day, students shared their feedback, and the program concluded with the distribution of certificates.

Outcome of the Program:

The internship program successfully enriched the participants knowledge and practical skills on GC-MS and HPLC techniques. Students gained hands-on experience in sample preparation, instrument handling, chromatographic analysis, and analytical data interpretation. The program also improved their understanding of the applications of GC-MS and HPLC in biotechnology, pharmaceutical, clinical, environmental, and research fields, thereby increasing their confidence and interest in analytical research and future career opportunities.

Feedback link: https://forms.gle/K69TTYAGVJAeAVMR6

Feedback Summary:

Most students were highly satisfied with the internship and gave the speakers top ratings. The training helped them move from just reading about GC-MS and HPLC in books to understanding how they work in real life. Participants found the practical sessions very helpful for learning how to handle the instruments and read data. Many plan to use these new skills for their college final year projects and future jobs in science. A few students suggested adding even more hands-on practice and teaching in smaller groups next time.

9/7/25

Associate Dean – Research **IQAC Director** **Principal**

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Research and Development Cell (RDC)

Programme Name: Internship

Topic: "DST–FIST Supported two weeks Internship on Sample analysis using GCMS and HPLC"

Date: 13-05-2026 - 30-05-2026





Principal

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