



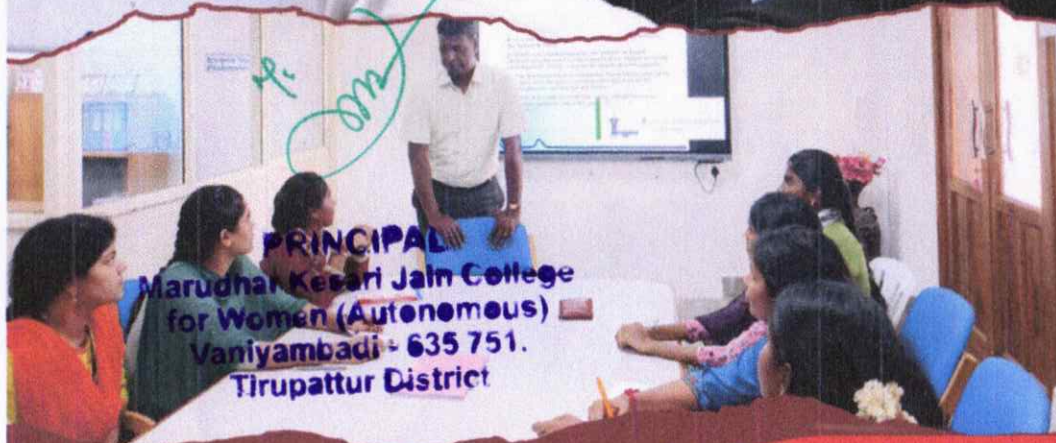
Marudhar Kesari Jain

College for Women (Autonomous), Vaniyambadi

RECOGNISED UNDER SEC 2(F) & 12(B) OF UGC ACT, 1956 || ACCREDITED WITH "A+" GRADE BY NAAC (4TH CYCLE) PERMANENTLY AFFILIATED TO THIRUVALLUVAR UNIVERSITY || AN ISO 21001:2018 (EDMS) CERTIFIED INSTITUTION || SUPPORTED BY DST-FIST MARUDHAR NAGAR, CHINNAKALLUPALLI, VANIYAMBADI - 635 751.

Website: <http://www.mkjc.in>

The Workshop 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 workshop 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



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Vaniyambadi - 635 751.
Tirupattur District

Students, Scholars and Faculty of all science departments are eligible



REGISTRATION FEES:
RS.1000/- PER HEAD



DST-FIST Supported Workshop on Importance of GC-MS and HPLC In Sample Analysis

DATES: 17-11-2025 TO 29-11-2025



TOPICS COVERED IN WORKSHOP

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

CERTIFICATE WILL
BE PROVIDED

Venue:
FIST LAB @ Marudhar
Kesari Jain College for
Women, Vaniyambadi
Time: 9:30am- 2:30pm



Scan the QR code to
register or use the URL
<https://forms.gle/kipaCF8fco3DCumh7>

For further details contact
Dr. R. Jesu Jaya Sudan
Associate Dean-Research
Marudhar Kesari Jain college for women (Autonomous), Vaniyambadi
Email: jesu.r@mkjc.in; Ph. No. 9894170894

**LAST DATE FOR
REGISTRATION:-10-11-2025**



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FIST SUPPORTED WORKSHOP ON IMPORTANCE OF GC-MS AND HPLC IN SAMPLE ANALYSIS

Date: 17-11-2025 - 29-11-2025

Agenda

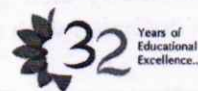
Day	Date	Topic	Theory Sessions	Practical Sessions
1	17-11-2025	Introduction to Chromatography	Overview of basic chromatographic techniques	-
2	18-11-2025	Sample preparation for HPLC	Process in sample preparation	Sample preparation- Decoction
3	19-11-2025 to 20-11-2025	HPLC Operation	HPLC Instrumentation and handling	Method setting, Sample Injection and Sample run
4	21-11-2025 to 22-11-2025	Result Analysis and Report preparation	Post run analysis-HPLC	Phytochemical analysis using in-built software
5	24-11-2025	Sample preparation for GC-MS	Process in sample preparation	Maceration using solvent
6	25-11-2025 to 26-11-2025	GC-MS Operation	GC-MS Instrumentation and handling	Method setting, Sample Injection and Sample run
7	27-11-2025 to 28-11-2025	Result Analysis and Report preparation	Post run analysis-GC-MS	Phytochemical analysis using compound library and in-built software
8	29-11-2025	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 Workshop on “Importance of GCMS and HPLC in Sample Analysis”		
Alignment of this Programme with	SDGs <input type="checkbox"/> Viksit Bharat 2047 <input type="checkbox"/> State / National Schemes <input type="checkbox"/> NEP 2020 <input type="checkbox"/> MOU activity <input type="checkbox"/> Others <input checked="" type="checkbox"/>		
Mode	Physical mode		
Type of Activity	Workshop		
Level	Institutional level		
Date	17/11/2025 - 29/11/2025	Time	09:30am-12:45pm
Venue	DST-FIST LAB		
Resource Person Details	Dr. R. Jesu Jaya Sudan Associate Dean - Research		
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: 10 Faculty: Nil	External Participants count	Students: Nil Faculty: Nil

Report:

DST-FIST supported two weeks workshop on Importance of GCMS and HPLC was organised by Research and Development Cell from 17/11/2025 to 29/11/2025. Around ten students from the departments of Biotechnology, physics, chemistry and Biochemistry were registered for the workshop. The theory and the practical session were handled by Dr. R. Jesu Jaya Sudan and the demonstration of the GCMS and HPLC instruments were given by Dr. S. Kavi Karunya. The workshop provided a deeper insights on working principles of GCMS and HPLC, along with its importance of today's research practice. In addition, the workshop covered the herbal sample preparation and processing through GCMS and HPLC. This workshop encouraged the participants to develop confidence in operating the instruments, analyzing samples, and processing analytical data. Each session concluded with a Q&A segment, allowing participants

to clarify their queries. On the valedictory day, students shared their feedback, and the program concluded with the distribution of certificates.

Outcome of the Program:

The participants gained sound knowledge about the concepts of GCMS and HPLC, and hands on training experience in sample preparation and sample loading into the instruments. The participants also learned to analyse the results using post run data with the help of built in softwares.

Feedback link: <https://forms.gle/3EjPSsy8YdsUK5kbA>

Feedback Summary:

All the participants of the workshop reported that the sessions were very useful. The participants mentioned that they have got a good exposure to advanced instruments like GCMS and HPLC. They have also stated that they have gained deeper insights about the applications of GCMS and HPLC in drug development, forensic investigations, phytochemical analysis of plants, identification of compounds. The hands on training experience has improved their technical skills. The participants also stated that the workshop was organized in a well planned manner, and all the topics were clearly explained. They have also mentioned that the workshop has motivated the participants to carry out research in their field of interest. The workshop has developed confidence for the participants in instrument handling. Overall the participants were very satisfied with the workshop.


Associate Dean – Research

Dr. R. JESU JAYA SUDAN
Associate Dean - Research
Marudhar Kesari Jain College for Women
Vaniyambadi - 635 751.

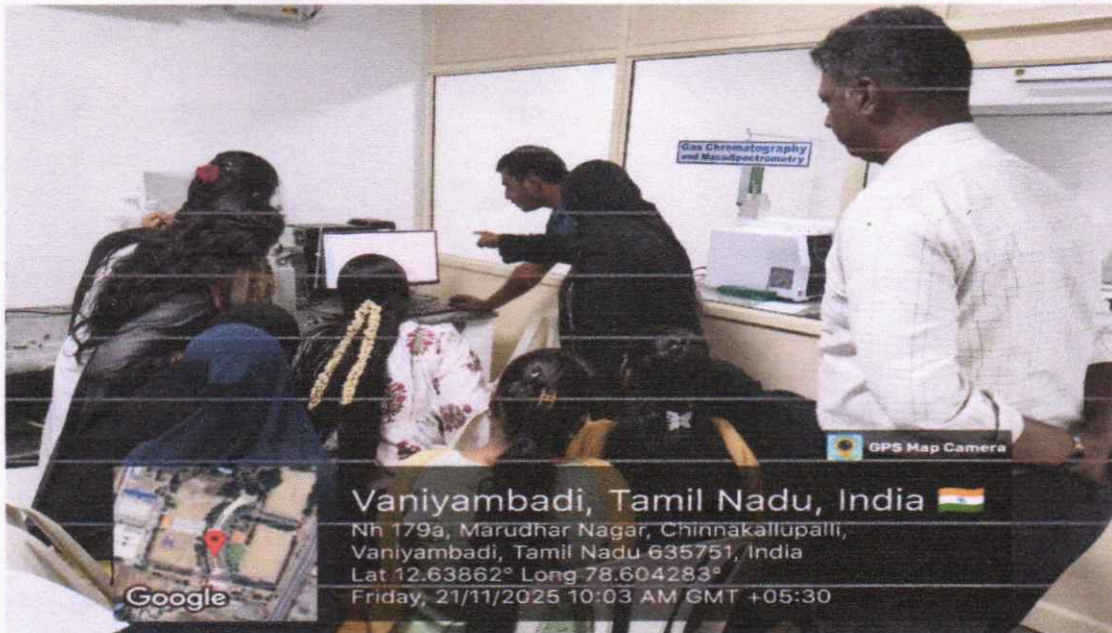

IQAC Director


Principal
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Tirupattur District



32 Years of Educational Excellence...

**Marudhar Kesari Jain
College for Women (Autonomous), Vaniyambadi
Research and Development Cell (RDC)
Programme Name: Internship
Topic: DST-FIST Supported Two weeks Workshop on
"Importance of GCMS and HPLC in Sample analysis"
Date: 17.11.2025 to 29.11.2025**



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