



# DAYANAND COLLEGE HISAR

Affiliated to Guru Jambheshwar University of Science & Technology, Hisar

Under DAV College Managing Committee, New Delhi


## DEPARTMENT OF CHEMISTRY

Visit Pesticide Residual Laboratory at CCS HAU, Hisar

Session: 2022-23

Date: April 1, 2023

Year/ Session	Name of the Course	Date	Paper/Visit/Survey/Project/Programme Title	Contingent Incharge	No. of Students
2022-23	M.Sc. (P) II Semester	01April, 2023	<b>Paper (ACP-502):</b> Organic Chemistry Practical – I Visit the Pesticide Residual Laboratory, College of Agriculture, CCS HAU, Hisar on 01April, 2023	Dr. Jyoti and Ms Dikhsa	18

  
Head of Chemistry Department  
Dayanand College, HISAR

  
Principal  
Dayanand College  
HISAR

To,

The Principal  
Dayanand College  
Hisar

Allowed  
31/3/23

**Subject:** Permission for Educational visit of Students.

Respected Sir,

Kindly allow the educational visit of M.Sc./ B.Sc (Final Year) students of our college under the supervision of Dr. Sunita Lega, Dr. Jyoti and Ms. Diksha Kundu to Pesticide Residual Laboratory, College of Agriculture, CCSHAU, Hisar on 01.04.2023 at 10:00 A.M. The students are observing Gas Chromatography and its working.

Thanking you

Yours' Faithfully

*S. Lega*  
31/3/23  
Dr. Sunita Lega  
Head of Department of Chemistry

Principal  
Dayanand College  
HISSAR

*V. Jyoti*  
Principal  
Dayanand College,  
HISAR

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# DAYANAND COLLEGE, HISAR

## DEPARTMENT OF CHEMISTRY

Educational Trip at Pesticide Residual Laboratory, College of  
Agriculture, CCSHAU, Hisar

### List of Participants

S.No	Class	Roll No.	Signature
1	M.Sc - 1st year	223040510015	
2	M.Sc. 1st year	223040510003	
3	M.Sc 1st year	223040510009	Komal.
4	M.Sc (P)	223040510007	Simran
5	M.Sc (P)	223040510027	Jagdeep
6	M.Sc (P)	223040510014	Jahil
7	M.Sc (P)	223040510006	Jitender
8	M.Sc (P)	223040510020	Shuchi
9	M.Sc (P)	223040510004	Surena
10	M.Sc (Ist)	223040510038	Nisha
11	M.Sc (Ist)	223040510031	Mansi
12	M.Sc. (Ist)	223040510023	Priya
13	M.Sc. Ist	223040510022	Pooja
14	M.Sc. (Ist)	223040510021	Aarti
15	M.Sc. (Ist)	223040510037	Maharaj
16	M.Sc (Ist)	223040510026	Pooja
17	M.Sc (Ist)	223040510025	Khushboo
18	M.Sc (Ist)	223040510024	Yashika
19			

Principal  
Dayanand College,  
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Mega  
01/4/23

Principal  
Dayanand College  
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**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR**

Name of Programme: **M. Sc. Chemistry**  
 Duration of Programme: **Two Years (Four Semesters); Choice Based Credit System (CBCS)**

**SCHEME OF EXAMINATION (w.e.f. 2022-2023)**

Sr. No.	Course Code	Course Type	Course Name	Hrs/week L - P	Credits	Marks		
						Ext.	Int.	T
1.	ACL-511	Core	Inorganic Chemistry - I	4 - 0	4	70	30	1
2.	ACL-512	Core	Organic Chemistry - I	4 - 0	4	70	30	1
3.	ACL-513	Core	Physical Chemistry-I	4 - 0	4	70	30	1
4.	ACL-514 (a) or ACL-514 (b)	*Foundation Elective	Mathematics for Chemists or Chemistry of Life Science	2 - 0	2	70	30	1
5.	ACP-501	Core	Inorganic Chemistry Practical - I	0 - 8	Annual Examination (Course spread over in semester I & II)			
6.	ACP-502	Core	Organic Chemistry Practical - I	0 - 8				
7.	ACP-503	Core	Physical Chemistry Practical - I	0 - 8				
<b>Total Credits</b>					<b>14</b>			

\* To be decided as per subject(s) (Mathematics/Biology) studied at B.Sc. level.

Sr. No.	Course Code	Course Type	Course Name	Hrs/week L - P	Credits	Marks		
						Ext.	Int.	T
1.	ACL-521	Core	Inorganic Chemistry - II	4 - 0	4	70	30	1
2.	ACL-522	Core	Organic Chemistry - II	4 - 0	4	70	30	1
3.	ACL-523	Core	Physical Chemistry-II	4 - 0	4	70	30	1
4.	ACL-524	Core	Group theory and Spectroscopy	4 - 0	4	70	30	1
5.	ACP-501	Core	Inorganic Chemistry Practical - I	0 - 8	8	140	60	2
6.	ACP-502	Core	Organic Chemistry Practical - I	0 - 8	8	140	60	2
7.	ACP-503	Core	Physical Chemistry Practical - I	0 - 8	8	140	60	2
<b>Total Credits</b>					<b>40</b>			

Soni  
6/10/22

Principal  
Dayanand College  
HISAR

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Dayanand College  
HISAR

# Report

## Visit to the Pesticide Residual Laboratory, College of Agriculture, CCS HAU Hisar

**Date: 01.04.2023**

**Introduction:** The M.Sc. (Chemistry) Ist year students had an opportunity to visit the Pesticide Residual Laboratory at Chaudhary Charan Singh Haryana Agricultural University (CCS HAU), Hisar, on April 1, 2023. The visit had been scheduled as a part of the Organic Chemistry Practical-I (ACP-502) curriculum to provide students hands-on experience with pesticide residue analysis and the techniques used to ensure food safety.

### **Objective of the Visit:**

1. The main objective of the visit was to provide students hands-on experience in the field of pesticide residue analysis. The laboratory visit aimed to bridge the gap between theoretical knowledge gained in the classroom and its practical application in a research setting.
2. To understand analytical techniques used in the laboratory, such as Gas chromatography and spectroscopy, which are essential for detecting and quantifying pesticide residues in various agricultural samples.

### **Laboratory Overview:**

The Pesticide Residual Laboratory at CCS HAU is equipped with Gas chromatography (GC) and high-performance liquid chromatography (HPLC) systems are employed for the separation and quantification of pesticide residues with high precision. The laboratory is also furnished with specialized equipment for sample extraction, clean-up, and concentration, ensuring accurate analysis of complex matrices.

### **Activities during the Visit:**

Students were given a comprehensive visit of the laboratory, showcasing various sections dedicated to sample preparation, analysis, and data interpretation. For the purpose, Dr. Sushil Dhanda, Assistant Professor demonstrated the operation of key instruments, also explaining the principles behind chromatographic techniques and the significance of method parameters. Real-life case studies were presented to illustrate the application of pesticide residue analysis in solving practical challenges related to food safety and environmental protection.

The visit to the Pesticide Residual Laboratory proved to be an invaluable experience for the M.Sc. (Chemistry) students. It provided them with practical insights into the complexities of pesticide residue analysis and the role of analytical chemistry in ensuring the safety of agricultural produce. The exposure to advanced instrumentation and applications enriched their understanding of the subject experiential learning and research in the field of agricultural sciences.

  
Head of Chemistry Department  
Dayanand College, HISAR

Principal  
Dayanand College  
HISAR

### Geo-tagged Photo



#### Out Come Achieved from The Visit:

- The visit significantly enhanced the practical knowledge of M.Sc. (Chemistry) Ist year students in the field of pesticide residue analysis.
- Students gained hands-on experience, bridging the gap between theoretical concepts learned in the classroom and their practical application in a real-world research setting.
- Students were exposed to the operation and principles behind Gas Chromatography and spectroscopy, crucial for detecting and quantifying pesticide residues in agricultural samples.
- The visit proved to be invaluable, offering students experiential learning in the complexities of pesticide residue analysis.
- Exposure to advanced instrumentation enriched their understanding of the subject and its role in ensuring the safety of agricultural produce.

  
Principal  
Dayanand College  
HISAR

  
Dr. Sunita Lega  
(Head of the Department)  
Dayanand College, HISAR