



SREE SANKARA VIDYAPEETOM COLLEGE, VALAYANCHIRANGARA

Report on Seminar (online) on Understanding Molecules through Mass Spectrometry

Programme Details in a nutshell	
Name of the Event	Understanding Molecules through Mass Spectrometry
Nature of the Event	Research Methodology
Objectives	To equip students about the analytical technique employed in research
Resource person	Dr. Rabin Rajan
Date and Time	09-10-2021, 10.30 a.m. - 12.30 p.m.
Beneficiaries	Students No. of participants- 45
Venue	Google meet
Organizing dept/ Cell	Post Graduate Department of Chemistry
Coordinator	Smt. Anju Paul
Outcome/ Benefit of the programme	The students were acquainted with importance of characterizing molecules in research



PROGRAMME REPORT

The seminar on understanding molecules through mass spectrometry as a tool in research was conducted on 09-10-2021. The primary objective of the seminar was to provide students with a comprehensive understanding of mass spectrometry and its applications in various fields of research.

The introductory session provided a foundational overview of mass spectrometry, covering principles, instrumentation, and basic concepts. Participants gained insights into ionization techniques, mass analysers, and detectors. The next session discussed the applications of mass spectrometry in analytical chemistry. Topics included identification of chemical compounds, quantitative analysis, and advancements in chromatography-mass spectrometry coupling.

The seminar emphasized the role of Mass Spectrometry in biological research, including proteomics, metabolomics, and lipidomics. Participants learned about sample preparation techniques, data interpretation, and the latest developments in biomolecular analysis. Mass spectrometry's significance in environmental science was highlighted, focusing on its use in monitoring pollutants, analyzing contaminants, and studying environmental samples. The seminar was successful in achieving its goal of familiarizing participants with the tool's diverse applications in research.



Programme Description in detail






<p>SREE SANKARA VIDYAPEETOM COLLEGE, VALAYANCHIRANGARA P.O, PERUMBAVOOR Reaccredited with NAAC 'A' grade Affiliated to Mahatma Gandhi University, Kottayam</p>	<p>Curriculum Enrichment Programme Series (Academic year 2021-2022) Organised by Post Graduate Department of Chemistry</p> 
<p>ABOUT THE TALK</p> <p>Mass spectrometry is one of the highly used analytical techniques, the applications of which range from medicine in surgical applications to modern space explorations.</p> <p>Since its discovery by J.J. Thomson in 1913, followed by the development of Aston's mass spectrograph, mass spectrometry has undergone tremendous developments in the analysis of simple to highly complex mixtures.</p> <p>This talk will discuss the general principles, instrumentation, and applications of mass spectrometry in order to understand molecules and their structure.</p>	<p>Understanding Molecules through Mass Spectrometry</p>  <p>Resource Person: Dr. Rabin Rajan J Methikkalam Assistant Professor, Mar Ivanios College (Autonomous), Thiruvananthapuram</p> <p>Dr. Rabin earned his PhD from IIT Madras in Physical Chemistry. Later he worked as visiting researcher at Physical Research Laboratory (PRL), Ahmedabad and as a Post Doctoral researcher at The Hebrew University of Jerusalem, Israel. Currently he is working as a faculty of chemistry at Mar Ivanios College, Thiruvananthapuram. He has published about 13 research papers in peer-reviewed, high impact journals. His areas of research interest include low energy ion induced reactions on molecular solids, surface chemistry, catalysis, surface spectroscopy and reactions induced by surface modifications and low temperature reactions relevant to astrochemistry.</p> <p>Date: 09-10-2021 Time: 10.30 a.m.-12.30 p.m. Platform:  Google Meet</p> <p>Principal : Dr. Padma P. H. O. D. : Smt. Poornima M. P. , PG Department of Chemistry</p>
<p>Co-ordinator: Smt. Anju Paul</p>	<p> anjupaul@ssvcollege.ac.in  9496364767</p>

Figure 1 Brochure of the event

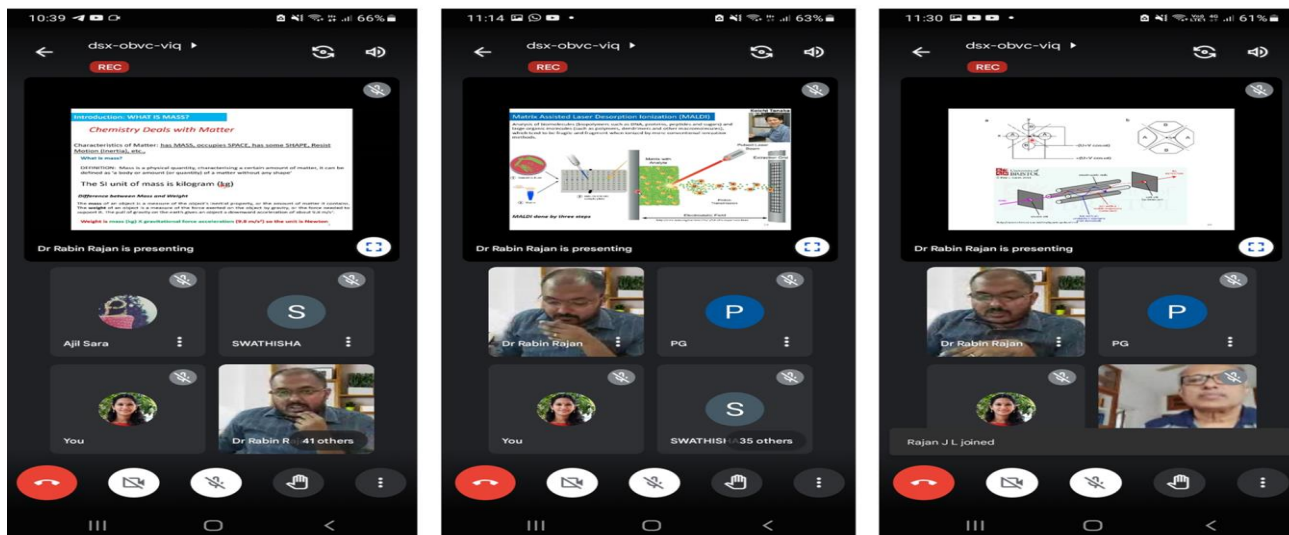


Figure 2 Screenshots of the seminar


LIST OF PARTICIPANTS

Sl.No.	Name of Course/Department	Name of student/Faculty
1	M.Sc. Chemistry	Ardra M S
2	M.Sc. Chemistry	Harsha Sajeev
3	M.Sc. Chemistry	Ameena Ks
4	M.Sc. Chemistry	Dinsha M Saji
5	M.Sc. Chemistry	Jiya John
6	M.Sc. Chemistry	Arya Venugopal
7	M.Sc. Chemistry	Jahana P J
8	M.Sc. Chemistry	Athira Suresh
9	M.Sc. Chemistry	Sreejith Krishnakumar
10	M.Sc. Chemistry	Gopika A M
11	M.Sc. Chemistry	Ajil Sara Joy
12	M.Sc. Chemistry	Manumitha.S
13	M.Sc. Chemistry	Nisma Rahman
14	M.Sc. Chemistry	Sreedathan P N
15	M.Sc. Chemistry	Sreelakshmi S
16	M.Sc. Chemistry	Athira Krishnan
17	M.Sc. Chemistry	Rithika Sasi
18	M.Sc. Chemistry	Visny Velayudhan
19	M.Sc. Chemistry	Jishnu C Kartha
20	M.Sc. Chemistry	Jisna C J
21	M.Sc. Chemistry	Ahsana C S
22	M.Sc. Chemistry	Aiswarya A V



23	M.Sc. Chemistry	Mehrunnisa T H
24	M.Sc. Chemistry	Vismitha G Nair
25	M.Sc. Chemistry	Mahadev P S
26	M.Sc. Chemistry	Anjana Suresh
27	M.Sc. Chemistry	Aparna Nair
28	M.Sc. Chemistry	Athira P R
29	M.Sc. Chemistry	Keerthana Murari
30	M.Sc. Chemistry	Sreejesh K H
31	B.Sc. Chemistry	Meenakshi Suresh
32	B.Sc. Chemistry	Sreelakshmi Chandran
33	B.Sc. Chemistry	Akhila Francis
34	B.Sc. Chemistry	Arathi Subramanian
35	B.Sc. Chemistry	Jaidev S
36	B.Sc. Chemistry	Malavika Manoj
37	B.Sc. Chemistry	Meenu Manoj
38	B.Sc. Chemistry	Muzammil Jamal
39	B.Sc. Chemistry	Swathisha K S
40	B.Sc. Chemistry	Abhijith M S
41	B.Sc. Chemistry	Aksa Varghese
42	B.Sc. Chemistry	Arathy Santhosh
43	B.Sc. Chemistry	Athira Santhosh
44	B.Sc. Chemistry	Krishna Viswanathan
45	B.Sc. Chemistry	Devika Dileep




 PRINCIPAL
 SREE SANKARA VIDYAPEETOM
 VALAYANCHIRANGARA P.O
 (VIA) PERUMBAVOOR