







One Day Intensive Workshop on

Liquid Chromatography-Mass Spectrometry: Wave-2

- Organized by CAMS & CBA at Venture Center

	 Introduction to liquid chromatography and mass spectrometry techniques LCMS Instrumentation and Method development strategies 		
	Workflow of different mass spectrometric applications		
Gains	Quick update on latest techniques/developments		
	Lab Demonstration- LCMS method development, analysis of real sam	ples and data interpretation	
	Workflow of different mass spectrometric applications		
	 Mini workshop on data acquisition of real sample and data interpreta Ouisland data on late at task bains of claud languages. 	ation	
	 Quick update on latest techniques/developments Learn from faculty with extensive practical experience with industrial 	annlications	
Organized by	 Venture Center – a Technology Business Incubator 		
	 Students, Academic researchers and Staff of organic chemistry, analy 	rtical chemistry.	
	biochemistry, biotechnology, food technology, environmental science	-	
For whom	themselves for industry jobs		
	 Industry professionals (Pharma, Biopharma, Chemical CROs, Environn etc.) 	nental and Food industry	
When	(Saturday) 28 th June 2025 Time: 9 am- 5.30 pm		
Where	Lecture Theater & CAMS, Venture Center, 100 NCL Innovation Park, (Pashan) Road, Pune-411008		
Contact	Technical queries: Mr. Amit Wankhede amit.wankhede@venturecenter.co.in +918956226088		
	Registration queries: Mr. Vineet Joshi vineet.joshi@venturecenter.co.in +91-9156465141		
	Maximum 20 seats; First-come-first-serve.		
	Fee category	Fees	
	Students with valid ID cards	Rs 1,000/-	
	Micro, small enterprises/ Individuals	Rs 2,000/-	
	Medium and large companies/ others	Rs 4,000/-	
	Steps for registration:		
Step 1: Interested participants need to fill in registration form at the former ale (nBcByteEABTexhTyE)		the following link.	
Desistuation	 Register Online at: <u>https://forms.gle/nRsRxt6EABTcxb7Y6</u> Step 2: Payment details will be shared via email to participants post screening of registration details and seat will be confirmed only after receipt of payment. 		
Registration			
	Note:		
	• For more details, visit: <u>https://www.venturecenter.co.in/events</u>		
	REGISTRATIONS AND FINAL PAYMENT DEADLINE Registration closes once 20 seats are full or		
	on 26 th June 2025 (whichever comes sooner)		
	• Fees paid is not refundable and non-transferable under any circumst		
	 The organizers reserve the right to accept or refuse or delay registrat 	•	
	composition of the group and hence maximize learning for all particip	pants	









Introduction

Liquid chromatography-Mass Spectrometry (LC–MS) is a powerful analytical technique used for separation, identification and quantification of components in a mixture. It is analytical technique that involves physical separation of analytes followed by their mass-based detection. LC-MS technique is widely used in pharmaceutical analysis, environmental monitoring, food analysis, metabolomics and proteomics etc.

This workshop aims to introduce the participants to the basics of Liquid Chromatography - Mass Spectrometry. The goal is that the participants should be able to utilize their learning from this workshop for their respective workflows. The workshop will be conducted by faculty having vast experience working on high end mass spectrometers and related techniques. The workshop includes lab demonstrations and data interpretation exercises. Learn from faculty with extensive practical experience with industrial applications.

Course outline:

- > Theory of operational principles and essential concepts
- Introduction to different mass spectrometric workflows
- > Demonstration on MS system; Running a sample- Create method, create sequence, Acquire data, Data analysis
- Mini-workshop on data interpretation with real data; few special applications illustrated with real case studies
- Quick update on latest techniques/developments

Participants to note the following

- Course includes tea and lunch at Venture Center
- Course will include: Lab demo; Access to restricted website with online compilation of resources for LC-MS; Course
 notes including slides, case studies and application notes and one-on-one feedback on
 data interpretation exercise
- Please note, the participants will have to arrange for their own travel/local transport and accommodation and dinners
- No sessions will be repeated if a participant is unable to attend due to any reasons.
- Free membership in mailing list to follow-up on workshop and intimation of relevant events/ funding/ opportunities









	Workshop Schedule	
Saturday, 28 th June 2025		
Time	Session title	Lead
09.00 - 09.30	Registration	Vineet
09.30 - 09.45	Introduction to the course and faculty	Sneha
10.00 - 11.00	General concepts, essential terms, basics and Instrumentation of LC-MS	Shakuntala
11.00 - 11.15	Tea; Group Photograph	
11.15-12.15	 Basic Maintenance of LC-MS Applications of Mass Spectrometry Qualitative Quantitative Biopharma (1-2 slides) Method Development Strategies 	Heramb
12.15 – 13.15	Lunch	
13.15 – 16.15	 Introduction to practical session-sample prep (CAMS 500 NIP, Lab block 400 NIP) Demonstration on LC-MS system (CAMS 500 NIP) Running a sample, create method, Create sequence, Data acquisition Data analysis VC Tour 	Sayali, Amit, Heramb
16.15 – 16.30	Теа	
16.30 – 17.15	Data interpretation exerciseCalculations	Sayali, Amit Heramb
17.15 – 17.15	Closure – Feedback	Sneha

Speaker (in alphabetical order of last name)

Sneha As Assistant

Sneha Asai

Assistant Manager- Analytical Services

Sneha is working as Assistant Manager at Center for BioPharma Analysis (CBA), Venture Center. She has completed her PhD degree in Life and Biomolecular Science from Stazione Zoologica Anton Dohrn, Italy. She has 8+ years of industrial experience in molecular genetics and clinical R&D. She was earlier associated with Linq Therapeutics Pvt. Ltd. and ATS Genetech Pvt Ltd. She manages the Analytical and Cell Culture Lab at CBA.

Shakuntala Bai Assistant Scientist-Analytical Services Shakuntala is currently Assistant Scientist at Center for BioPharma Analysis (CBA), Venture Center. She holds a Ph.D. in Biological Sciences from CSIR- National Chemical Laboratory, Pune. She had worked as Project Scientist-II at Regional Centre for Biotechnology, Faridabad. Her doctoral and post doctoral work was based on biomarker discovery and mass spectrometry method development for clinical plasma studies in diabetes and preterm birth. She has professional experience in Mass spectrometry based proteomics, Cell culture techniques and animal experiments.









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Heramb works for the Mass Spectrometry Facility at ACTREC, Navi Mumbai as a Scientific Officer D. He has a Ph.D. in Life Sciences from CCMB Hyderabad and almost 10 years of post-PhD experience in academic research as well as industrial R&D. He was earlier associated with Accutest Biologics, Biocon Limited and Venture Center. Heramb pursues his interest in applications of mass spectrometry to various fields.

Sayali Kulkarni Specialist-Analytical Services



Sayali is Specialist in Analytical Services, Venture Center. She has a Masters in Analytical Chemistry (Shivaji University) and 3 years' experience as a quality control analyst in natural products. She was a project assistant in the Central NMR Facility at the National Chemical Laboratory, Pune. . Her responsibilities include supporting incubatees and budding entrepreneurs by offering lab services, contributing and ensuring smooth operations, participates in installation of instruments & operating lab in coordination with scientific mentors and advisors.



Amit Wankhede Scientist- Mass Spectrometry

Amit is a Scientist at CAMS, Venture Center. He has a Masters in Pharmaceutical Chemistry (Sinhgad College of Pharmacy, Pune). He has 12 years of professional experience in Pharma and Bioanalytical (R&D) industry. He has previously worked in Sai Life Sciences, Pune and Alkem Lab Ltd., Mumbai. His key functional area was to develop and validate LCMS methods for drugs and metabolites at Bioanalytical GLP facility involving Pharmacokinetic Studies and In-vitro Assay (both clinical and non clinical).

Organized by		
	Entrepreneurship Development Center (Venture Center) – a CSIR initiative – is a Section 25 company hosted by the National Chemical Laboratory, Pune. Venture Center strives to nucleate and nurture technology and knowledge-based enterprises by leveraging the scientific and engineering competencies of the institutions in the Pune region in India. The Venture Center is a technology business incubator supported by the Department of Science & Technology's National Science & Technology Entrepreneurship Development Board (DST-NSTEDB). Venture Center's focuses on technology enterprises offering products and services exploiting scientific expertise in the areas of materials, chemicals and biological sciences & engineering. For more information, visit https://www.venturecenter.co.in/	
ANALYTIX	The mission of VC AnalytiX is to set up and operate a world class, efficient and reliable Analytical Services Center as an open access facility. VC AnalytiX also organizes various workshops and trainings for students of academic and research institutes. For more information, visit <u>www.venturecenter.co.in/analytical/</u>	
	The Center for Applications of Mass Spectrometry (CAMS) is a facility developed and managed by the BioIncubator at Venture Center, NCL Innovation Park, Pune, India as a resource center for foster collaboration between researchers and industrial/ entrepreneurial organizations leveraging mass spectrometry. CAMS plans to have a specific focus and emphasis on technology advancement, industrial applications and new venture creation (especially services leveraging mass spectroscopy to create value and tools enhancing the applicability of mass spectrometry). For more information, visit http://cams.venturecenter.co.in/	











Center for BioPharma Analysis (CBA) is an initiative of Venture Center supported by the National BioPharma Mission, BIRAC (Government of India). Services like Protein Characterization, Biosimilar testing, Bioanalytical analysis, Proeteomics services are offered here. For more information, visit https://bioanalysis.in/