

# 5<sup>th</sup> Trade Fair and Conference for Beer, Wine and Spirits Production

4 – 6 September 2024

KTPO Convention Centre,  
Whitefield, Bengaluru

Brews  
&  
Spirits

E X P O

Versuchs- und Lehranstalt für Brauerei in Berlin e.V.  
Seestraße 13  
13353 Berlin



VLB  
BERLIN

## Technical Workshop on Methods of Recipe Development – Traditional & AI Powered

5 September 2024,  
KTPO Convention Centre, Whitefield, Bengaluru

Versuchs- und Lehranstalt für Brauerei in Berlin (VLB) e.V. is located in Berlin and is thrilled to offer its expertise in recipe development for a brewery. Recipe development is the art and science of creating and refining beer recipes to achieve a desired flavour profile, aroma, and overall quality. Understanding and mastering the techniques of recipe development can elevate your brewing skills to new heights, enabling you to craft unique and memorable beers. This seminar covers the essentials of recipe development within a brewery, guiding you through the process of designing and fine-tuning beer recipes. Participants will learn how to balance malt sweetness with hop bitterness, choose the right yeast strains for desired fermentation characteristics, and incorporate speciality ingredients to enhance flavour and aroma. Additionally, the seminar will provide an overview of sensory evaluation techniques to assess the quality and consistency of your beers.

Moreover, we are excited to announce that our workshop will include a special segment on utilizing AI and machine learning in recipe development, brought to you by our esteemed partner iWORT. This cutting-edge approach will show how data-driven techniques can revolutionize how we create and perfect beer recipes. By leveraging AI and machine learning, brewers can analyse vast amounts of brewing data to uncover patterns, predict outcomes, and optimize recipes for specific goals. By the end of the workshop, attendees will have a comprehensive understanding of traditional and modern approaches to beer recipe development. Whether you are looking to create a new flagship beer or experiment with seasonal brews, this seminar will equip you with the tools and knowledge needed to succeed in the exciting and evolving world of brewing.

Research Institute for Biotechnology and Water  
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### Schedule

1130 - 1330 hrs

5 September 2024

#### Introduction to Recipe Development

- Understand the fundamentals and importance of recipe development in brewing.
- Learn how effective recipe development influences flavour, aroma, and overall beer quality.

#### Sensory

- Determine the sensory attributes (taste, aroma, mouthfeel, appearance) that appeal to the target market and develop initial beer concepts based on market research and sensory profiling.
- How to Conduct surveys, focus groups, and hedonic testing to gather consumer preferences; use trained panels for descriptive sensory analysis of popular beers.

#### Overview of Malt

- Introduction to different malt types (e.g., base malts, speciality malts).
- Discussion on how each type of malt influences the flavour, colour, and body of the beer.

#### Overview of Hops

- Introduction to various hop varieties (e.g., bittering hops, aroma hops).
- Explanation of how hops contribute to bitterness, flavour, and aroma in beer.

#### Practical Block

- Hands-on demonstration on calculating malt quantities based on specific beer recipes.
- Hands-on demonstration on calculating hop quantities to achieve desired bitterness and aroma profiles.

#### How AI Can Help

- Explanation of how AI can assist in optimizing ingredient calculations for consistent and precise recipe development.

*Demonstration of AI tools that can automate the process of adjusting malt and hop quantities based on recipe requirements.*



**Jan Biering**

Head of Research Institute for Beer and Beverage Production

Jan Biering currently Head of Research Institute for Beer and Beverage Production (FIBGP) and consultant. Since 2021, he is responsible for the Research Institute for Beer and Beverage Production, including consultancy in breweries worldwide with a focus in technological issues, recipe development and troubleshooting and microbiological issues. He is also involved in education and training for different courses at the VLB that includes the craft brewing course to the certified brewmaster course.

Earlier he was the plant manager, Schlossbrauerei Schwarzbach from 2003-2011 and was responsible for beer production from raw material intake till final filled product in bottles and kegs. Responsibilities included brew house work, fermentation and filtration. His field of activity included Quality management, consumer relations and production of alcohol-free beverages.

Jan has a Dipl.-Ing Biotechnology/ Brewing science (1997-2003) which he received from the Technical University of Berlin/Germany and has also done an apprenticeship as brewer and maltster (1995- 1997) at Kulmbacher Brauereien, Kulmbach, Germany.



**Gayatri Mehta**

Gayatri Mehta currently serves as a Research Assistant at VLB Berlin, a renowned institute in the brewing industry. Her involvement spans research, training, education, and service provision. In the Department of Bioprocess Engineering and Applied Microbiology (BEAM), Gayatri focuses on advancing fermented beverages like Kombucha through pioneering research to enhance quality and flavour. With a brewing journey that began at the Barking Deer Brew Pub and Restaurant in Mumbai (2013-2014), Gayatri managed the entire production process, from ingredient sourcing to quality control. She handled various tasks, including CIP, malt milling, brew house operation, yeast pitching, and sensory evaluation. At the Research Institute of Beer and Beverage Analysis (FIBGA) at VLB Berlin (2018-2022), Gayatri significantly contributed to commercial turbidity analysis, shelf-life research, and stability studies. Her expertise extended to the Research Institute for Spirits, Analytical Technology, and Sensory Analysis (FISAS), where she led protein analysis and innovative projects, including a rapid forced aging test for beer. Active in sensory panels, she demonstrated her nuanced sensory evaluation skills. Gayatri holds a Master's degree in Biological Sciences from the Narsee Monjee Institute of Management Studies, Mumbai (2010-2013). Her dedication to professional growth led her to become a certified Brewmaster from VLB Berlin in 2015.



**Ankur Napa**

A seasoned professional with extensive expertise in brewing and data science. With a rich background in creating unique beers and optimizing brewing processes, Ankur has worked with leading beer companies like ABInBev, United Breweries, and SABMiller. Leveraging AI, machine learning, and data analytics, Ankur has successfully implemented innovative solutions to enhance product quality and operational efficiency in the brewing industry. As the founder of iWort, Ankur continues to drive advancements in brewing technology, helping breweries improve their processes, develop new recipes, and maximize sales.

Registration Category	Participation Fees
Indian Participant Workshop - 5 Sept. 2024	INR 7500*
International Participant Workshop - 5 Sept. 2024	USD 150*

\*Note: Local taxes will be added as applicable at the time of final billing