

## Vermont Manufacturing Extension Center

**Cultivate the Talent Needed for Today and Your Future;** Lisa Henderson, Phil Chadderdon, Vermont Manufacturing Extension Center (VMEC), Nermin Elezovic, Vermont Department of Labor

Learn how your on the job training can be a path to apprenticeship that will produce passionate employees that add value to your business and ensure a bright future for the craft brewing community. Get connected to free resources and multiple sources of funding that are available to support you.

Advanced manufacturing companies (like breweries) face complex workforce challenges in an increasingly competitive marketplace. Registered apprenticeship is a proven solution for recruiting, training and retaining a talented workforce and quality jobs. Benefit from customized training to meet needs such as improving productivity and reducing turnover. VMEC will facilitate connections between employers and a wide array of Registered Apprenticeship resources available at the state, regional, and national levels.

**Phil Chadderdon**, *Professional Manufacturing & Business Growth Advisor* | VMEC  
pchadderdon@vmec.org

Phil has been helping manufacturing businesses improve and grow his entire career. Starting as an engineer visiting customers to solve problems and introduce new products led to roles in sales and business development; after completing his MBA, Phil went on to hold positions as Plant Manager, Technical Director and General Manager. Along the way he has implemented Lean transformations, ISO certifications and business development systems. This includes experience at both small and large companies in industries including papermaking, nonwovens, electrical insulation, electronics and metal fabrication. He brings a diverse background and enjoys helping people learn and grow, whether on the shop floor or working with the leadership team. When not working, he can be found with his family or in the Northeast Kingdom, hiking, biking or skiing.

## Vermont Manufacturing Extension Center

**Lisa Henderson**, *Director of Client Services and Innovation Engineering Black Belt* | VMEC  
lhenderson@vmec.org

Lisa has a long history with VMEC, beginning in 1996, and in 2022 adjusted her schedule to working part time. With over 40 years of practical experience in the manufacturing and professional services industry, she has held positions in technical sales and service, strategic planning, quality management and project management as well as Director of Manufacturing at the King Arthur Flour Company.

Lisa has worked broadly across all sizes and industries of Manufacturing, from the shop floor to the executive boardroom, coaching and facilitating organizational transformations in continuous improvement. As a pioneer of Innovation Engineering Management System practice, in early 2014, Lisa became the fourth VMEC Team Member to be certified as an Innovation Engineering Black Belt.

When she is not working with clients, Lisa can be found outdoors enjoying the beauty our region has to offer with her husband, Chris.

**Nermin Elezovic**, Vermont Department of Labor  
nermin.elezovic@vermont.gov



## Sustainability Committee

The mission of the Sustainability Committee is to provide outreach and education to guild membership by establishing an archive of information and expertise on brewery sustainability and best management practices.

### **Bob Grim** | Foam Brewers

**Bokashi Culture:** Learn about the Bokashi culture the team over at Foam uses, also known as EM-1 (Effective Microorganism). It is used for anaerobic microbial composting, but it's extremely beneficial for many things. It's a blend of bacteria and yeast that is effective when used as a microbial fertilizer, inoculant, and foliar spray; Bokashi composting comes from sustainable, natural farming in Japan & Korea that utilizes the culture to anaerobically compost food scraps that can then be incorporated, as a direct amendment, into the soil after only 2-3 weeks... The list goes on and on, but I've found that the EM-1 culture is the best option for "preserving" spent grain and it's aromas. The culture also acts as a powerful probiotic for all animals (chickens, cows, goats, dogs, etc).

### **Chris DeMasi & Jack Kern** | Switchback Brewing & Amherst Label

**Label Liner Recycling Initiative:** Clear PET label liner recycling initiative. Efforts to side stream overlooked plastic waste in the interest of diverting it from landfills and single stream recycling practices. Creating opportunity for circular recycling of plastic label liner, ensuring it is given life beyond single-use applications.

### **Dan Sartwell** | Black Flannel Brewing

**CO2 Savings:** A quick update on the Can Carrier Reuse Program as well as some helpful tips on conserving and reducing Co2.



## Lallemand Brewing

**Molecular Biology and Brewing:** Exploring Metabolic Engineering of *Saccharomyces cerevisiae* and the Future of Beer; Avi Shayevitz, Lallemand Brewing

In this session we will cover the topic of new yeast strain development, touching upon the primary biotechnology used in the selective breeding, hybridization, and bioengineering of novel brewing yeast. Brewers should leave this session with better understanding of how strains are selected and enhanced through various means and what that could mean for the industry at large - especially when facing modern challenges facing all aspects of agriculture, food, and brewing.

**Avi Shayevitz**, *Research Scientist* | Lallemand Inc.  
ashayevitz@lallemand.com

Avi Shayevitz was born and raised in Detroit, MI, USA and is currently living in Montreal, QC. He studied at Oregon State University where he completed an undergraduate and graduate degree in Food Science and Technology with a focus on bioinformatics and biocomputing, and their application in fermentation ecologies. He now works on the development of novel brewing yeast and process aids for Lallemand Brewing. He was invited to join the Lallemand Brewing team in 2019, where he had previously been working for Anheuser-Busch InBev as a Research Brewer in Bend, OR, USA.

**LALLEMAND BREWING**



Notes:



BEER WORTH FINDING®  
**VERMONT BREWERS  
ASSOCIATION**

# Tech & Ed Day

## May 21, 2024

- **10:30am** – Check-In Begins
- **11:00am – 12:00pm** – Avi Shayevitz, Lallemand Brewing: *Exploring Metabolic Engineering of *Saccharomyces cerevisiae* and the Future of Beer*
- **12:00pm – 1:00pm** – Lunch
- **1:00pm – 2:00pm** – Lisa Henderson & Phil Chadderdon, VMEC and Nermin Elezovic, Vermont Department of Labor: *Cultivate the Talent Needed for Today and Your Future*
- **2:00pm – 2:15pm** – Break for beers
- **2:15pm – 3:15pm** – Sustainability Committee Panel Discussion; *Label Liner Recycling, Bokashi Culture, and CO2 Savings*
- **3:15pm** – Networking & Beers

THANK YOU FOR COMING TO TECH & ED DAY!

LALLEMAND BREWING



THANK YOU TO OUR SPONSOR



THANK YOU 14TH STAR FOR HOSTING



THANK YOU TO MILL RIVER  
BREWING FOR CATERING LUNCH



THANK YOU TO ALL OUR SPEAKERS

## Upcoming VBA Events

July 19-20: Vermont Brewers Festival



TO SEE THE LATEST  
INFORMATION & UPDATES  
SCAN HERE

July 30: Lake Monsters Game sponsored by  
Country Malt Group & Lallemand Brewing



FOR MORE INFO & TO RSVP  
SCAN HERE

November 11-12: Vermont Craft Brewers  
Conference



FOR MORE INFORMATION  
SCAN HERE