



MBAA Rocky Mountain District 2017 Fall Meeting

Tuesday November 14th 5:00-8:30pm
Hosted By: Crazy Mountain Brewery, Denver, CO
\$20 Member / \$40 Non-Member

Register at www.rockymountainmbaa.com
Registration Deadline is Thursday November, 9th
Capacity is 100 people



SCHEDULE

- 5:00 Registration Starts
- 5:30-6:30 Dinner
- 6:30-6:45 Business Meeting
- 6:45-7:45 Technical Presentations
- 7:45-8:45 Tour and Social Hour at Crazy Mountain Brewery

Please note that there are TWO LOCATIONS for this event. It will start across from the brewery at the **Space Gallery (400 Santa Fe Dr.) where check in, dinner, and the presentations will be held. Afterwards, we will walk across the street to Crazy Mountain Brewery for drinks and tours (**471 Kalamath Street**).

**PARKING: Street parking, parking at the Space Gallery, and parking at the brewery will be available.

**There is NO BUS for this meeting due to lack of interest.

**Outside beers will be accepted for donations.

TECHNICAL PRESENTATIONS

POC development of IoT monitoring in a non-automated brew house and how they are used for implementing critical control points
Presented by John Allshouse of Crazy Mountain

Abstract: IoT in the brewery setting. The internet of things (IoT) is a network of physical devices embedded with sensors, actuators, and network connectivity. These IoT devices can be used to help the brewer collect and analyse data, sense equipment health, and alert the brewer of out-of-tolerance conditions in the manufacturing process.

Biography: John Allshouse has been around the Craft Brewing Industry (on and off) for the last 22 years. His most recent stint in the Craft Industry is the Head of Operations/Senior Staff Advisor at Crazy Mountain Brewing Company. John is also a lecturing Professor at the Metro State University in the School of Brewing Science, part of the Department of Hospitality, Tourism, and Events. John holds a Masters in Organic Chemistry and a Doctorate of Inorganic Chemistry from The University of Colorado, Boulder. John also holds a degree of post Doctoral studies in Microbiology from The University of Colorado, Denver. (Go Auraria!!)

Waste water treatment considerations for the brewing industry
Presented by Justin Hines of Cambrian Innovations

Abstract: For craft breweries across the United States, continued growth, while exciting, is often associated with unanticipated water and wastewater management challenges. Municipal wastewater treatment plants become overwhelmed by the increasing volume and strength of a growing craft brewery's wastewater, and are forced to set discharge limits. This presentation will discuss options for proactively managing wastewater as your brewery grows.

Biography: Justin Hines is Commercial Operations Manager at Cambrian Innovation. He owns the company's commercial deal process, from providing technical support in the design and development of potential applications of Cambrian's EcoVolt product suite to developing and executing customer proposals and contracts. Prior to joining the team at Cambrian, Justin spent five years in process engineering for MBR systems at Koch Membrane Systems and MICRODYN-NADIR. Justin earned his BS in Environmental Engineering from North Carolina State University.