



SCHEDULE (slight change):

Date: **Thursday, January 5, 2023**
 Location: **Zehnders of Frankenmuth - Town Hall downstairs**
 Meal: **Family Style Chicken (fried and broiled) & Livers dinner**
 Tickets: **\$35.00**

6:00 PM - Social Hour
 6:45 PM - Dinner
 7:45 PM - Business Meeting
 8:00 PM - Program

Digitizing and Improving Sand Testing Equipment



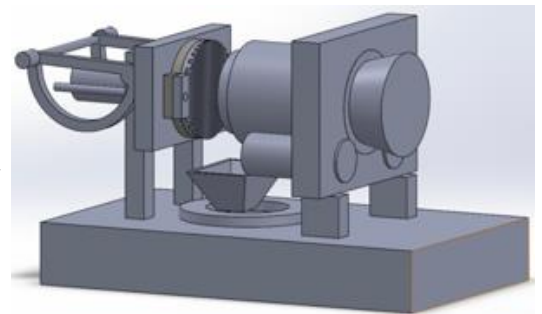
Levi Koebbe and Dr. Sam Ramratten, WMU

Speaker: Levi Koebbe

Levi Koebbe, Western Michigan University Mechanical Engineering student who has experience working as a Process Engineer in a Sand Foundry accompanied by Dr. Sam Ramratten will present information on Digitizing and improving sand testing equipment.

In this presentation Levi will be explaining the results of his senior design project. For his senior design project, it was required that he digitize and improve three tests that were in Dr. Sam Ramratten's Lab at Western Michigan University. These tests include the Impact Test, Compression Test and the Hot Friability test. The Impact Test is a test that is run to see the impact strength that a cookie sample of a sand specimen can withstand. The Compression Test is a test that is run on a sand specimen that outputs the compressive force for that a sand specimen can withstand with both normal and shear forces being applied. The Hot Friability Test is a test that is run on a sand specimen where a force is applied to the sand specimen and pushes it towards a hot plate that has a heater on the back of it. This is to represent what a mold experiences as melt flows through it. These three tests were digitized and modified to maximize the efficiency in how the tests are ran and how data is produced and collected

Levi was received a DTW AFS, Northern Indiana AFS, and West Michigan AFS Scholarship, 3rd Place Finish in the WI Regional Casting Competition in 2020, 2nd place finish and Imagination Award winner for the most innovative process in the 2022 WI Regional Casting Competition. Top Three Finish at the Cast in Steel Competition in 2022 HE has been a member of the AFS WMU student chapter for 4 and half years, and the President of the AFS WMU student chapter for 2 and half years.



FOR INFORMATION CONTACT: Sue Manyen, 989-906-5061 or smanyen@comcast.net

The AFS 2022-2023 Program will be posted to the website. Mark your calendars.

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| Thursday, February 2, 2023 | Kai Spande, Behind the Scenes in Building the Corvette Z06 |
| Thursday, March 2, 2023 | Fred Bauer, Bicycle Village on electric bicycles |
| Saturday, June 3, 2023 | Golf Outing at Swan Valley Golf Course |

The next AFS SVC Foundry in a Box event will be Tuesday, January 17 at Haven Elementary in Saginaw. Check the webpage calendar for more information or contact smanyen@comcast.net if available to volunteer

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See the AFS Saginaw Valley Chapter web site for Chapter information, Foundry in a Box calendar, photos from prior events and links to our sponsors at www.saginawvalleyafs.org.