

**Kalamazoo Valley Community College
Chemical Technology Advisory Committee
Meeting Minutes – December 8, 2016**

Present: Jason Bishop, KVCC; Luke Chadwick, Bell's Brewery; Paige Eagan, KVCC; Edward Hesseler, Bridge Organics; Charissa Oliphant, KVCC; Cynthia Schauer, KVCC; Ron Vanderroest, Zoetis

Absent: Kim Hilton, KVCC; Kim Lewis, KVCC; Christopher Nagra, Pfizer

Call to Order – The meeting was called to order by Schauer at 4:08 pm

Bishop detailed the new NMR machine used in Organic Chemistry. Eagan reported on new FTIR machine that replaced 25-year old machine that stopped working mid-semester. Discussion on capabilities of machines followed.

Schauer inquired if members have had any interaction with KVCC students and what their thoughts were about the students abilities. Hesseler stated only interaction was with students who tour his facility. Schauer asked whether anyone uses interns and if so, what skills are needed. Chadwick stated their interns are project oriented. Last intern was Statistics major from Kalamazoo College. Hesseler has had interns from MSU, Calvin College, Kalamazoo College, Hope College and WMU. Vanderroest stated Zoetis uses Eurofins to find contract workers and suggested contacting them for hiring qualifications. Hesseler stated many of their technicians were not degreed, most trained on site. Chadwick stated most of their applicants are 4-year college grads. Oliphant asked when should students apply for summer internships. Zoetis is December and Bridge is January/February, Bells's posts internship opportunities as needed, not just summer; interested students should keep eye on website. Oliphant explained the Monroe Brown Foundation Scholarship program and stated how most opportunities are for business students. She recommended at members look into the program to get more opportunities for science students. Schauer will send link to website.

Skills needed:

- lab prep – familiarity with equipment and comfortable using glassware
- knowledge of solvents and their reactions, and dilutions
- Microsoft Word, Excel, and OneNote
- knowledge of web-based tools such as MetaboAnalyst
- Chemometrics
- experience with both hot and cold reactions
- experience with pipetting and balancing
- chromatography
- aseptic work
- structuring sensory panels
- experience with chiral synthesis
- ability to navigate literature – not many applicants have this ability, it's a real plus when they do
- ability to work in teams – sometimes more important than tech skills
- not be afraid to ask questions when they don't fully understand
- ability to follow written instructions
- good technical writing skills
- statistics

Eagan asked for feedback on courses in Chemical Technician program, as well as ideas for attracting students to the program. Suggestion made to consider changing name to Chemical

Operator. Focus should be on what types of jobs are available in Chemistry. Having alumni talk about their employment within the field. Program brochure has graphic that is wrong.

Oliphant asked if there were any companies within an hour's drive that may need interns and/or student employees. MSU runs old Pfizer plant in Holland. In Ann Arbor Boraform and Caymen Chemical were both suggested as well as Covance in Battle Creek. Oliphant suggested looking into advertising in ACS newsletter.

Eagan reported on the new KVCC Science Club that students have formed.

Eagan asked for feedback for next meeting. Hesseler would like to hear more about the Organic Chemistry and Microbiology courses.

Schauer thanked everyone for feedback and for braving the slippery roads to attend.

Meeting adjourned 5:16 pm.

DRAFT