General Session 1, Friday Afternoon, 1:00 PM

Brian Kamusinga opened the 70th meeting by welcoming everyone to Principia and reflecting how good it was to return to having an in-person Annual Meeting. He then introduced the college president, John Williams. John encouraged everyone to tour the campus and visit the bluffs for the great view. He mentioned the most recent addition to the campus, the School of Government building, and the funny trials and tribulations of his office move in relationship to the construction of that building. He next related a story about how he learned about MACTLAC and Principia’s involvement in our Association. He praised those in attendance and the important work we do, as well as the larger work we do at our respective liberal arts colleges. John again welcomed us to Principia, and then turned the floor to Jeff Cornelius, who proceeded to introduce the afternoon’s plenary speaker.

Plenary Address

*Back to the Future: Drawing on the Lessons of the Past to Prepare for Coming Challenges*

Dr. Jeffery Aper, Provost, Retired
Millikin University
Decatur, IL

Dr. Aper began his talk by thanking MACTLAC for asking him to speak, after which he described how chemistry is central to education, particularly in the liberal arts curriculum, and is a primary area for cross-disciplinary activities. He then juxtaposed the central nature of chemistry in the liberal art curriculum with the fact that it is an expensive major for any institution, and that cost analysis shows it is one of the most expensive majors per credit hour at any institution. As a result, he discussed moves to generate “chemistry in a box” to reduce the major’s cost, but that those endeavors have yet to re-create what can be found in in-person settings.

Dr. Aper then talked about why students would want to spend so much time and money to attend a liberal arts college. He said that part of the reason to attend was to learn skills needed to work in a profession, as well as to learn about all sorts of concepts and skills that make students good citizens. It’s the job of liberal arts college administrators and faculty to clearly articulate these values to students, and to work closely with them to ensure that they gain these skills. As a result, liberal arts institutions are guiding entities that show case how important face-to-face contact and interaction is to students so that they can understand all the information they come into contact with. They learn thinking, relating, debating, and sharing, and other skills that they would not get otherwise. Indeed, an educated population is required for society to properly function and avoid fractures and societal failures. Liberal arts institutions are important in that they spend their
resources on working with students to challenge and support them, and are are placed well to meet this challenge.

This said, Dr. Aper reflected on how the COVID-19 pandemic has disrupted higher education. Never in his 42 years of work in higher education did he see anything affect higher education than how the pandemic did. We are now seeing students coming to campus lacking skills, which places an even greater burden on institutions to challenge and support them. It will take time for a new equilibrium for those students to be reached, so it is important for administrators to recognize this and support their faculty until new equilibrium is reached. Relatedly, the doom of modern liberal arts schools that is often talked about due to the pandemic induced thrust of technology is probably not going to kill liberal arts institutions as their model is strong enough to absorb and survive such changes. Again, he emphasized that in-person work will never be replaced by technology, but that technology is just another tool for teachers to use. Thus, faculty will need to incorporate new technology and restructure our majors and courses where appropriate.

Dr. Aper then address what he thought was the unsustainable financial model used at most colleges. He talked about how he graduated with no debt and did not require any major grants to do so. Now, students experience the opposite: they have to have cars, computers, and carry debt before even starting at a school, which means they have to have grants and loans in order to pay for their education. Thus, students have financial, emotional, and skill debts that makes it more difficult for them to succeed. Dr. Aper then related how family educational and financial levels relates to student success. This means that student success is often dependent on things that occur outside the classroom. This means that liberal arts colleges can help support student success through all of the informal interactions we have with students. As such, Dr. Aper encouraged all of us to ask our administrators for data about who is being enrolled at our institutions so that we can better plan what to expect in our classes.

Dr. Aper next touched on the expected change in demographics that we are all familiar with. While he does think that it will impact and change how colleges operate, he doesn't believe that their will be a major die-off of schools. Colleges will definitely need to embrace different ways to enroll students, however. And for faculty, they'll have to do more with less, both in budget, staffing, and advising. Thus, faculty will have to do more teaching, research, and recruitment. He again encouraged faculty to talk with their administrators so as to plan for and constructively work toward solutions. Dr. Aper said that faculty and administrators must be true collaborators in tackling these challenges if they are to work effectively to adjust.

Dr. Aper then shifted to discuss the role of the typical liberal arts college Chief Academic Officer (CAO): facilitating the work of the faculty. He found that most of his initial Provost responsibilities were financial: finding ways to make the budget work best for faculty. Every single dollar must be spent to ensure the best for the institution and faculty. Again, a good working relationship between CAO and faculty is a must in order for a healthy institution to function, so sharing information is also must. He thought that it's never possible to share too much information with the faculty. A use-it-or-lose-it spending mentality can discourages Department from being frugal, for example. Faculty should work with their CAO to find ways to save money constructively that works for both the CAO and the Department. Rolling over unspent funds is one way to do this, for instance: unspent lab fees could be rolled into an account that could be used to fund new instrument purchases, lab upgrades, and the like. At the same time, faculty need to understand that not all information needs faculty approval.

In Dr. Aper's experience, good student assessment methods and data can be highly valuable to upgrading courses, majors, and programs, but only if that data is used for improvement, since to use it otherwise is not the intent of student assessment. As such, Dr. Aper again encouraged us to work with our CAO to start (or continue) regular program reviews. And we should demand that our
CAO’s support our efforts to improve our teaching and advising that will ultimately benefit our students and the institution.

Faculty also need to understand the pressures that our CAO’s are under and work to address them as we are able. These are complex issues that don’t have simple answers. We need to work with our CAO’s to find answers that work for our individual institutions. This will take time and effort, but will be worth it when our students succeed.

Dr. Aper ended his talk with an antidote about how he said hello to a student while walking across campus, and how two years later, when that student graduated, they said that his hello was the one thing that prevented them from transferring or dropping out. A powerful example of the one-on-one interaction that liberal arts colleges excel at, and one the Dr. Aper expected that we’ve all had with our students.

At the conclusion of Dr. Aper’s talk, Jeff announced where the afternoon’s breakout sessions would be held within the Science Center.

Respectfully submitted,
Mark Sinton
MACTLAC Secretary-Treasurer

General Session 2, Friday Evening, 7:30 PM

Plenary Address

*Physical Science as a Source and Beneficiary of Vocabulary and Syntax Instruction. A Physical Science Literacy Workshop*

Dr. Brian Johnson, Associate Professor, Department of Teaching and Learning
Dr. Stephen Marlette, Professor, Department of Teaching and Learning
Southern Illinois University Edwardsville
Edwardsville, IL

Drs. Johnson and Marlette began their presentation by first passing around a handout (see below) which was used to highlight presentation concepts. The relevant portion of which is reproduced below.

Dr. Marlette’s then described his background is as a high school teacher who turned into college professor of chemistry. Dr. Johnson’s background is as a linguist that moved into analyzing college level textbooks.

Dr. Marlette proceeded to gave some background into their topic. Students often start in a STEM major, but then don’t complete the degree, which is an issue for all liberal arts colleges or other STEM institutions. He then talked about the blame game: high school teachers that aren’t doing their job results in the students we see and their lack of persistence. The blame game then goes to middle high schools and the lack of role models, followed by the marginalization of STEM at the elementary level, lack of parental support, and finally to societal factors. This is a complex program that can’t be fixed by us, but rather what we can do to deal with STEM student persistence.

Dr. Marlette described one study that looked at undergraduate STEM courses by asking students “what are your concerns” once at the beginning of class and once at mid-semester. The results of that study showed that students often don’t know what to study, being afraid of speaking out in class, course pace, and a variety of other factors. Drs. Marlette’s and Johnson’s presentation would only focus on the “what to study” issue revealed by this research.
As Dr. Marlette moved from high school to higher education, he learned that general literacy does not equal disciplinary skills. The way scientists speak and write are different than for other genres, for example. Further, skepticism and challenge are part of chemistry literature, and that evidence rather than popular opinion is given priority. As a result, individuals that teach literacy don’t understand STEM literature and the associated skills. So, Dr. Marlette believes that to change this requires support and help from both STEM teachers and general education teachers.

Dr. Marlette next reviewed content knowledge and general pedagogical knowledge and skills. The intersection between these two is Pedagogical Content Knowledge (PCK), as described by Shulman (Shulman, L., (1986). Educational Researcher, 15(2), 4-14). Teachers must help students overcome this hump to make them better technology readers. For example, the textbooks that we use can be better at helping students read and understand.

Dr. Johnson then joined the presentation by saying that their talk was about giving us insights into the “what to learn” barriers, as well as the opportunities that sentence linguistics within science texts have for chemistry learners. He emphasized that we are chemistry professionals, not a reading teachers, and that chemistry texts are complex for a reason, which should be valued. His point was that when teachers teach reading, it has to be done with an idea for what do we want them to read. We are seeing the lack of chemistry education in our modern world as it changes as a result of global climate change. What we really need to do is understand what reading is. For chemistry, what we know about reading and writing tells us that chemistry experience builds vocabulary and comprehension, not the other way around. So we don’t have to teach reading per se, but focus instead on the chemistry experience. This can be done by exploring conceptual level texts, connecting level texts, and symbolic level texts.

Conceptual level texts for chemistry are known as the literacy of realia (realia is a term of art meaning any authentic object). It is the real chemistry experience people have with a physical concept. Such interactions with physical concepts build mental structures of understanding. Having this type of interaction encourages people to think like scientists and notice the world around them. This conceptual understanding is required for the other two levels.

Connecting level texts are one that recognizes and defines connections among noticeable patterns and then explains how those patterns build on each other to produce a coherent idea that is then generalized. Dr. Johnson gave the example of two scientists that didn’t talk about a scientific problem, but rather drew on a sheet of paper how the various concepts of the problem were connected; that is, the conceptual can be visualized.

Symbiotic level texts summarize disciplinary experiences in precise and concise ways. Without the previous two levels, students will not be able to understand a chemistry text since chemistry concepts are complex that incorporate the previous two levels. Without having the two other levels, students can’t understand and appreciate the inherent complexity of chemistry texts.

With this ideas in mind, when reviewing chemistry texts, the first difficulty encountered is vocabulary. Most chemistry jargon is beyond beginning chemistry students as they haven’t been exposed too, particularly if they don’t have the conceptual and connecting experiences. If students just slow down their reading, however, they will often be able to better understand the text and succeed in their major.

Dr. Johnson then asked that the audience turn to page three of the handout, which contained the following excerpt from the textbook The Sciences: An Integrated Approach by Tiefel and Hazen:

“Place a tray of liquid water in the freezer and it will turn to solid ice. Heat a pot of water on the stove and it will boil away to a gas. These everyday phenomena are
examples of changes of state—transitions among the solid, liquid, and gas states. Freezing and melting involve changes between liquids and solids, while boiling and condensation are changes between liquids and gasses. In addition, some solids may transform directly to the gaseous state by sublimation.

Temperature induces these transitions by changing the speed and amplitude at which molecules vibrate. An increase in the temperature of ice to above 0°C (32°F), for example, causes molecular vibrations to increase to the point that individual molecules jiggle loose and the crystal structure starts to break apart. A liquid forms. Then, above 100°C (212°F), individual water molecules move fast enough to break free of the liquid surface and form a gas. These changes require a great deal of energy, because a great many chemical attractions must be broken to change from a solid to a liquid, or from a liquid to a gas. Thus, a pot of water may reach boiling temperature fairly quickly, but it takes a long time to break all the attractions between water molecules and boil the water away. By the same token, a glass of ice water will remain at 0°C for a long time, even on a warm day, until enough energy has been absorbed to break all the ice attractions. Only after the last bit of ice is gone can the water temperature begin to rise.”

Focusing on the bracketed section of this excerpt demonstrates the complexity of most undergraduate chemistry texts. For example, this sentence had a high lexical density: 14 chemistry or academic related words. This compares to an average of 4 or 5 vocabulary words in other types of reading material. Further, some of these words have several meanings, depending on context. Jiggle means something different to a dancer than to a chemist, for instance. This sentence also has a grammatical metaphors (turning verbs into nouns or verbalizing nouns): transitions, increase, and vibrations have all been turned into nouns. Moreover, this sentence has a high grammatical intricacy (clauses that are connected such that they become one unit of meaning): 8 clauses in one sentence yields a intricacy ratio of 8:1. This is very high when compared to other types of reading material, where the grammatical intricacy ratio averages 3:1. Finally, the sentence had low cohesion (how close a pronoun and its referent are): the sentence pronoun “that” is removed from its referent “break apart” by 3 clauses. Dr. Johnson reiterated that students can make significant gains in their understanding by just reading slower.

Dr. Marlette then stepped in to advocate that we recognize the issue and that we should be willing to act within what we do to influence STEM persistence. Talk with your education colleagues to understand what they teach and why the teach what they do, for instance. We should be open to trying new ideas in classes and programs. We can also be advocates at the public policy level.

Dr. Marlette then described Universal Design for Learning (UDL), which has three principles: provide multiple means of engagement (the why of learning), representation (the what of learning), and action/expression (the how of learning). Dr. Marlette described several examples for incorporating UDL into our courses: aligning lectures with prioritized or problem area concepts; working through simulations in classes; demonstrating reading coding and then ask students to do it as pairs; prioritizing concepts so students know where to place their reading efforts; supplementing texts with terms and definitions; encouraging student-to-student engagement with concepts and ideas; having students revisit their anticipated guides after reading, reviewing, and taking notes to identify how their understanding changed; having students talk about what they read with others in small groups; and organizing a class discussion or debate about what students learned.
Drs. Marlette and Johnson closed their presentation by thanking MACTLAC for the invitation to speak and cover this important topic.

Respectfully submitted,
Mark Sinton
MACTLAC Secretary-Treasurer

General Session 3, Saturday Morning, 8:30 AM

Plenary Address

Black Girls Do STEM
Cynthia Chappe, Founder, Black Girls Do STEM

How Safety is Taught and Learned in Undergraduate Lab Settings
Dr. Susan Wiediger, Professor, Department of Chemistry
Southern Illinois University Edwardsville
Edwardsville, IL

Jeff Cornelius began the morning’s plenary session by introducing the first speaker, Cynthia Chappe.

Cynthia Chappe began her presentation by asking the audience which liberal arts colleges were represented at the meeting. She then described her background, starting as an undergraduate chemistry major and ending as the founder of the Black Girls Do STEM program. In between, she worked as an intern at the Illinois State Forensics lab, then did a stint at Anhesur Bush, where she was part of the product development group and helped bring one product in development to the market. Afterward, she started Black Girls Do STEM, now in its fourth year, and which offers programs to 6th through 12th grade students. There are currently about 90 students spread across all of the organization’s programs.

The core values of Black Girls Do STEAM are scholarship, training, empowerment, equity, and mentorship. The goal of Black Girls Do STEM is equitable representation of black women in all STEM fields. The program is thus intended to be interdisciplinary and integrated.

For junior high students, the program runs a Saturday academy which includes social and personal development, mentoring from black STEM professionals, advocating for a multidisciplinary education, and tutoring. For high school students, the program offers ACT/SAT preparation, tutoring, post-secondary planning, college and industry tours, and intern/externships.

Ms. Chappe then talked about the issues facing black girls that prevent them from entering STEM fields, such as the sexualization of young black girls, how current K-12 education programs are not meeting the needs of their students which leads to an opportunity gap (these students don’t go to college or go into a non-STEM degree), and the lack of young black girls (and boys) taking advanced STEM courses in high schools leading again to an achievement gap in college.

She illustrated her point with two student stories. The first story concerned a student that graduated from her program, and who was now in college, but was experiencing an achievement gap. This student attends a small school where her professor knew her name and worked with her to overcome her achievement gap, helping to keep her in school. The second story described Ms. Chappe’s own experience with a professor that did not like having female students in their class and how she felt invisible and ignored as a result. She emphasized that what we do at small liberal arts college is so important for helping these students stay in school and stay in a STEM major.
Ms. Chappe closed her talk with ideas on what we can do for minority students: affirm them, get to know them, build connections, and support their academic journey. She also described one more of her experiences in which a professor in her legal speaking class told her that her first paper and talk was the worse he'd ever graded, and how that made her feel. She again tried to be invisible for the rest of the class and worked very hard to try to sound like everyone else. It was a hit to her confidence, and while it motivated her to do better, it did caused her to question her major. That one comment almost changed her life course, so we should be careful about how we talk to and attempt to motivate students. Later in the semester, that professor told her that she was one of the most improved students he had ever seen.

Dr. Cornelius then introduced the next speaker for this session: Dr. Susan Wiediger.

Dr. Wiediger began her presentation by describing her point of view on the topic of safety education. She received a sum of safety experiences throughout her education, starting with student-led safety inspections while as a graduate student, continuing as an active research professor, and finally to working with pre-science teachers that typically aren't supervised in their teaching, which means that any safety procedures they use aren't typically supervised, let alone reviewed. This has led her to become involved in safety education research projects, involvement with the ACS, and being part of the Department safety team and working on several different safety projects.

Dr. Wiediger then pointed about the difference between compliance and best practices. Compliance is the opening day rules: OSHA, EPA, enforcement and documentation, equipment checks, accident reports, and waste manifests. Best practices are ongoing discussions, risk/hazard analysis, documentation and continuing improvement.

To do best practices, you need competence (knowledge, skills, confidence), resources (equipment, time, materials), and support (from colleagues and administrators). The average chemist doesn't get much education in any of these area, however. Take waste management, for example: different EPA waste generator levels have different levels of compliance, enforcement, and documentation. We are responsible for waste once we label something as waste (cradle to grave). But likely none of us in the audience has had any formal training on waste management.

As a result, Dr. Wiediger believes that what is needed to learn safety is integration, practice, assessment, modeling, contextualization, knowledge, skills, attitude within our course work. Spiraling is required as well to build and reinforce. She pointed out the that ACS has a laboratory safety text book, the authors of which are working on a 3rd addition, which will have a much reduced cost.

The ACS is also shifting safety education from rules based to risk-based. This is important because it empowers people to handle situations that don't follow the rules and adapt safety programs as needed. Dr. Wiediger also highlighted ACS guidelines for every level of chemistry safety education, from high school to college to academic chemistry laboratories. In addition, the ACS two free on demand video safety courses: Foundation for Storing, Organizing, and Disposing of Chemical in Educational Settings, and Foundations of Chemistry Safety and Risk Management. Both can be found at https://learning.acs.org/course/index.php?categoryid=43. ACS also has quite a few safety videos that have been recently revised for high schools and colleges that are available on the ACS’s YouTube channel. ACS had several divisions that focus on or touch on safety, such as DivCHAS, CCS, DivCHED Safety Committee, and specialized symposia and resources. Many local sections have their own safety programs and resources as well. One area that we can do much better at is to think about how safety needs to be adapted for those with disabilities, however. This needs to be extended to PPE for service animals that attend labs for students that require them.
Dr. Wiediger then highlighted some examples she uses in her classes: digging into a SDS, digging into waste characterization and management, doing risk and hazard assessment, increasing the amount of safety work as students progress through their academic career, and demonstrating touch contamination using a fluorescent indicator.

In summary, Dr. Wiediger thinks that working safety is a progress, and we have a responsibility and duty to prepare students to work safety and maintain the laboratory environment. We’ll need support to do this and should use the RAMP model (Recognize hazards, Assess hazard risk, Minimize hazard risk, and Prepare for emergencies) in our courses and research spaces. We also need to understand that we can never be completely safe, and must always make choices in our day to day lives.

Dr. Wiediger closed her talk by asking us to complete a DivCHED safety survey about the kinds of support we need to effectively teach and do chemistry safety.

**MACTLAC Business Meeting**

1. The meeting was called to order at 9:57 AM by President Brian Kamusinga.

2. Brian thanked everyone for coming and then reflected on his belief that the low turn out for the Principia College meeting had to do with the fact that we haven’t had an Annual Meeting for two years and the remote location of this year’s meeting. He expressed hope that Annual Meeting attendance will rebound at the 2023 meeting, which will be held in a more central location.

3. The Treasurer’s report for 2022 (see next page) was presented by Mark Sinton. Mark noted that the Association is good place financially, but that our current account balance has not changed much since our last meeting in 2019. As we didn’t have Annual Meetings in 2020 and 2021, the Association had almost no expenses and just a bit of dues income since Annual Meeting expenses represent the bulk of the Association’s finances. Before a motion was made to accept the Treasurer’s report, Mark explained that since there was not a quorum of members at the 2022 meeting (there were only ~20 members in attendance), the Executive Council decided that any motions moved and seconded at the General Business Meeting would be voted on by e-mail in the following manner: Mark would send out a membership wide e-mail listing all motions, with instructions to reply to him by e-mail only if a member wishes to cast a “no” vote for a motion. Mark said that the Council decided on a two week time window in which a member may cast a “no” vote for a motion. (Note: a General Business Meeting quorum is defined in our By-Laws as being 20% of the membership. Our current members stands at 251, which means a quorum is 51 members in attendance at a meeting.) With that explained, a motion was made to approve the 2022 Treasurer’s report and seconded. Upon completion of the e-mail vote, the motion passed.
Secretary’s Report for 2022 (see next page) was presented by Mark Sinton. Mark noted the same trends in our membership as described for the Treasurer’s report: our total membership has remained essentially unchanged since our last meeting in 2019. It now stands at 251 members, with just a few new faculty joining and about the same amount being removed from the membership rolls. As in previous years, Mark said that he doesn’t remove members less they move and leave no forwarding contact information, he learns of their passing, or they ask to be removed. As such, Mark did bring to the attention of members in attendance that the number of members three or more in arrears for their dues has ballooned since 2019 since most members pay their dues when they receive Annual Meeting information or when they register for one. Per our By-Laws, members three or more years in arrears are removed from the membership database. When this happens, Mark usually sends an e-mail to those members asking if they’d like to pay their back dues so as to remain members of the Association. Mark indicated that we would do the same this year, and expected that many will remain members. A motion was made to accept the Secretary’s report and seconded. This motion passed upon completion of the e-mail vote.
5. Brad Sturgeon presented the 2022 Archivist report. Brad briefly mentioned that work is ongoing to digitize many of the paper based documents and pictures still housed at the Monmouth College Library. He then reminded members of the various ways that they can access the Association’s archives via the Internet. Brad also mentioned that the Executive Council had decided to call the Principia College meeting the 70th Annual Meeting since that comports with the fact that 2022 is the 70th year of the Association’s existence. A motioned to accept the Archivist report was made and seconded. This motion passed upon completion of the e-mail vote.

The MACTLAC archives continue to be actively maintained in the Hewes Library Archives at Monmouth College (https://library.monmouthcollege.edu/archives).

The “Finding Aid” available online contains detailed information about the collection, including links to the digitized content (https://library.monmouthcollege.edu/ld.php?content_id=26038236).

The server for temporary digital storage has been updated to:
http://205.166.159.208/wiki/index.php/MACTLAC_Archives
Temporary digital storage will eventually be deposited into the Hewes Library Archive system.

As noted in the title, I am looking into how this meeting should be numbered due to the cancellation of annual meetings in 2020 and 2021. I will provide further info, although the Executive Council could make a decision in this regard.

Information specific current meeting:

- This is the first year Principia College has hosted MACTLAC.
- List of meeting sites can be found at http://205.166.159.208/wiki/index.php/List_of_Meeting_Sites.
- A map of all MACTLAC sites can be found at https://www.zeemaps.com/map?group=2342609#.

6. As there was no 2022 Placement Officer report, Brain Kamusinga moved on to the next agenda item.
7. Brain Kamusinga next announced our newest emeritus member: Nadine Szczepanski from MacMurry College.

8. Since there was such low attendance at the Principia College meeting, there were almost no members from the three states needing new State Representatives: Minnesota, Iowa, and Missouri. The current Missouri representative, Bernard Hansert, agreed to stay for additional term. In addition, the representatives for Illinois, Michigan, and Wisconsin have resigned, so their positions need to be filled. Brian Nell, the current Minnesota representative agreed to continue for an additional term as the Wisconsin representative since he now teaches at an institution in Wisconsin. Thus, Minnesota, Iowa, Illinois, and Michigan still need representatives. The members in attendance from these states were encouraged to find and nominate individuals to act as their state’s representative. The Executive Council also charged everyone on the Council to do the same. It is hoped that all of these positions will be filled in time for the 2023 Annual Meeting. (Note: since recording these minutes in October, a Michigan member has stepped forward to assume the Representative duties for that state, so only Minnesota, Iowa, and Illinois still need State Representatives. If anyone from those state is interested in being a State Representative, please contact Mark Sinton for more information.)

9. Brian Kamusinga then opened the floor for nominations for President-Elect. Jessica Bonjour from University of Wisconsin-Whitewater nominated herself. Hearing no other nominations, Brian said that Mark would handle the President-Elect election in a similar way as for the General Business Meeting motions. After completion of the e-mail vote, Jessica was elected as the Association’s next President-Elect.

10. A motion was then made for the Secretary-Treasurer to send the following letters of thanks. As with all other motions made at this Meeting, this motion will be voted on by e-mail as described in item 4. This motion passed upon completion of the e-mail vote.

   Outgoing Officers: Brian Kamusinga
   Outgoing State Representatives: Melanie Hauser (IA Rep.), Kelli Kazmier (MI Rep.), and John Morris (MN Rep.)
   Host Institution: Principia College
   Host Organizer: Jeff Cornelius and Brian Kamusinga
   Others: None

13. Becky Sanders then invited everyone to next year’s meeting at North Central College in Naperville, Illinois, which will be held on October 20th and 21st. While the theme for this meeting was not yet know, the North Central chemistry faculty are looking forward to seeing everyone on their campus in 2023. Brian Kamusinga then passed the MACTLAC meeting banner on to Becky.

11. Brian Kamusinga noted the following future meeting locations. Mark Sinton asked that anyone interested in hosting a future meeting should contact him. Mark also asked members to do the same if they know of another institution thinking about hosting.

   2023: North Central (Central)
   2024: Gustavus Adolphus College (West)
   2025: Open (East)
13. Brian Kamusinga then handed off the meeting to the incoming President, Tracy Thompson from Alverno College.

14. Tracy Thompson asked if there was any other business. There being none, Tracy asked for a motion to adjourn the meeting. Such a motion was made and seconded. Upon completion of the e-mail vote, the motion to adjourn passed. The meeting ended at 10:22 AM.

Respectfully submitted,
Mark Sinton
MACTLAC Secretary-Treasurer

Discussion Groups

Due to the low attendance at this year’s meeting, most of the Discussion groups did not meet, nor where notes recorded.

Vendors and Sponsors

The organizers of this year’s meeting wish to express their thanks to the following vendors and sponsors:

American Chemical Society St. Louis Local Section

MACTLAC Officers, State Representatives, and Other Association Personnel for 2023

Officers:

Past President: Brian Kamusinga Principia College
President: Tracy Thompson Alverno College
President Elect: Jessica Bonjour U of Wisconsin-Whitewater
Secretary/Treasurer: Mark Sinton University of Dubuque

State Representatives:

Illinois: Open
Indiana: Sarah Wilson Oakland City University
Iowa: Open
Michigan: Blakely Tresca Kalamazoo College
Minnesota: Open
Missouri: Bernie Hansert Westminster College
Wisconsin: Bryan Nell Ripon College

Other Association Personnel:

Archivist: Bradley Sturgeon Monmouth College
Placement Officer: Paris Barnes Millikin University
Web Master: Craig Bieler Albion College

MACTLAC Weather Report

It has become a tradition to mention something about the weather surrounding the MACTLAC meeting.
**Friday’s Weather**

Friday’s weather was sunny. The day had a high of 73°F (23°C), a low of 48°F (8.9°C), with 41% humidity. There was a 10 mph (16 kph) wind from the north, with 17 mph (27 kph) gusts. The barometric pressure was steady at 29.52 inHg (749.8 mmHg). The day saw no precipitation.

**Saturday’s Weather**

Saturday’s weather was also sunny. The high for the day was 75°F (24°C), and the low was 48°C (8.9°C). The humidity held steady at 46%. The day had a 12 mph (19 kph) wind out of the north with no gusts. The barometric pressure also remained steady at 29.53 inHg (750.1 mmHg). The day received no precipitation.

**MACTLAC News**

**Placement**

MACTLAC’s Placement Officer maintains two lists: 1) a list of faculty positions available within the MACTLAC member colleges, and 2) a list of candidates seeking positions with member colleges. Our goal is to ensure that candidates are in contact with the colleges having positions available. If you are currently recruiting new faculty, are looking for a teaching position at a Liberal Arts college, or have any other questions, please contact the Placement Officer. A copy of the list of available positions can also be found at www.mactlac.org.

**Website**

The address for the Association’s website is www.mactlac.org. Feel free to visit this site to get information on our organization and the services that it offers. Be sure to check out the links page as there are some things on that page that may be of interest to you.

**Honorary and Emeritus Membership**

Honorary membership is granted only by a unanimous vote of the Executive Council, and shall be reserved for those persons who have rendered extraordinary service to the Association or who have made noteworthy contributions to the improvement of chemistry teaching in member colleges. To be considered for honorary status, the candidate must be nominated by a colleague in a letter submitted to the Secretary-Treasurer at least one month prior to the Annual Meeting at which the letter is to be considered by the Executive Council. A second letter of support from another colleague should also be submitted at least two weeks before the Annual Meeting to the Secretary-Treasurer. These letters should attest to the criteria needed for honorary membership status. An Honorary member will be excused from further payment of dues and will be listed as an Honorary member.

Emeritus membership is reserved for any person who has been an active member of MACTLAC for 10 years and who has retired from teaching. An Emeritus member will be excused from further payment of dues and will be listed as an Emeritus member. Anyone seeking emeritus membership should request it, preferably by sending a letter to the Secretary-Treasurer of MACTLAC.

**2023 Meeting**

Our 2023 meeting will be held at North Central College in Naperville, Illinois, on October 20th and 21st. The theme of the meeting will be “Chemistry After COVID”, and will feature Dr. Ginger Shultz, Associate Professor of Chemistry, from the University of Michigan as the Friday afternoon Plenary
speaker. More details about this year’s meeting will follow shortly. Everyone on the Executive Council hopes to see you there.