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Vol 4, Issue III September 2017

Call for Mentors

MAC Needs Mentors for MAC Scholars!

MAC-AIChE's Mentoring Program matches recipients of the MAC scholarship with AIChE professional members, who help guide the students through college and into professional life. The MAC scholarship is a need-based scholarship that focuses on providing resources to students who are part of underrepresented minority groups in chemical engineering.

The Mentoring Program matches mentors with students at a crucial point in their engineering education, when they first begin to face the challenges of the rigorous engineering coursework. Many of the students awarded the scholarship begin their college years with no connections to anyone who has already been through the engineering degree. As a result, AIChE mentors become essential guides for navigating the tortuous path through academics, internships, job searches, and early professional life.

Call for Mentors

MAC makes a Call for Mentors to fulfill the needs of the Mentoring Program. Even with some volunteers offering to mentor multiple students, MAC faces difficulty providing a mentor to each and every MAC scholarship recipient.

With its current level of funding from charitable donors, MAC is able to award scholarships to around thirty students per year. To provide a mentor to each of these students, MAC asks that members of AIChE from all walks of professional life volunteer to serve in the Mentoring Program.

The Call for Mentors is not limited to any specific background or level of experience. Although membership in an underrepresented minority group is a requirement to receive a MAC scholarship, it is not required to become a mentor. Mentors can be from academia or industry. They can be young professionals early in their career, senior engineers with wellestablished careers, or anyone in between.

Call for Mentors

continued <u>The Importance of Mentoring</u>

The Mentoring Program is integral to the MAC Scholarship program. MAC recently reached out to past scholars, asking them to share their experiences in the program. We would like to share the response of one MAC Scholar, Nellie A. Hernandez. MAC will continue to publish more responses from MAC Scholars as we expand our Call for Mentors to additional publications.

Dear AICHE Scholarship Committee,

Thanks for the opportunity given last year, 2015-2016. I feel honored and very thankful for having the opportunity to apply the AICHE Scholarship towards my education tuition. AICHE opened doors for me because it provided me the means to enroll in classes.

I am an international student who lost the support of my family due to financial and Health constraints. I aspire to continue studies here in the U.S.A.

Many people have told me that pursuing an education would be hard for me because of my means as an international student. A great lesson I have learned from life is that although you are not always given the adequate tools to fulfill a task, you should always find the means to fulfill that task one way or another.

Blessings,

Nellie A. Hernandez MAC Scholarship Recipient

Become a Mentor

If you are interested in becoming a mentor or sharing the program with others please contact the current MAC officer in charge of the Minority Scholarship, Dr. Emmanuel Dada.

Officer:

Emmanuel Dada

emmanuel.dada@ymail.com

Reflections on MAC @ 25

Stephanie Viola, Felicia Guglielmi, and Gordon Ellis

MAC@25 Recap



The MAC@25 celebration helped energize and articulate several AIChE diversity and inclusion initiatives, both new and ongoing at the time, led not only by MAC, but also WIC, YPC, SIOC, and the AIChE Foundation.

The key highlight of the MAC@25 festivities was the presentation of 20 Pioneers of Diversity Awards, on November 9, 2015, recognizing the founding members of MAC and those individual pioneers critical to leading the efforts of diversity and inclusion in AIChE and chemical engineering. A small publication, "A Retrospective: MAC, Celebrating a Quarter-Century of Service to the Chemical Engineering Community" was written to document the celebration and the history of MAC. The book is available for purchase. Excerpts from the book and video interviews with the pioneers are available to view here.

Since MAC@25, AIChE has continued to advance its diversity and inclusion efforts with various new projects funded by the AIChE Foundation, such as LGBTQ members and allies events, a Disability convocation and HBCU travel grants to name a few. Exciting events are planned for the Women's Initiatives Committee's 20th anniversary in 2018.

The AIChE Foundation has worked closely with MAC since 2014 on fundraising efforts like the MAC Futures Fund which focused on engaging "100 donors in 100 days" to demonstrate the MAC community's immediate and direct annual support of diversity in AIChE, the profession and society at large. Funding from this effort went toward revival of the Minority Faculty Forum, increased scholarships for freshman and upperclassman, and enhanced resources for young professionals.

MAC@25 immediately followed the MAC Futures Fund fundraising effort and in 2015 helped to define the need and launch of the Minority Affairs Committee Endowment fund, a global effort to promote diversity and inclusion in AIChE and the profession, to support and encourage the education of future minority chemical engineers. The MAC Endowment Fund will support, in perpetuity, at least fifteen outstanding minority students every year in their pursuit of chemical engineering excellence. To date, we've raised \$80,000 toward our \$300,000 goal, having officially endowed the MAC scholarship program in perpetuity. Thank you all founding donors!

Reflections on MAC @ 25

continued

MAC@25 Recap

We know that the MAC@25 celebration was well received by many individuals involved in MAC and AIChE leadership, past and present, and as mentioned, it helped launch the MAC Endowment Fund which creates new opportunities, year after year, for brilliant young minds to power the future. Our current focus is on extending our reach beyond those already "invested" and thinking more broadly about the impact and value of AIChE's diversity and inclusion efforts. On a more tactile level, AIChE staff and MAC are currently working together to reach out to the roster of MAC scholarship recipients for testimonials about the benefits of their scholarships and/or mentorship experiences. Our goal is to see a large representation of recipients still engaged in AIChE, the MAC community and chemical engineering as a result of the scholarship program.



*Correction

In the previous issue of MAC eNews it was stated that Kathy Lee was the chair of the MAC@25 program. This was incorrect. As with any large event, the MAC@25 events were guided and chaired by a committee consisting of members from MAC and the Institute. Kathy Lee was chair of MAC in 2014 and submitted the proposals to the foundation to fund the Pioneer Awards and the reception and guided the reception plan. Dr. Isaac Gamwo was chair of MAC in 2015 during the celebration year and was chair of the Pioneer Awards committee and, along with staff and MAC executive committee, guided the Archive project. None of the MAC@25 events, Pioneer Awards, reception and archive, could have happened without a dedicated group of volunteers and staff.

MAC Events at AIChE's Annual Meeting

Minority Faculty Forum Event: MAC Real-Talk - MFF on Academic Career Paths in Chemical Engineering



Photo by Gerry Roarty on Unsplash

Minority Faculty Forum Event: MAC Real Talk - MFF on Academic Career Paths in Chemical Engineering

Ticketed Lunch Event for Ph.D. Students and Postdocs Tuesday, October 31, 11:00 AM - 12:30 PM

Description:

This is a two-part session consisting of a career path panel and speed mentoring. The panel will feature MAC members who are esteemed senior academics. Each will each give a brief career summary. This will be followed by a rapid-fire Q&A session. During the speed mentoring portion of the event, attendees will participate in informal conversation with an MFF faculty member. Groups of 3 attendees will meet with one mentor for 10 minutes each.

Confirmed mentors include:

Dr. Paula Hammond, David H. Koch Professor of Engineering and Department Head of Chemical Engineering at MIT

Dr. Levi Thompson, Richard E. Balzhiser Collegiate Professor of Chemical Engineering at the University of Michigan

Dr. Gilda Barabino, Berg Professor and Dean of Engineering at the City College of New York

Attendees can register for the event as part of the Annual Meeting Registration.

Attendance is capped at 30.

MAC Events at AIChE's Annual Meeting

Student Conference Event: MAC Real Talk - What's next with your ChemE Degree?



Photo by Dmitrii Vaccinium on Unsplash

Student Conference Event: MAC Real Talk - What's next with your ChemE Degree? Ticketed Event (\$5) for Undergraduates Sunday, October 29, 10:00 AM - 11:30 AM

Description: This speed mentoring event is just for our student members! The session will feature 2 short presentations by experienced chemical engineers who exemplify success along different career paths. This will be followed by an opportunity for students to speak informally with professional AIChE members representing a range of industries, career stages, and career paths. Come prepared with questions or use some of the conversation prompts we provide. Either way, this session will give you a chance to discover options for life after your degree by speaking with engineers who are currently living it.

Event will be open to 100 students Registration will cost \$5 per student Students will register for the event as part of the Meeting Registration Diverse group of professionals to serve as speed mentors (multiple industries, roles, identities)

MAC Events at AIChE's Annual Meeting

Broadening Participation in Chemical Engineering: Outreach Efforts that Work (Cosponsored by MAC)



Photo by Anna Vander Stel on Unsplash

Broadening Participation in Chemical Engineering: Outreach Efforts that Work (Cosponsored by MAC) Free Event for AIChE Members Tuesday, October 31, 2017, 03:15 PM - 05:15 PM

Description: Significantly broadening participation in chemical engineering is essential to finding the opportunities in 21st century challenges. This session is an interactive panel discussion highlighting creative approaches to reach and retain underrepresented students. The panelists will present their programs and demonstrate hands-on interactive activities that attendees may adapt for use in their classrooms and/or outreach efforts. Panelists will discuss the logistics associated with delivery of their programs, effective collaborations with local sections to identify, reach and retain underrepresented students, virtual program delivery and broadcasting, undergraduate student involvement in outreach, and successful approaches to including outreach in NSF grant applications. Panelists will also discuss developing student mentors and leaders, and collaborations with community partners. The session format will allow for break-out groups and discussion of diversity best practices.

MAC Events at AIChE's Annual Meeting Additional Events

Minority Faculty Forum Breakfast. Monday, Oct 30 or Tuesday Oct 31 (Vote Decides)

MFF members should have received an email poll to select either Monday, Oct 30 or Tuesday Oct 31st for the MFF breakfast. This will be held at a local restaurant (location TBD). If you'd like to join us and we missed you in the email, please visit this <u>link</u> to participate in the when2meet poll by Friday, Sep 29! <u>https://www.when2meet.com/?6334662-ok6vF</u>

MAC Chemical Engineering Forum. Monday, October 30, 2017, 12:30 PM-3:00 PM MAC Business Meeting. Monday, October 30, 2017, 4:00 PM-6:00 PM MAC Reception. Monday, October 30, 2017, 7:00 PM-9:00 PM

NewAICHE Member Benefit:

Discounts on Dell Technology Products

AIChE and Dell are partnered to offer the AIChE community savings up to 40% on the regular price of Dell computer systems and a wide range of Dell branded technology products. The AIChE discounts program will also feature seasonal offers on select products. Use your AIChE ID and get healthy discounts on Dell's vast range of technology products here at the Dell-AIChE benefits marketplace.

Currently available for US market only

New AIChE UPS® program Delivers Savings and Speed

Take advantage of new, even more competitive rates and expanded services using AIChE UPS® shipping services. Enrollment is easy to set up your shipping services savings account.

Whether you need your documents or packages to arrive the next day or are looking for affordable shipping options, UPS® understands the importance of speed, reliability, and cost. Plus, the more you ship, the more you can save.

New AIChE discounts help you save on a broad portfolio of shipping services including Air, Ground, NextDay, UPS Worldwide Express® export, and International imports and export services. <u>Get your savings to your bottom line now</u>.

[link to <u>http://www.savewithups.com/aiche/</u>]

Updates on MAC Members

MAC Congratulates these Members for their Recent Achievements!



Dr. Paula Hammond



Dr. Thomas Mensah



Dr. Isaac Gamwo

Dr. Paula Hammond, David H. Koch Chair Professor of Engineering at the Massachusetts Institute of Technology, and the Head of the Department of Chemical Engineering at MIT.

> Recently Elected Fellow of AIChE, Elected Fellow of the National Academy of Medicine, and Elected to the National Academy of Engineering

Dr. Thomas Mensah, President and CEO of the Georgia Aerospace Systems, Fellow of the National Academy of Inventors, Director of AIChE Nanoscale Engineering Forum.

> Co-Authored the book *Nanotechnology Commercialization: Manufacturing Processes and Products*, which is described as "A fascinating and informative look at state-of-the-art nanotechnology research, worldwide, and its vast commercial potential."

Dr. Isaac Gamwo, Senior Research Chemical Engineer, National Energy Technology Laboratory (NETL). Awarded the 2017 NOBCChE – Joseph N. Cannon Award in Chemical Engineering. Joseph N. Cannon is one of the founders of NOBCChE and has made many contributions to the field of Chemical Engineering. This award recognizes and honors Dr. Gamwo's achievements in the Chemical Engineering Field.

Thank You to the MAC Eminent Chemical Engineers Award Committee



The MAC Executive Committee wishes to thank the outgoing members of the MAC Eminent Chemical Engineers Award Committee, Dr. Emmanuel Dada, Dr. Thomas Mensah and Dr. Cato Laurencin, for their outstanding contributions and look forward to their support for the incoming 2018 MAC Eminent Chemical **Engineers** Award Committee.

MAC Leadership 2017

Chair: Vice-Chair: Vice-Chair: Past-Chair: Treasurer: Secretary: Officer: Staff Liaison:

Belinda Akpa LaRuth C McAfee Antonio Estevez Kathy Lee Joe Howard Emmanuel Dada Felicia Guglielmi

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September 2017

Meeting Minutes

AIChE Minority Affairs Committee Business Meeting – March 27, 2017 AIChE Spring Meeting and 13th Global Congress on Process Safety San Antonio, TX

Attendance: Belinda Akpa (Chair); Humbert Joseph Howard (Treasurer); Kathy Lee (Past Chair; AIChE Board); Emmanuel Dada; Sheena Reeves; Peter Schwallenberg; Tim Odi (AIChE Board); Andre Da Costa; Gordon Ellis (AIChE Communications); Steve Smith (AIChE Communications); Irvin Osborne-Lee; Senyo Opong; Alon McCormick (CTOC liaison to SIOC); Otis Shelton; Soni Oyekan; Quinta Warren; Sipho Ndlela; Angela Jenkins; Heather Yuengling (AIChE Executive office); Kim Karagosian (AIChE Marketing); Kristen Opalach (AIChE Marketing)

1. Welcome and Introductions

2. Endowment Committee Report

Status report on MAC Endowment Fund (**Oyekan**) — Goal: \$300K raised by 2017; \$700K raised by 2027; \$4.5M raised by 2047

By end of 2016, MAC fund had reached \$63K. Total in March 2017 is ~\$85K. **Oyekan** notes that \$50K more is needed for the fund to be endowed through AIChE Foundation. Two corporations — ExxonMobil and Pacific Gas and Electric — have contributed to the fund; the rest is from individuals.

Shelton notes that 22% of donations are from MAC affiliated members; needs more support from members at large.

J. Howard identified recent problem with online AIChE dues bill "check-off" donations not being directed specifically to MAC fund. **S. Smith** explained that "check off" donations are directed to AIChE's general "Annual Fund" — which support a range of general programs, including MAC scholarships. MAC's check-off link has now been redirected to MAC Fund. **Kathy Lee** recommended that the MAC newsletter explain the several options for donating to MAC (dues bill check-off, MAC Fund donation through AIChE Foundations, etc.).

3. Fellows Committee Report

Shelton summarizes proposal that would match AIChE Fellows with MAC scholarship recipients based on geography, specialization, etc. — as requested by scholarship recipients seeking mentors.

4. Update on Awards Subcommittee (B. Akpa)

(Chair LaRuth McAfee not present)



Awards help encourage AIChE membership and active engagement with both MAC and the broader Institute

Objective: Lifelong AIChE members exemplifying leadership, service, and mentoring roles in the profession

MAC Awards Subcommittee seeks to strength pipeline of honorees — from MAC scholarships (for undergrads), to Lumpkins awards (for grad students and young professionals), to MAC's professional honors such as Eminent Engineer, Distinguished Service and Grimes Award. **McAfee** will chair the effort.

As per discussion at Annual meeting 2016, plan to align award procedures with other AIChE entities and adopt AIChE's "web infrastructure" for soliciting and reviewing nominations.

Noted that MAC seeks to relaunch its **Outstanding Scholastic Achievement Award**, which has been dormant for many years. Suggestion that such an award should include travel allowance and registration for Annual Meeting. Funding source would need to be identified.

5. Scholarship and Mentoring Program (E. Dada)

In 2016, MAC presented 17 undergrad scholarships and 14 incoming freshman scholarships (totaling \$31K). MAC wishes to increase scholarships to perhaps \$3K per year, but funding is not yet available. So, MAC continues to cast wide net using available funds.

E. Dada and **B. Akpa** have written guidelines for MAC mentorship. Guidelines propose framework for interaction, including conversation prompts for various stages of student/mentor interaction. MAC will look for ways to evaluate effectiveness of the guidelines.

Mentorship opportunities for MAC scholars: **Dada** notes that opportunities to mentor are open to anyone — not just AIChE Fellows or MAC members. Basic assignment is one academic year, extended according to desire. **Kathy Lee** suggests tapping Lumpkin Travel Award recipients for mentor roles.

6. Faculty Forum Report (B. Akpa)

(Rep. Lola Eniola-Adefeso not present)

September 2017

- Target Audience: PhD students and postdocs
- Format: Interactive Mentoring Session
- 45-minute 'career path' panel featuring 3 senior academics (e.g. full profs, department heads, and deans)
- 45-minute speed mentoring session
 - Attendees spend 10 minutes in each group for informal Q&A with a MFF faculty member
 - 1 faculty member per group (representatives from multiple career stages: early career, mid-career, senior)
 - 8-10 faculty members total & 3 students per group
 = 25-30 students served

Ideas for 2017 Annual Meeting: Interactive faculty mentoring session in the format of speed dating – multiple rounds of speed mentoring with invited department heads, deans, full professors. Suggestions: Contact potential mentors well in advance of event; schedule for time slot close to Annual Meeting's Meet the Faculty session (typically Sunday); Question: Can the MAC Faculty Forum event be treated as a free ticketed item on the Annual Meeting registration form?

7. Outreach to HBCUs/MSIs (S. Reeves)

Reeves reported on college night event between Texas MSIs and the AIChE South Texas Houston) Section. Some students were able to arrange internships during the dinner meeting.

Proposal presented to fund travel (to Annual Meeting/AIChE Student Conference) for president and vice president of three AIChE student chapters from MSIs (e.g., Prairie View, NC A&T; Tulane; Lamar; TX A&M, Kingsville; New Mexico State; others schools not normally represented at the Annual Meeting). Delegates would shadow professionals onsite at the meeting. Students selected for the sponsorship would need to commit to AIChE activities at their schools and fundraise to help additional students from the school to attend the AIChE meeting.

Idea: A dedicated student poster session for students from MSIs. Would need to be discussed with Student Conference planners/ Student Chapters Committee, to avoid direct conflict with established Student Poster session. Would need to be organized through AIChE programming several months in advance of the event.

8. Treasurer's report (J. Howard)

Information not available in time for March 2017 report.

9. 2017 Annual Meeting Programming – Open Discussion

Some thoughts to seed discussion

Undergraduate Students – Mentoring and Networking/Shadowing; ~25-30 in attendance from MSI initiative (Lead: Sheena Reeves)

Graduate Students – MFF-led Speed Mentoring and Panel (Lead: Lola Eniola Adefeso)

Professionals – Mentoring Best Practices

Unanticipated potential synergies: Nobcche meeting colocated in Minneapolis in October -> Propose a topical that bridges the two organizations, creating a pathway for students in Nobcche to begin to identify and affiliate themselves with AIChE?

Opportunity for cross-promotion: NOBCChE Annual Meeting is scheduled for the same week as AIChE's Annual Meeting in Minneapolis, MN (Oct 29– Nov 30, 2017). MAC is considering opportunities for synergy between two conferences, particularly of students and young professionals. Possibility of special reception or invitations to special / joint events (Chem-E-Car, Quiz Bowl, for example). One challenge would be the handling of registration fees for access to the AIChE conference and vice versa. Another challenge is coordination well in advance with AIChE and NOBCChE programmers.

Mentoring of undergraduates, recent grads, and professionals – Who needs what and what are our immediate and long-term objectives?

Does MAC need a mentor training session, offering best practices for MAC mentors? This was last done in 2001 as a joint MAC/Women's Initiatives Committee (WIC) mentor training session. Consensus is that there is not much enthusiasm for live mentor training, but the new guidelines are a good start. MAC should also have experienced MAC mentors available to offer guidance.

S. Reeves: Is AIChE trying to help YPs understand the importance of mentorship?

Kathy Lee: WIC is doing a session on mentorship and reverse mentorship for young professionals (YPs).

Odi: Keep in mind — Who are we trying to mentor? Undergrads? YPs? Younger colleagues? Each type of mentorship is a different task.

K. Lee agrees that mentorship means different things at different career stages. Objective should be to address the weaknesses. For example, AIChE should ask YPs what they need in

Howard: Once ChEs graduate to industry, what is the retention in the field? How many ChEs stay in the pipeline until the end? Does the Institute's investment in students ever come back to AIChE?

K. Lee: Attrition in chemical engineering is a major topic for AIChE leadership, as well as for other professional societies. AIChE is studying the demographic info. Lots of reasons for attrition in the field. Today, we graduate more chemical engineers than there are (traditional ChE) jobs to employ them — so ChEs wind up everywhere. It's not necessarily that they give up.

S. Reeves: Why isn't the goal of mentoring to keep people in the profession? MAC (and AIChE) has best practices, but must be sure to use new methods for new times. For example, use social media and online information to locate potential mentors in specific locations, industries, etc.

Odi: Notes that people may or may not look at AIChE as part of their career, depending on what AIChE can do for them at the moment.

S. Oyekan: Adds that ChE's perceptions and interests in AIChE membership can depend on mentorship and support and AIChE advocacy from their supervisors, workplace colleagues, and companies.

Idea: Local section can host MAC events, such as cook-out (similar to AIChE's local-level YP subcommittees activities)

B. Akpa: Should mentoring focus on young professionals? MAC could benefit from new investment in and by YPs.

Questions: Does MAC and the Young Professionals Committee have any joint activities now? (Nothing noteworthy). Should MAC have a subgroup for YPs within MAC?

How can MAC help young professionals "move up" in their careers and in the AIChE hierarchy?

I. Osborne Lee suggests that Young Professionals Committee might already be covering much of this territory, in terms of encouraging young peoples' involvement in the Institute and industry. MAC should partner with YPC to advance mutual interests. Also notes that mentoring today's YPs takes different skills than previous generation, and that "Young people will listen to each other more than they'll listen to old-timers."

10. General business; comments:

Membership and participation:

MAC needs more Henry Browns to actively recruit at meetings, to put a personal face on AIChE and its active members.

Yuengling suggests including profiles of MAC members in the MAC newsletter to offer morepersonal attributes and activities. Newsletter could also include statements from senior MAC K. Lee: Perhaps theme of MAC's Annual Meeting reception can target Young Professionals.

Give-away tee shirts? "sMACk-down" or some new slogan For collaboration — noted that MAC and YPC business meetings tend to be scheduled for same time slot, so there is little opportunity for collaboration on strategy.

What can we do to increase visibility for MAC at Annual?

Place a MAC advertisement on screens Ribbons for MAC members: Can AIChE produce some? Place reps in registration area to catch people — $\dot{a} la$ Henry Brown Obtain list of meeting attendees in advance to promote activities

Dada: Advises that any of MAC's plans for 2017 Annual Meeting need to be solidified early — due to early meeting date. Up to two months prior to meeting in order for activities and award winners to appear in program book.

MAC "Business Meeting" — K. Lee commented that such a title might intimidate general meeting attendees from participating, as it sounds like an exclusive event for insiders. Perhaps the event could be promoted with a more inclusive sounding name. (Proposal — Margarita Monday?") Osborne-Lee reminded group that "business" has been used in flagging these committee events to distinguish the activity from other types of MAC sponsored sessions.

Osborne-Lee lauded MAC's recent newsletters.

Odi requests that MAC meeting notices be distributed at least two weeks in advance of each; this permits scheduling and also allows time for those who cannot attend in person to submit notes or reports for inclusion in the discussion

Howard: Suggested that AIChE website listings for MAC be revised to include email/contact information linked from MAC officers' names.

Question: Is there a MAC LinkedIn group? Yes. It is inactive, but exists.

A. McCormick mentions that within AIChE Engage one can start a subgroup for MAC

11. Adjournment