



Presents:

The March 2020 Newsletter



“Our ability to reach unity in diversity will be the beauty and the test of our civilization.” - Gandhi



@MacAiche



@AICHEMAC



Minority Affairs
Committee (MAC) of
AICHE

Editor's Notes

It is commonly accepted that each new year marks the time for change. These changes are for the betterment of the individuals or groups that make them. In keeping with that, each section within this newsletter will highlight changes, opportunities, challenges, and the cathartic power of hope.

Throughout reading you will find out how and why the Minority Affairs Committee is becoming a more dominant force. Also, you will have a sense the strength in numbers when it comes to bringing multiple people together, no matter the age, to broaden the scope of diversity within the engineering industry. Finally, you will find out how businesses and other programs outside of MAC are joining in the effort.

Each of these stories speaks to our faith in the future, and I'm excited to share them with you with the help from members of the Communications Team.

Make sure to keep your eyes on this newsletter going forward for more signs of resilience and growth. No matter what the circumstances are, one thing remains true: the best times for new beginnings are now.

Let's continue to strive.

Thank you,
Trebor Gainwell
Communications Officer, MAC



Table of Contents

I. Dedication to Mr. and Mrs. Brown and mention of article in April.....	3
II. MAC Leadership Officers.....	4
III. Comments from The Chair and Chair-Elect.....	5
IV. Engineers & Entrepreneurship.....	7
V. Long Tenured MAC Member.....	8
VI. Webinar Series.....	10
VIII. Foundation Grant Recipient Interview.....	11

Dedication to Mr. and Mrs. Brown

MAC is saddened by the passing of Dr. Henry Brown. Dr. Brown was a pillar for the MAC family, including a number of senior MAC leadership who have known him and his wife for many years. We send our gratitude to his family for the scholarship programs that will continue to support more minorities for generations to come. In the April issue of the newsletter, we will take a moment to reflect on his tremendous work in shaping MAC.

Sipho Ndlela
MAC Past Chair



MAC Leadership Officers

Sipho Ndlela
Past Chair



Kazeem Olanrewaju
Chair



Audie Thompson
Chair-Elect



Temitayo Femifowode
Treasurer



Janice Adewuyi
Secretary



Trebor Gainwell
Communications Officer



Comments from MAC Chair

Greetings,

First and foremost, the incoming MAC executive committee (2020) will like to appreciate Siphon, the outgoing MAC chair, 2019 MAC executives, ex-official of MAC (Kathylee, LaRuth, Emmanuel) and all AICHE Staff (Felicia, Cathy, Elsa) who have been working tirelessly to help MAC achieve its desire feat this fiscal year (2019) . Without further ado, the incoming MAC executives are poised to take the baton and move in that same line of strides and success.

The coming year is expected to be busier than we can presume, this is the year that MAC will be celebrating its 30 years of impacting positive value in the life of its member and AICHE at large, thence, expediency demands that we start putting together the various activities needed to achieve our goals and target for the coming year as soon as possible.

I am impressed to see that the communication committee members have started meeting and also came up with a list of targeted activities for the coming year. Thanks to Kathylee and Trebor for taking this prompt initiative. We will like to replicate this promptness with other subcommittees (MAC Eminent Award committee, Williams Grimes Award committee, Janice Lumpkin Travel Award committee, and Student Award committee (Emmanuel Chair), 30 years Celebration Committee and others) to avoid undue stress in meeting up with deadlines as we get into the heat of 2020. Some of the committees have already being set-up at the Fall 2019 business meeting, so what is require of us now is to reach out to the people selected and encourage them to start working.

Per the 2020 Business Meeting: MAC will be co-sponsoring with SIOC and STS in a weekend programming to reach out to AICHE Student Local Chapters and Community College(s). This programming will be chair by Sheena. I met with Sheena about a week and some couple of days ago to discuss the modality of the outreach. Present in that meeting was Nabila (PVAMU Chemical Engineering Faculty and STS executive) and PVAMU AICHE Student Chapter president and vice president (Marvelous and Little). It is hoped that the Students turn out will be impressive.

Kazeem B. Olanrewaju, Ph.D., MAC Chair
Assistant Professor, Department of Chemical Engineering



Comments from MAC Chair-Elect

What an honor and privilege it is to serve as the Chair-Elect of the AIChE Minority Affairs Committee (MAC) for 2020. MAC plays a critical role in my involvement in AIChE and other minorities due to its mission to promote activities that encourage the training of disadvantage and minorities within engineering. I believe in the power and the impact of people together in a shared purpose and vision. In 2020, we will celebrate the 30th Anniversary of MAC by recognizing those of the past, present, and future.

This service opportunity is a special moment for me because after receiving the Janice Lumpkin travel award, some of the MAC members mentored me. I am forever grateful for the guidance of its former leaders and members. MAC has the opportunity to influence the next generation of leaders, and it starts with our communication and consistent engagement. It is my vision that after undergraduates, graduate students, and post-docs receive scholarships and travel awards that we keep in contact with them. Our role is to nurture their professional growth and give them a platform to pay it forward.

To be a great leader means to be an accessible servant of the committee members. My life experience and career in higher education have provided me with the tools and skills needed to serve and assist the Chair to be successful. I believe that supporting and working closely with our incredible community of Chemical Engineers will help us ascend to levels beyond our expectations.

MAC has gained a strong reputation for being a clearinghouse for information on programs and training, thus equipping people with knowledge to lead to successful and productive careers. A communication team of young professionals offers webinars for graduate school and career path opportunities in Chemical Engineering. I look forward to supporting their efforts by advertising the webinars and inviting students to attend. Working together with our strategic partners and allies, we will stay consistent in promoting and achieving excellence.

I plan to ensure that MAC sustains excellence in being a resource for minorities in engineering and related disciplines. We must embrace technology and innovation to continue to grow and engage our members for the future as well as mentor those pursuing engineering careers. I look forward to working with the MAC in this capacity, celebrating the 30th, and planning for years to come.

Audie Thompson, Chair Elect
AIChE Minority Affairs Committee



Engineers & Entrepreneurship

The core of being an entrepreneur is identifying a need in society and then addressing it. Engineers are uniquely positioned to do this as we are trained to solve problems. Unfortunately, business is not generally taught as part of the engineering curriculum so we have to figure out for ourselves how to monetize our skills beyond working for others.

While being an entrepreneur sounds like a dream because you set your own hours and keep all the profits, there are downsides too. The days can be long; in fact, it's not unusual for entrepreneurs to work every day to keep the business going. Additionally, if you don't work, you don't have any money coming in.

The first step is deciding what niche your business will be in. It is helpful if it falls in the intersection of your experience and a real need in society that people will pay for.

Once you decide what your niche is going to be, you need to decide whether you will be supplying products or services. Products may be brand new inventions, or modifications of old products. Some research and development may be required, which would add to initial costs. Patents may also be needed. Additionally, production facilities may be needed, either in-house or outsourced.

Services generally have less overhead but require much more experience as you are selling your experience and expertise. Consulting is an example of a service business.

Regardless of the type of business, market research is necessary to understand what the potential profits are for your chosen niche. You need to understand whether there is demand for your product or service. You also need to understand who your target customer is so you can market your product or service adequately.

Networking is a must for entrepreneurship. This can be done through coffee meetings, happy hours, conferences, or joining trade organizations such as AIChE. Your network can help you find new clients. They can also introduce you to trusted lawyers, accountants, and other services your business will need.

It's also important to partner with people whose strengths shore up your weaknesses. For instance, a good product, or service, does not guarantee customers. Marketing a product requires very different skills from inventing a product.

To be an entrepreneur, you must have a high tolerance for risk and failure. Once you get your business going, it is important to stick with it. Don't give up if things get difficult, and they will. Creativity and flexibility are also important to deal with unforeseen issues. Success comes to those who persevere.



Engineers and Entrepreneurship
Dr. Quinta Warren, PE, PMP
Founder and CEO, Energy Research Consulting

Long Tenured MAC Member Highlight

In this newsletter, I was given the opportunity to highlight a tenured member of the Minority Affairs Committee (MAC), with a key purpose of exposing new MAC members and students to the dedicated and passionate group of individuals within our organization.

For this month's issue, I have chosen to highlight Dr. Gilda Barabino who has made seminal contributions to Chemical/Biomedical Engineering, STEM education, and mentoring. Presently, Dr. Barabino is the Daniel and Frances Berg Dean of Engineering, and Professor of Biomedical, and Chemical Engineering in the Grove School of Engineering at the City College of New York (CCNY). In addition to the many 'hats' that she wears as Dean, Mentor, Visionary of diversity, minority advancement and education, she maintains an active research presence focused on critical biomedical problems related to cartilage regeneration and repair, and sickle cell disease. Using an interdisciplinary approach, coupling biology/medicine with engineering first principles (i.e. fluid mechanics and cell mechanics), she is working towards impacting and improving the quality of life for individuals living with these diseases.

For those who know Dr. Barabino well, her calm and friendly demeanor is testament to her commitment and dedication. A quick 'google' of Dr. Barabino, results in numerous webpages highlighting her many accomplishments and achievements, as well as links to video interviews, where she explains her approach, motivation and drive for biomedical-focused engineering research and education. In particular, I found her interview for AIMBE's "Meet Inspiring Bioengineers" very enlightening, and I believe that each of us can glean some insights and perspective for our own career paths. As the first African-American admitted into Rice University's PhD program in Chemical Engineering, a minted fellow of the National Academy of Engineering (NAE) and the American Institute of Chemical Engineers (AIChE), and founder of the National Institute for Faculty Equity, her interest in 'ills' spans far wider than the ones experienced in the clinic, but also societal ills that result from gender/race/ethnicity-based disparities and biases that limits the impact and advancement of women, minorities and individuals in STEM.

I remember meeting Dr. Barabino for the first time at the airport in San Diego in 2018 on my way back to New York from the American Society of Hematology Annual Meeting. Having a knowledge of who she was, since I am an alum of CCNY (although she became Dean after I graduated in 2010), I built up to courage to introduce myself. As a shy introvert, it is typically difficult for me to approach someone new, but once we began talking it became easy, as I could tell that she had a genuine interest in listening to my story and aspirations as a young engineer interested in an academic career. When time came to go to our separate flights, she told me that we should continue this conversation and I promised to email her. Since then, we have had more conversations, from which I have been encouraged, and have learned a great deal about academia from her, especially as I was preparing to apply for faculty positions during the fall of 2019. If I had to pick one 'gem' of advice that I received from her it would be that there is a unique benefit that comes from having an 'activated' network. This stood out to me because many times I believe that as students, trainees, professionals we try to do it all on our own, not acknowledging the fact that there are people (i.e. mentors, role models, support system, and persons in authority) who are willing to guide, encourage, and even help to open the 'doors and windows' that will enable us to better reach our dreams and aspirations. However, this only works if our network of mentors is 'activated', and they have a working knowledge what it is that you are trying to accomplish.



Long Tenured MAC Member Highlight

In the short time that I have known Dr. Barabino, and my limited interactions with the members of MAC, it is clear that there is a culture of community, shared vision of excellence, and a wealth of experience and perspective. It is a 'village' that I am honored to be a part of, and I am looking forward to doing my part to contribute the MAC mission, which is to promote activities that encourage the education and training of underrepresented communities in engineering and related disciplines, encourage minority entrepreneurship, and direct the expertise of engineers to the solution of special societal and economic problems faced by such minorities.

In closing, I have two appeals and call to arms. 1) to the students, trainees and young professionals, take time to get to know the members of MAC, reach out to them, learn from them, and most importantly take advantage of this unique privilege; (yes I am talking to myself too). MAC is a village of mentors waiting to be activated. 2) to the established and tenured members of MAC and professionals, please continue to talk with us, share your experiences, perspectives and advice with us. It may not seem like much, but the words of encouragements, and simple gestures of acknowledgement can go a long way.

Jude Phillip, PhD.
Department of Hematology and Medical Oncology
Weil Cornell Medical College



Webinar Series

On February 19th, 2020, MAC conducted its first webinar entitled Academia at a Glance. The presenters were Roneisha Haney and Dr. Natalie Arnett. Roneisha received her Bachelor's in Chemical Engineering from Clemson University in 2016 and is currently a 4th year Chemical Engineering PhD Candidate at FAMU with expected graduation in May 2021. Her focus during candidacy is 3D printing of functional polymer-based composites. Dr. Natalie Arnett graduated with her associates in Chemistry and Biology from The College of the Bahamas. She then received her Bachelors from Grambling State and later received a PhD in Macromolecular Science and Engineering from Virginia Tech. She currently works as an associate professor and chair of life at FAMU. Both presenters spoke on subjects pertaining to what students can expect when entering a graduate program. The primary invitees were Foundation Grant recipients, MAC Leadership members, and several other interested parties that work in several sectors of the industry.

The next webinar, scheduled for April 2nd, 2020, will be entitled Chemical Engineering for a Changing World. The presenters will be Rajib Das, Hasini Jayatilaka, and Michael Chee-Awai. The subjects that are expected to be covered pertain to how chemical engineers have the ability to work within different industries that are not technical-based. Invitations have been extended to the same individuals that attended the first webinar, with the addition of individuals within the SIOC group.



Notes from Interview with Cesar Moreno

I had the privilege to take some time to speak with Foundation Grant recipient, Cesar Moreno who is a PhD candidate at the University of Notre Dame. The ultimate purpose of speaking with him was to understand the impact that the Foundation Grant he received in 2018 had on him and his future.

Cesar notes that prior to receiving the award, he worked on campus to support himself as his family did not have the means to do so at that time. Because of this, he was hesitant in making a decision on whether he should pursue his PhD because of the limited amount of time he had to focus on research. However, this change upon receiving the award.

Once received, Cesar was able to leave his campus job thus freeing him from any time constraints. This allowed him to enroll in the PhD program and focus strictly on the research. In turn, he was able to publish his research on microfluid devices, which will result in cheaper and safer manufacturing for use in the health industry. He also notes, that this has influenced him to pursue a career in teaching on the college level.

Cesar stressed that he is deeply grateful for the opportunities that the scholarship has afforded him and hopes that more recognition of these types of awards are displayed for individuals within diverse communities.

The MAC family is extremely proud of Cesar and all of his accomplishments. Going forward, the committee will take heed to his gratitude and comments to ensure that these opportunities are displayed on a more frequent basis for minorities. Congratulations, Cesar.

Trebor Gainwell
Communications Officer, MAC

