Interview with Emmanuel Dada
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Edited transcript

About Emmanuel Dada:
Emmanuel Dada is the President of ChemProcess Technologies, LLC, where he is responsible for process intensification, innovative and emergent technologies in the areas of reactive distillation, microreactor technology, and energy efficient processes. He is also a chemical engineering faculty member at Prairie View A&M University. He previously worked for FMC in many areas of innovative technologies, becoming Associate Research Fellow in 2004. Prior to joining FMC in 1995, he gained experience working at Rohm and Haas. In addition to his leadership in MAC, Dada is a member of AIChE's Separations Division and Process Development Division, and is active in the South Texas Local Section. He served as General Arrangements Chair for AIChE's Centennial Annual Meeting in 2008. He earned his BS at the University of Ife, Nigeria, and his MS and PhD at Lehigh University, all in chemical engineering.

The following interview was conducted by Gordon Ellis, AIChE Communications.

GE — We're talking with Dr. Emmanuel Dada, President of ChemProcess Technologies in League City, Texas, an adjunct faculty member at Prairie View A & M University, and one of the Minority Affairs Committee's Pioneers of Diversity. Thank you for taking some time today to talk to us for the MAC archive project.

Tell us a little about you earlier experiences. You received your initial chemical engineering training at University of Nigeria. Is that correct?

DADA — The name of the university was University of Ife, Nigeria. It is now called Obafemi Awolowo University, Ile-Ife. So, I got my Bachelors degree there, in chemical engineering, in 1980.

I was born and raised in Nigeria, and all along I had an ambition to be an engineer. And I thank God I am today. A chemical engineer, specifically. I've been in the U.S. since 1984, for my Masters and PhD program at Lehigh University. I got my masters and PhD in chemical engineering from Lehigh University in Bethlehem, Pennsylvania. Prior to that, in Nigeria, I was an assistant lecturer, at University of Port Harcourt, Nigeria, for about three years, from 1981 to 1984. And, as soon as I finished my graduate studies at Lehigh with a PhD in chemical engineering, I started working for Rohm & Haas Company in Bristol, Pennsylvania. I worked there for about five years. Then I moved on to FMC Corporation in 1995 — and I was there for about 15 years.

I started my own company in 2010 — ChemProcess Technologies, LLC — for consulting in the chemical processes, engineering solutions, waste heat recovery, energy efficiency, reactive distillation, sustainability, and some emerging technologies, such as dimethyl carbonate for making batteries solutions. I'm also involved in research on capturing and storing of carbon dioxide, especially from the coal-fired electrical companies and plants. I'm also currently an adjunct faculty member at Prairie View A&M University in chemical engineering. I started as adjunct faculty in the year 2012.

GE - Okay, and during this period, after you came to Lehigh, when did you first make a connection to AIChE activities?

DADA — I've been a member of AIChE since 1989. I've been coming to AIChE conferences since 1989. And I got involved early in the 1990s. Then, I wasn't an officer of MAC, or playing a key role, I just attended the meetings. The first assignment I had was to be the administrator of the MAC scholarship in 1998.

GE — How did you make a connection with MAC?

DADA — I learned about MAC, that's where minorities — Hispanic, African American, Africans, and others — meet at the AIChE conferences. So, I was invited to the meeting. I remember people like Soni Oyekan, Henry Brown, and Irvin Osborne-Lee were there. And through those people I got connected to MAC.

GE — So, they got you involved with MAC, and this was around the time that the committee was beginning, which was in 1990. What made you focus on the scholarship job, or did they simply need a volunteer?

DADA — They needed a volunteer. And, to my surprised, the number of scholarships they were giving was very small. Maybe four scholarships. And I wondered, what impact would four scholarships make? It's not going to make much of an impact. Then we said, let's go out and look for funding so we could expand the number of scholarships that we awarded. And, from four scholarships we went to 10. From 10 we went to 20. 20 to 30. And from 30 to almost 40 scholarships per year.

GE — Do you remember the year the scholarships started?

DADA — The scholarships started in 1994.

GE — And, have they been presented continuously since then?

DADA — Yes.

GE — And is it about 20 per year that you give?

DADA — Fortunately I have the history here. From the year 1994 to 2014, we've awarded about 391 scholarships.

GE — And those scholarships go to both incoming freshmen as well as students who are already enrolled in chemical engineering?

DADA — Yes.

GE — And where does most of the funding for those scholarships come from?

DADA — It comes from the dues check-off. When people pay their annual AIChE dues, they volunteer to pay an additional amount of money to support MAC's activities.

GE — And are you still active with the MAC scholarship program?

DADA — Yes, I'm still the chair — since 1998. Probably it's time for me to go. [laughs]

GE — Well, I know the committee always needs more volunteers. What motivated you to keep administering this program?

DADA — Well, initially, I thought that a $1,000 scholarship was a small amount. But the story of the students is, what do they use it for? We are very creative in the scholarship program. Even if it is $1,000, the money goes directly to the student. So, the student can use the money for things that the regular student aid package doesn't cover. So, what I hear from the students is that the $1,000 helps them a lot — and that's what motivates me, because, we feel we can help students to do well. And not only are we giving them scholarships, we have a mentoring program in which we assign a mentor to each of the recipients. And these mentors are AIChE professional members and they give professional advice to the students, to help them. So, not only do we give them scholarship money, we also provide them with mentoring possibilities.

GE — So, you have a network of volunteers who assist you with this program. Where do those volunteers come from?

DADA — The majority of the volunteers are from MAC and from AIChE's Societal Impact Operating Council (SIOC) members. So, that's where we draw most of the volunteers from.

GE — So, if an AIChE member wanted to help, how would they get involved? What's the best way for them to start?

DADA — I'm not sure if we have an option to volunteer on our website. What we usually do is send out notices to SIOC members, and email some other members of AIChE that I personally know, and I'll say, for example, we need your help in two areas: One, to serve as mentors to our scholarship recipients, and two, to evaluate the scholarship applications. And I've received overwhelming support on both fronts. Both for mentorship and for scholarship evaluators.

GE — And when did this mentorship component begin? Is it fairly recent?

DADA —The mentoring program started in the year 2000. Initially we drew the mentors from MAC. Later, we expanded it to include anyone from AIChE who wants to mentor.

GE — You've been the keeper of this scholarship program for its entire history. Are there other projects within MAC, initiatives that you've been involved with — or are scholarships your your main focus?

DADA —That's my main focus. The other one I was involved with is the MAC Eminent Engineers Award, which was started about five years ago. We recognized not only MAC members, but any minority professional engineer that has influenced the society and is a good role model to upcoming, young professional engineers. So, that award has been going on for about five years, and I've been the chair of that program. The other program that I'm proud of

that I've been involved in is the MAC Faculty Forum — even though when I got involved I was not a faculty member. But it started when I was the chair of MAC, I supported them, and through them we got some funding from NSF — which was championed by Christine Grant. That was in the year 2001 or 2002, I believe, when the NSF gave funds to help get the Minority Faculty Forum started. The Forum was started so that people know what is expected as a faculty member. So, they have a workshop for minority faculty members.

GE — Looking back, what would you say MAC's biggest contribution to the Institute or the community has been, in terms of improving the inclusiveness of the organization?

DADA — I think MAC has made a lot of strides in bringing underrepresented minorities into the mainstream of AIChE — in which we are now visible, in which we now have members of underrepresented minorities elected as directors of AIChE. We have representatives on the Operating Councils. We have had underrepresented minorities chair all three operating councils at one time or another. And also — very, very important — even when AIChE has had financial difficulties, the contributions of members to minority programs, MAC programs, has been sustained. In fact, even while AIChE's revenue was down in the early 2000s, the amount of money members put in their check off dues for MAC stayed very constant. Approximately $25,000 every year. Which means the community recognizes and continues supporting MAC activities. So, we are very happy about that — that the AIChE community sees value in the programs to support underrepresented minorities and MAC — that they continue to support it, even if there is a bad financial period for AIChE. Especially in the early 2000s.

GE — And, from a more personal perspective, over all these years, how has your involvement with AIChE and MAC been meaningful to you? Either professionally or personally?

DADA — I do this not for any personal gain, but to see that underrepresented minorities in chemical engineering advances. That they are also recognized. And that we are visible. And that we are being recognized and being respected. That when you look at minorities and you will see that they are also contributing effectively to the progress of AIChE and chemical engineering. So, that really makes me very happy, to see that we are contributing and that we are being recognized — that's all I want.

And especially, some of the programs we are doing — like the Janice Lumpkin Travel Award. When it started, we did it for one year, and it went down. Then, I took it over again, and we got tremendous support from Bette Lawler (AIChE staff operations director) — so that we were able to continue the Janice Lumpkin Travel Award — which is to bring in young professionals, and give them money to come to the AIChE conference so that they can meet with other professionals. And give then an opportunity to network.

And so, having been in charge of those programs, in which I could see five or six people and, through what I was doing, they were able to come to the AIChE conference free of charge — because the registration fee is waived for them — to give them an opportunity to attend the AIChE conference and network with professionals — there's no better place to meet professionals than at an AIChE conference. And to be part of that — to give people the opportunity to afford to come to the conference — really makes me happy. So, I'm not really getting anything personally, but at least, on a professional level, seeing that people progress, seeing that people make a success in their life, really makes me happy about my contributions to AIChE.

GE — I appreciate your comments, and we all appreciate your contributions. Do you have any final words?

DADA — I'm really happy about where AIChE is. Last year we had, for the first time, an African American president of AIChE, Otis Shelton. He was in Nigeria a few weeks ago, and he was recognized and he was honored. His being the first African American president of AIChE was really great for us. It means AIChE is inclusive. AIChE recognizes the contributions of underrepresented minorities. And we are very happy about that.

GE —Dr. Emmanuel Dada, thank you so much for talking to us.

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