



Interview with Irvin Osborne-Lee

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Edited transcript

About Irvin Osborne-Lee:

Irvin Osborne-Lee is Professor and Head of the Department of Chemical Engineering at Prairie View A&M University, where he is also Associate Director of The Center for Environmentally Beneficial Catalysis. He has been Principal Investigator on numerous projects with such sponsors as the National Science Foundation and the U. S. Department of Energy. He currently leads a project to provide training on nuclear forensic analysis for minority-serving institutions, in partnership with Texas A&M University and Los Alamos National Laboratory, and funded by the U.S. Department of Homeland Security. Prior to joining Prairie View in 1998, he was a member of the development staff and Group Leader at Oak Ridge National Laboratory. Osborne-Lee is a life member of AIChE, where he has served as Director of the Fuels and Petrochemicals Division, as a member of the Societal Impact Operating Council and the Career and Education Operating Council, and on the Board of Directors. He earned his BS, MS, and PhD degrees in chemical engineering at The University of Texas at Austin.

The following interview was conducted by Gordon Ellis, AIChE Communications. Video extracts from this interview are available in the Minority Affairs Committee's archives.

GE — We're here today with Dr. Irvin Osborne-Lee, the Department Head and chemical engineering professor at Prairie View A&M University, in Prairie View, Texas. And I'm talking with Irvin in connection with the Minority Affairs Committee's 25th anniversary archive project. Maybe you can start by telling me a little about your chemical engineering background. I know you got your training at UT Austin, is that correct?

OSBORNE-LEE — That's correct. But first of all, let me say I'm really excited about this interview. I appreciate the interest the Institute is showing in the Minority Affairs Committee and its history. There's a strong and long history of support from the Institute, and just to have the opportunity to talk about something that's near and dear to my heart — I really appreciate it.

Now, to your question. Yes, I'm a graduate of Texas at Austin three times over. I did my Bachelors work there, my masters work there, and my doctorate work there.

GE — Did you first become involved with AIChE as a student member?

OSBORNE-LEE — Well, yes, but as a student, I was focused on academics. There were a few student organizations there that I was a member of, and AIChE was one. But, there was nothing

really special to me at that time about it. When I finally graduated with my doctorate in 1985, I went to work at Oak Ridge National Lab. I worked there three years, just focused on my work, until my boss and group leader, Bill Rodgers, who was very active in AIChE, encouraged me to start attending the meetings. He wanted to recruit me into the Fuels and Petrochemicals Division. So, I joined.

So, how did I get involved with Minority Affairs? Well, back then, Henry Brown was chair of the *ad hoc* committee on minority affairs. And part of his style was to recruit. He was very big on that. And I was going up an escalator at the AIChE Annual Meeting and he started talking to me. So, he convinced me to come to a Minority Affairs Committee meeting. And I got really interested in that.

GE — Were you also an officer in the Fuels and Petrochemicals Division?

OSBORNE-LEE — Fuels and Petrochemicals is my original home in AIChE. I followed my group leader there and we did a lot of programming together. And, yes, I did become a director of F&PD. I was a member of their board and did programming, and even was Meeting Program Chair for one of the AIChE national meetings. So, I have a real appreciation for the work that goes into an AIChE Spring Meeting.

GE — Now, during the *ad hoc* committee era for the Minority Affairs Committee, what was it like? What sorts of programs were you attempting to get people to come out for?

OSBORNE-LEE — Well, Henry Brown and his predecessor Gerry Lessells, got support from what was then called Council, now called the Board of Directors — to engage in issues related to minority affairs. And there were meetings and programs that were supported by a budget that we were able to use. One example was the ChIME program, Chemical Industries for Minorities in Engineering. And ChIME was a program that got youngsters, middle-school to high-school-age, involved in activities that lead them to become interested in technical disciplines. So, it was a type of pre-college outreach, and it was something that we thought was worthwhile, and so we funded it for a time.

And then, of course, in 1990, the events built to the point where it was seen as appropriate to establish a national AIChE committee. And, of course I was there, and I became the first chair of MAC. So, one of the first challenges we had, which was given to us by Council, was to establish our own programs internally. Council recognized the benefit of supporting organizations that were doing good things, and, understandably they wanted AIChE to be the one doing good things. So, we worked on it.

GE — What sorts of challenges did MAC face in its early days as a formal committee?

OSBORNE-LEE — One of the big challenges was getting volunteers to make commitments and to come out and be a part of the team. I mean, I look at the Minority Affairs Committee now, and — we have really accomplished something. I call it stability. One of the biggest achievements during my time was to establish a working succession plan. So that the people working for MAC were not falling over from exhaustion. You realize it's not going to wreck your career if you choose to volunteer. So, now, people were deciding to step.

GE — You chaired the committee for its first several years, in the early 1990s. Are you still active?

OSBORNE-LEE —In a sense I'm as involved as I ever have been, in that I still care, and I'm looking to make sure that things are getting done, even if I don't have to be the one doing everything. There are so many great people. You know, any roomful of chemical engineers is an awesome amount of potential. I know, because I train them, and whenever I get together with these people it's just different than your general population.

But yes, I chaired the committee those first four years. And I've chaired the committee again since then, in 2011, after my stint on Council. Fortunately the succession planning was working, so I was just taking a turn, and after a year I was able to be succeeded.

GE — Going back to those first few years of MAC, were there specific accomplishments that gave you encouragement?

OSBORNE-LEE — Well, yes. We were faced with this need to accomplishing things. And one of the things that we did well early on, and continue to do well, was outreach. We come together from different parts of the country, at a meeting like this one, the Spring National Meeting. Here we are — all these relevant role models sitting around the table in a conference room. But the needs are out there, beyond the walls. And so we started putting teams together and spending a morning in a local classroom. We'd make the arrangements ahead of time, bring the materials, and do hands-on science activities with the students. Really as an interest generator, in terms of getting students confident with the idea that they can do science.

So, that's one of the things we wanted to do — look down the road and see how we can encourage the production of future engineers, with a more diverse portfolio — if you will — for AIChE. And AIChE is now doing some other K–12-type activities related to what MAC did. Plus, those visits only cost about a hundred dollars every time we did one, and the budget MAC was working with was about 30 thousand a year back then. So, our goal of spending our budget on worthwhile AIChE activities, even make small steps, had a lot of impact.

But that was only a small piece of what we envisioned the whole pipeline should be. What we envisioned for the pipeline was — there's K–12, there's college, there's just out of college, and there's beyond. Okay, so, what can we do to impact the different stages of the pipeline? And at that point we created the scholarship program. We created scholarships for students who were already in university engineering, and others for incoming freshmen who were interested in engineering. And that was a part of the initial suite of programs that we started in the early 1990s, and that continues now.

We also had an awards program for those who are out of college, working within the Institute. So we have the Distinguished Service Award, and that allows us to recognize people who do things worthy of recognition. There's no money associated doing MAC's work, because we can't begin to pay our volunteers what they're worth.

Then there's the William Grimes Award, and that was named after the first African American member of Council, or the Board of Directors, who recently passed (in early 2015). And that award can be given to a chemical engineer who may or may not be a member of the Institute. It identifies someone who serves as an excellent role model. Someone we can put the spotlight on. One example is Mae Jemison, the first African American woman astronaut, who's a chemical engineer. Also in that suite of awards is the Outstanding Scholastic Achievement Award for recognizing an exemplary undergraduate student.

So, things like that were part of the original set of programs. Of course things have developed beyond that. We've got the Minority Faculty Forum, the Eminent Engineer Awards, and these Pioneer awards.

GE — And these MAC outreach and recognition programs continue. Going forward, what do you think the committee should focus on in the near future?

OSBORNE-LEE — Well, ultimately we'd like to see us exceed our need for existence. Right? Basically, work ourselves out of a job. Clearly there's a lot of distance to cover, because diversity is still a huge goal of the Institute. It's worthy of achieving, but we're not really where we want to be yet. Then again, diversity can be a changing picture. One of the things that MAC did focus on initially, that we don't have to anymore, is women's issues. AIChE now has a Women's Initiatives Committee that has grown out of the kind of playing field MAC was operating in. They're handling that part of the AIChE strategic plan very well, I think. But there can be other issues too. So, right now, I think MAC has to continue to develop more creative, impactful programs that address needs as they come up.

And, another important area right now is that pipeline just after college, before we get established — which fits into the category of young professionals. And, fortunately, AIChE has a robust program going on in that area. And I think there's a lot of things that MAC can do in conjunction with that particular group, to help increase diversity right there at the start of membership.

GE — How can interested AIChE members get involved and show support for MAC?

OSBORNE-LEE — Well, they could do it the way I did it. Come to the AIChE Annual Meeting or the Spring Meeting, and as long as you're there, come and participate in the MAC business meeting, to see what's going on. Of course, AIChE also has a dues check-off box, and so an easy way to get involved with MAC is to check that box, and make a donation. And then watch to see what good things happen.

GE — And much of that funding goes to the scholarship programs.

OSBORNE-LEE — Absolutely

GE — And the committee has given nearly 400 scholarships over the last 20 years.

OSBORNE-LEE — And it's getting larger. Right now we're trying to see how we can give more and larger scholarships.

GE — Well, as we close, do you have any final comments on the occasion of MAC's anniversary?

OSBORNE-LEE — Well, right now MAC is getting ready for a big event. And so there's a lot of planning that has to be done. We've got a succession plan working, with a new chair every year. And they'll need lots of support. And probably the most fun will be watching them be in charge.

GE — And the door for volunteers is always open.

OSBORNE-LEE — Oh yes.

GE — Dr. Irvin Osborne-Lee, who was the first chair of the Minority Affairs Committee back in 1990 and still is an advisor to that group. Thank you so much for being here.

OSBORNE-LEE — Thanks for having me.

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