

I believe a university faculty member acts as a tripod, with three strong legs. One leg of the tripod is research, the second leg is teaching, and the third leg is service. It is often easier to quantify the first two legs: how many papers do you publish, how much money do you generate, how many classes do you teach, how many teaching awards have you won, and so on. But I believe that service is just as critical as research and teaching for someone in my role. While service is not as straight forward to measure as research and teaching (this is similar to the difficulty of quantifying the social pillar of sustainability, versus the economic or environmental), I believe that, as a tenured, Associate Professor at the University of Arkansas, I should be providing service on a local, national, and international level.

In my opinion, service at a local level is the most important level of service. Since the University of Arkansas is a land-grant institution, funded significantly by tax-payer dollars, service back to the university and community should be expected. One aspect of service in the local community is serving on committees. A university is complex, with many different aspects that need attention from faculty members. I believe it is one of my duties as a faculty member to serve on university committees, from serving on the Transit, Parking, and Traffic Committee and the Athletic Committee at the university level, to participating in departmental hiring committees; all are necessary to keep the university running smoothly. In addition to serving on committees, participating in outreach programs such as the Engineering Career Awareness Program or Engineering Highlights, both in the College of Engineering, allow me to serve the university.

Another aspect of service to the local community is on the state-wide level. Civil Engineers have ample opportunities to participate in state activities, such as conferences organized by the Arkansas Department of Transportation (ArDOT), the local chapter of the American Society of Civil Engineers (ASCE), and other state-wide associations. As in the case for university programs, these state-run associations also depend on help from the community. I believe faculty are prime candidates to participate in these roles. Currently, I am heavily involved with the Arkansas Asphalt Pavement Association (AAPA) and the Arkansas Concrete Pavement Association (ACPA).

In addition to service within the local community, the next level of service is on a national scale. Civil Engineers are fortunate to be in a field where there are always new nationwide engineering problems to face as well as innovative solutions to discover. These problems are often dealt with on a national level through committees and task forces. I am already an active member of the Transportation Research Board (TRB), as a member of committee AFK20 (Committee on Characteristics of Bituminous Materials), AFK50 (Characteristics of Asphalt Paving Mixtures to Meet Structural Requirements), and AHD20 (Committee on Pavement Preservation). I am also an active member of the Association of Asphalt Paving Technologists (AAPT), organizing the yearly webinar series, which continually works to understand the behavior and characteristics of asphalt concrete and its components. Finally, I created and hosted a monthly webinar series called "Pavinars: Webinars for the Pavement Community." These webinars give an hour-long introduction to various topics in the pavement industry, are attended by public and

private sector engineers from around the country, and include time for live questions and answers. By serving on committees and hosting webinars, I am able to reach out to professionals around the country and improve the state of knowledge in pavement materials and sustainability within the Civil Engineering field.

The final level of service I strive for as a faculty member at the University of Arkansas is service on an international scale. Having spent two years in China for my Post-Doc and six months in Spain for a sabbatical, I have experienced firsthand how many of the problems occurring in the transportation infrastructure of China and Spain are similar to the problems occurring within the United States. This has led me to be more active within the Asphalt Emulsion Manufacturing Association (AEMA), an international association. I am involved with AEMA in two primary functions. First, I am the chair of the Young Member Committee. Each year, the committee establishes three goals in order to increase the knowledge of asphalt emulsions, from implementing a mentorship program to developing YouTube videos on basic asphalt emulsion principles. Second, I have developed three on-demand, on-online certificates for asphalt emulsion. These three certificates are:

- Introduction to Asphalt Emulsion
- Applications of Asphalt Emulsion
- Manufacturing of Asphalt Emulsion

Through these three certificates, I hope that awareness is raised for the economic and environmental benefits of utilizing asphalt emulsion through a better understanding of the characteristics and fundamental behavior of asphalt emulsion.

I believe service must have a purpose. As a faculty member, I actively search out committees and task forces at the university, in the city, in the state of Arkansas, at a national level, and around the world that are working to solve the challenges facing both transportation engineering and university communities. While research and teaching are often the more visible deliverables of a university faculty member, I believe service is just as important.