Dr. Ruth Douglas Miller is an associate professor of electrical engineering at Kansas State University. She has been very active in the American Scientific Affiliation (ASA), and has already served on the Executive Council including past president of ASA. See more about Ruth at her profile in the ASA membership directory.

Why are you a Christian? I wasn’t raised a Christian. As a child, I was surrounded by science. God didn’t exist to me because I couldn’t measure him. I first met Christians in high school, and gradually they showed me that the love of God was real. And if they loved for real, and thought Jesus was real, I had to take a look at Him. Like C.S. Lewis, I had to figure out what to do with this Jesus – liar, lunatic, or Lord.

Why are you an engineer? My dad was a chemist, and my mother trained in chemistry and became a medical technologist. In high school I loved science of all sorts. My dad suggested that chemical engineering was where the money was, so I looked at engineering. At Lafayette College, I had to study circuits, and when I hit circuit theory, I fell in love with electrical engineering. V=IR no matter what; no fudge factors, nothing to neglect! It’s perfect; it’s magical.

How do your faith and your engineering enhance each other? When I was in high school, and an undergrad in electrical engineering, my career and faith were not aligned. The Christian leadership of the high school group that brought me to faith advocated women staying home and having babies, which to me was a waste of intellect. At Lafayette my career and my faith were separate worlds; we simply failed to ask the question of why is what I’m doing what God wants me to do. I wanted to do engineering research, so I pursued graduate studies at the University of Rochester. There I fell in with a grad-faculty Bible study group of very bright thinkers, who came from diverse backgrounds across science and the arts, and diverse Christian backgrounds, from high church to the Plymouth Brethren (a small group similar to the Quakers). I was challenged about what it meant to have engineering as a calling, about why I wanted an advanced degree in a technical field, about the purpose of my life. All that sort of thing was talked out. And I learned that God has blessed me with the ability to understand the beauty of Maxwell’s equations. God belongs here on the bench next to me. I don’t have a calling to go into church ministry; I have a calling to do this terrific engineering research.

What, or who, have been the three greatest encouragements for you personally in your career? First, the Bible study at Rochester had the most important impact early in my career. Second, the ASA. My husband, Keith, was already a member of ASA when we met and he introduced me to it while at Rochester. Interacting with ASA members and speakers, across scientific disciplines, at the annual meetings is tremendously energizing. Third, my students who recognize me for my faith. I don’t hide my faith; after all, I work in the Bible belt. Every once in a while, a student
will come to me for advice outside of class – on a life question, or science and faith question -- because I am a Christian. That is incredibly rewarding.

**What advice would you want to give a student or early career person, on being a Christian woman in engineering?** I have two thoughts on advice. First, don’t give up if you are the only woman on the team. Those of us at my age – the over-forty set – have succeeded in a male-dominated field because we don’t care about who we are working with, and working with all men is the norm. But some of my students feel uncomfortable and want a woman on their team. That can be a problem; there simply are not very many women in electrical engineering. So my advice would be to get used to working without another woman on the team, or go recruit one; just don’t give up because of that reality. Second, enjoy where you are at, right now. Life is full of uncertainties – where you will go to school, where you will work. Avoid thinking that you will start living when you get this or that answer. You are, right now, where God wants you to be. Don’t put off the rest of living – staring a family, getting a house – until you get all the answers. Live now.

**What is your vision for Christian Women in Science and/or the American Scientific Affiliation?** ASA is a very valuable opportunity for a believer in the sciences or engineering, because there aren’t that many or not many open about their faith. In ASA you can still meet people across disciplines at the annual meeting. I don’t understand why other folks don’t see the value and join. We think ASA is an essential part of our Christian faith. Without it, life would not be so much fun.