

Fresh Perspectives

AN OCCASIONAL DISCUSSION ABOUT ENGINEERING ISSUES WITH ONE OF THE PROFESSION'S RISING LEADERS.



Angelina Errico, P.E.

Education: B.S. (1997) and M.S. (2003) in mechanical engineering from Rensselaer Polytechnic Institute
Employer: Owner of Errico Engineering LLC, Wilton, Connecticut
Job Description: Provides driveline/powertrain consulting, with a special interest in the effect of automotive technology on rescue workers

PE: So what made you want to be an engineer-entrepreneur?

Errico: I wanted to be my own boss, and I'm really creative in my designs. Being in the corporate world you're limited in your creativity. I want somewhere where I can be creative and come up with patent ideas. I'm constantly thinking of things as I see them. I always think of ways to improve everything that's out there. I want to put that to some use and be more helpful to people.

PE: As a young engineer, you're already taking an active role in your profession as a member of the Connecticut Society of Professional Engineers' Governing Board and a member of NSPE's Young Engineers Advisory Committee. What can be done to get more young EIs and PEs interested in becoming active in their profession?

Errico: Most of the meetings are oriented toward civil engineers, and mechanical engineers have nothing to do. I'm involved to make some changes, to help mechanical engineers out and give them a place to go.

We also need more mentoring, mentors in your same field—somebody to be there to answer questions. My question might be, How did you get your business started? What's a good way to go out and find clients? What's the best way to approach people?

PE: What do you think is the profession's biggest challenge today?

Errico: Losing engineers to management. I think it's a bigger deal than offloading to other countries. Everyone is complaining about all the engineering going to other countries for cheaper rates, but the engineers who are here are offloading themselves to their own companies. There's less and less engineers. We're losing all the expertise so, of course, it's going to go to another country. And the other countries value engineering more.

PE: It's often the case that engineers in industry are not licensed, but you are. What made you decide to pursue the PE license?

Errico: I first heard about it my sophomore year in school because all my civil engineering friends were getting it, and it wasn't addressed at all on the mechanical engineering side. I looked into it and decided I needed to get it because it's prestigious and people look at you as an expert. When I started my first job, I heard all these whispers about how "she's only here because she's a girl." Anytime people would talk to me, they

people and only 80 engineers so we had a lot of responsibility.

PE: At the 2006 Society of Automotive Engineers World Congress, you presented a paper about advances in automotive design and technology that protect passengers but can present risks to rescue workers at the scene of an accident. What inspired you to conduct this research?

Errico: My younger brother. He's a volunteer firefighter, and he would come home complaining about certain safety features so I started doing the research on it, and nobody on the engineering side is covering this. The rescue workers are begging for help, but nobody's doing anything about it. Since I have experience in automotive engineering, why not do what I can to help out. The paper was the way I started it. It's opening some eyes. In June 2007 we're arranging a technical symposium and we're going to try to get rescue workers and the automotive engineers to speak to each other. My idea is for the automotive engineers to change the designs so that it can help the rescue worker or if they can't redesign it, teach the rescue workers about

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would talk down to me, and it took me a year and a half to prove myself—so each time I spoke I didn't have to do a calculation to prove I knew what I was talking about. Now when I say I'm a PE, they say, "she knows what she's talking about" and I get more respect.

PE: You've been working for a little over nine years. What advice would you give to new engineering graduates about getting a successful start in their careers?

Errico: I would say start at a smaller company. You get more responsibility. I see the difference between the way I started and the way other engineers start. I started at a company with about 6,000

the new technologies coming out so they can approach the accident scene safely. There's a disconnect there, and I'm trying to connect it.