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Make a change

It's time to redress the engineering gender imbalance, says **Mary Inman**

MY CAREER

I studied nuclear engineering science at Arizona State University. Nuclear engineering is a smaller field compared to disciplines like civil, electrical or mechanical engineering. I chose it because I thought it was more challenging and also, as it was smaller, it wasn't as intimidating as a class of 600 men. Those other disciplines were maledominated whereas nuclear was a bit more diverse. I think that's because you can take nuclear engineering in one of two directions: either the health physics route, working in hospitals, or nuclear power, working on commercial power plants. In my opinion, that choice attracts more women to the field.

I studied the core engineering curriculum that any engineering student will take, which includes basics like heat transfer, thermodynamics and calculus. On top of that, I was doing my speciality course in nuclear engineering science.

I was recruited out of college to work for a large engineering and construction firm as a nuclear engineer. I worked on a number of different projects and I think my willingness

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to do that enabled me to learn more and have more opportunities.

I joined EPCglobal about five years ago when it was starting up. I'm now responsible for all the technology development and the IT infrastructure for our business. I travel between all our offices in the US and the UK, but I'm primarily based in San Francisco.

WOMEN IN ENGINEERING

Women haven't previously been encouraged to enter engineering – it is a maledominated culture. Once women do enter into the field, unless they have a mentor or other female colleagues that they can confide in, it's often difficult. You have to adapt to a male-dominated culture, which goes against your nature.

I wouldn't say that there have been specific advantages or disadvantages to being a woman working in the engineering industry, but there are differences. Being a minority you stand out more readily. That's good in the

Being a woman in engineering, you stand out. If you're successful, you'll be recognised sense that if you're successful you're going to be recognised. It can be bad too, in the sense that if you make a mistake, as everyone does, you're more visible and it is more likely to be remembered. Because women are a minority in engineering, you can't yet have "average" female engineers; you have to be above average to be successful. Having said that, if you are driven your chances of being successful are very good.

There are several reasons why it is important to have women in engineering. Firstly, arbitrary obstacles such as gender should never prevent someone from achieving a certain professional position. And then there's the fact that engineering affects society: the people that develop and design engineering solutions should be a reflection of the population.

Attitudes can change, but there is a culture in place today that has been around for a long time. It will take a slow and gradual increase in numbers of women in the engineering industry until, eventually, that culture will adapt. In the meantime, female students who want to work in engineering should get to know people in the field. It helps to join organisations such as the Women's Engineering Society (www.wes.org.uk) and the UK Resource Centre for Women in Science, Engineering and Technology (www.setwomenresource.co.uk). Take a stand!

Mary Inman is the chief technology officer at EPCglobal

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GO FIGURE

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The percentage of UK engineers who agree that women are underrepresented in the industry.



The percentage of engineers who think education is a factor in the lack of women in engineering.



The percentage of engineers who think that working in a male-dominated environment is the biggest problem for women once in the industry.



The percentage of engineers who think the number of women in top roles will increase naturally as more enter the professions.

23bn

The amount in pounds that the Women and Work Commission believes the UK economy would benefit by if more women had access to and stayed in higher-paying jobs such as engineering.

Figures from a survey by the UK Resource Centre for Women in Science (UKRC) and EPCglobal, on Women in engineering (2006)