Why are female engineers needed?

What inspired you to become an engineer?
I was a very curious child that always ruined my own toys by opening them to see how they were on the inside. My mother and father always encouraged me to explore this curiosity and my creative side and for that I believe they are my original inspiration to become an engineer.

What is your research area?
I am a mechanical engineer specialising in development of biomedical materials. My research here in the Department of Engineering Science is focused on the development of porous nanocomposites and tuneable polymer membranes, integrating Metal-Organic Frameworks as multifunctional fillers to enable bioengineering of innovative applications.

How did you get started in engineering?
My first glimpse at engineering happened during my years in high school. I was involved with different science competitions in which we needed to apply our creativity and science skills to solve a variety of problems. Later I realized that what I was doing is exactly what engineering is all about.

What is the best thing about your job?
What I most enjoy about my job is the creative freedom that I have to explore different directions of my research project. I have had the opportunity to run successful experiments in world-class research facilities in my first year at the ISIS Neutron and Muon Source (Harwell), in which inelastic neutron scattering experiments were performed in the TOSCA spectrometer, and another at Diamond Light Source, where synchrotron experiments were performed on the B22 microspectroscopy beamline.

What has been your highest achievement to date?
My proudest moment so far was to go back to my former university in Brazil and be able to talk about my research and the opportunities I have in Oxford.
As the first person from this 12-year old university to be accepted into the University of Oxford, I am very honoured to represent all the women studying and working there.

What is an average day on the job like?
Since I am working on experimental research, my day normally involves hours in the lab conducting and preparing experiments as well as a few more hours in the office analysing the data produced from these experiments.
I also enjoy going to different university libraries whenever I want to focus on reading papers or working on my own manuscripts.

Have you faced any gender-related challenges?
As many women who work in engineering, I have always been surrounded by men during my undergraduate degree and now in the workplace. In many occasions, I was the only woman in the classroom. Due to my good academic performance, my colleagues knew better than to disregard my opinions, when it came to course materials and group projects.
However, during my DPhil I have experienced one or two situations in which I felt I was been left out for being a woman.

Why should young women choose engineering?
I think the best answer to this question is: why shouldn’t they? Engineering is a fun and creativity-driven career that directs us to accomplish incredible things and help the world to evolve. Women need to be a part of that.

“Engineering is a fun and creativity-driven career that directs us to accomplish incredible things and help the world to evolve. Women need to be a part of that.”

“What I most enjoy about my job is the creative freedom that I have to explore different directions of my research project.”