

International Women in Engineering Day

23 June 2021

Happy International Women in Engineering Day! Now in its eighth year, the theme for INWED 2021 is 'Engineering Heroes'. To celebrate we spoke to some inspiring female students and staff within our school about their experiences and achievements. We would like to share these experiences and inspirational words with you all, to show our women "Engineering Heroes" here at AACME. For more information, look at the [INWED](#) page.

Bella Alcock - *Second year MEng Automotive Engineering student*



I am currently a student at Loughborough University in Automotive Engineering and am coming up to the end of my second year. Alongside my course I have also had the privilege of being 1 of 2 girls in the senior team of

Loughborough University Motorsport. The thing I am most proud of in STEM is being given the role of head of manufacturing within the formula student team and being able to build up the female representation.

I think my only advice I could give to woman considering going into engineering is to just go for it! As someone who is one of 5 girls on my course of over 50, I have spent every day embracing standing out from the crowd and used it to my advantage. Being a woman in STEM may turn heads, so my advice is to make your statement and give them a reason to stare.

Lucy Davies - *Final year MEng Aeronautical Engineering student*

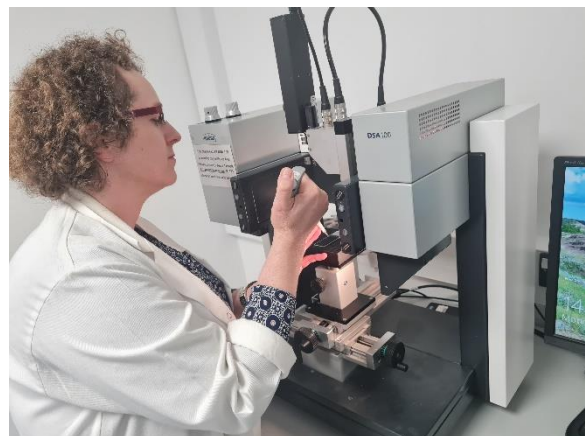


I have recently completed my final year project, titled 'The investigation of the interactions between streamwise vortices and supersonic shockwaves'. This was a collaborative project with BAE Systems and University of Cambridge that I

attained whilst on placement with BAE Systems. Doing a collaborative project was really exciting as it allowed me to gain an insight into industrial practices and understand how my findings would be implemented onto future aircraft designs.

My greatest achievement whilst at university was becoming Programme President of AAE in my second year. It felt inspiring to be in a position that I got to work with such a range of students, from foundation to postgraduate. It showed me that women in engineering are limitless.

My advice for a woman considering a career in STEM would be to go for it! It's such a rewarding career and the more you get stuck in, the more you will get out of it. Ask lots of question, build a network and take up space.



Dr Anna Trybala a senior lecturer in AACME working with a DA100.

Izabela Lackowska - *PhD Chemical
Engineering student*



My decision to take on a PhD was inspired during a 6-month research project which I was able to undertake during my degree. Which, I decided to do it in Toulouse, France, at the INSA (Institut de Sciences Appliquées). There, I started working in

the lab on microfluidics and the behaviour of bacteria and nanoparticles in microchannels through the phenomenon of spontaneous focusing. My supervisor at the time, Prof. Christine Lafforgue, taught me how to work in the lab and how to solve problems during my project.

Now, I am working on crystallization of pharmaceutical ingredients, using microfluidics, which slightly overlaps with my original research, and hope it will lead to a successful career allowing me to lead a life that I want. My main interests for a future career involve the pharmaceutical or cosmetic industry, where novel manufacturing techniques, such as microfluidics can be implemented.

Jessica Harrison - *Final year MEng
Materials Engineering student*



During my final year project, I worked alongside a PhD student who used lasers to melt metallic powders. This is essentially the initial stage of additive manufacturing (or 3D printing). My work involved looking at the

samples she made under a microscope to see how the shape and size of the melted powder deposits changed with varying process parameters, like velocity and laser power.

As for something I'm proud of, I would have to say being a member of the LUWES' committee 2020/2021, especially during the pandemic. This offered the opportunity to collaborate with some great female engineers. I am particularly proud of organising a STEM Club virtual outreach series, aimed at inspiring younger generations of future engineers.

The field of engineering is so broad and includes many disciplines - if you are at all interested, do some research to see which type of engineering best suits your interests and skill set. Personally, I found my engineering discipline through attending events, work experience opportunities and shadowing engineers.

Fiona Hatton - *Lecturer in Polymer
Chemistry, Materials Engineering*



I have been a lecturer in the Materials department here in AACME since joining Loughborough in 2018. My research is focussed on the development of new sustainable polymers from renewable materials, and we have an interest in

block copolymers that can self-assemble into different nanoscale structures in water. I have always enjoyed getting to do hands on experiments in the lab, which has been a big influence in my career path which has led me to the Materials department!

Thank you all for reading this newsletter and hope you enjoyed the stories of our women "Engineering Heroes", and we wish them all the best in their future endeavors. Please do also partake in the INWED day's activities and look at the website <https://www.lboro.ac.uk/news-events/iwed/> for further information.

