

# WOMEN IN ENGINEERING – NEWSLETTER

2023 will be the 8th year of Women in Engineering at the RNLI. We are excited to see what this year brings, join us for all news STEM related.

APRIL 2023



**SUSIE**  
SENIOR NAVAL ARCHITECT



My role at the RNLI is of Senior Naval Architect, using my specialism in Composite structures, stability, design and manufacture, trials and R&D to keep our boats and our people safe.

There are so many elements to the role of Naval Architect that it gives this amazing variety to my work. It is very rare that two days are the same and the mix of hands on testing of equipment and desk based research and design development keep me enthusiastic about the way we look after our volunteer crews and our varied fleet of boats .

There have been so many highlights to my career, from being on the bridge of a warship running a trial to find ways to simulate terrorist attacks, to laminating lifeboats, to developing designs from concept to launch, through to going down a slipway on the back deck of a Tamar surrounded by our volunteer crews. I can certainly say I've been lucky enough to experienced so much. The joy of working with great teams to produce real world solutions gives me the drive to keep progressing in the marine industry and I'm sure there will be many memorable experiences to come.

The reason I became a Naval architect stem from the fact that, as a dyslexic, a lot of subjects at school were tricky for me but maths, design and problem solving was something I seemed to have a natural affinity to. As a keen sailor it made most sense to my 18 year old self to follow my hobby into a degree. After achieving a first-class honours in my undergraduate I felt ready to take on a master's degree which really helped to round off my learning and set me up for a fantastic career in an industry I love. Unfortunately, I am yet to design sailing boats but my love of the water has driven my passion for my role at the RNLI. Afterall I never know when I might need to call on them!

The beauty of this industry is the variety, you really can tailor your career path to your interest. I have worked on luxury yachts, floating oil platforms, unmanned vessels, ship equipment, lifeboats and P1 racing powerboats but I have friends who I studied with in the Formula 1 industry, the winter Olympics sled design team and in the renewables sector. There are opportunities to suit every interest.

## LITTLESTONES FIRST FEMALE HELM



Heather went on to pass out as Littlestone RNLI's first female Helm on the March 10 2023.

'I'm not sure I ever thought that I'd one day hold the position I do now.' said Heather, 'I am so proud to have achieved what I have. It has taken hard work and a lot of time but at the end of the day there are no short cuts because you are going to be in command of a lifeboat and its crew, so you need to be the top of your game.'

[Link](#)



## PLASTIC EATING ROBOT FISH!

Scientists have designed a tiny robot-fish that is programmed to remove microplastics from seas and oceans.

Researchers at Sichuan University have revealed a cool solution to track down these pollutants when it comes to water contamination: designing a tiny self-propelled robo-fish that can swim around, latch on to free-floating microplastics, and fix itself if it gets cut or damaged while on its expedition.

Microplastics are the billions of tiny plastic particles which fragment from the bigger plastic things used every day such as water bottles, car tyres and synthetic T-shirts.

As we celebrated Earth day this month why not explore this innovative project that is designed to overcome a major environmental problem, plastic pollution. [Link](#)

## INTERNATIONAL EARTH DAY

International Earth Day took place on the 22nd of April. The day shines a light on the serious environmental problems we're facing, from the climate crisis to air pollution and deforestation.

The theme for 2023 is **Invest In Our Planet**. If you didn't manage to celebrate don't worry you can get involved by checking out the official earth day website below. Alternatively you can check out their [toolkit](#) for exciting ways to get involved.



[Find out more](#)

## MAKE A PARACHUTE

Have you ever wondered how a parachute works? It traps air and slows you down when you move fast! In this activity, you design a parachute for a miniature action figure. Tissue paper or a plastic bag and a few strings is all it takes to make your figure into an expert skydiver.



[Link](#)