**PRESS RELEASE**

**Irish environmentalist Fionn Ferreira (22) comes third in Young Inventors Prize 2023 for drawing microplastics out of the ocean**

* **Fionn Ferreira has placed third in the Young Inventors Prize at the European Inventor Award 2023**
* **The European Patent Office (EPO) recognises Ferreira for his microplastic removal solution**
* **The latest prototype uses a unique mixture without requiring filters or chemicals and removes over 85% of microplastics in a single pass**

**Munich, 4 July 2023 –** The European Patent Office (EPO) announced today that **Irish environmentalist Fionn Ferreira has won third place in the Young Inventors Prize at the European Inventor Award 2023.** Ferreira, a 22-year-old chemistry master's degree student and teaching assistant at the University of Groningen in the Netherlands, created a **way to remove microplastics from water using a unique mixture**.

“*Receiving this prestigious award is not just a personal achievement, but a profound acknowledgment of the urgent need to combat the devastating impact of microplastics on our planet's water systems. It also highlights how young inventors like me can make a difference,*” says Ferreira.

According to the [United Nations (UN)](https://news.un.org/en/story/2017/02/552052-turn-tide-plastic-urges-un-microplastics-seas-now-outnumber-stars-our-galaxy), there are more than 51 trillion microplastic particles in the seas – 500 times more than stars in our galaxy – and this crisis of plastic waste accumulation is a pressing global issue that has deeply affected and inspired Fionn Ferreira.

**Ferreira has come third in the second edition of the Young Inventors Prize**, which the European Patent Office (EPO) established to inspire the next generation of inventors. The prize recognises young innovators aged 30 or under who have developed technological solutions to tackle global problems and help reach the United Nations Sustainable Development Goals (SDGs). Ferreira’s invention contributes to UN SDG 6: Clean Water and Sanitation, as it supports the sustainable management of water resources, wastewater and ecosystems.

**Law of magnetising plastic**

Ferreira's method to remove microplastics from water is simple yet effective. His invention uses ferrofluid, a magnetic liquid mixture, which binds to microplastic particles, separating them from water and allowing for their removal using magnets. The latest prototype, supported by Robert Downey Jr.'s Footprint Coalition, **removes over 85% of microplastics in a single pass and can be used safely in drinking water.** The process does not require filters and produces zero waste. It retains nearly all the magnetic liquid while removing microplastics.

The collected microplastics can be outsourced for future recycling possibilities, **making the process environmentally friendly.** Ferreira is currently working with the University of Texas in scaling his invention to a commercial model. “*Together, we can combat environmental challenges no matter what age we are or our technical background*,” says Ferreira.

**The Young Inventors Prize winners were announced today at the European Inventor Award 2023 hybrid ceremony in Valencia (Spain). You can stream the ceremony on** [**inventoraward.org.**](https://inventoraward.epo.org/?mtm_campaign=EIA2023&mtm_keyword=EIA-pressrelease&mtm_medium=press)

Find more information about the invention’s impact, the technology and the inventor’s story on [this page](https://new.epo.org/en/news-events/european-inventor-award/meet-the-finalists/fionn-ferreira?mtm_campaign=EIA2023&mtm_keyword=EIA-pressrelease&mtm_medium=press&mtm_group=press).

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**About the inventor**

Fionn Ferreira is a 22-year-old chemistry student with a bachelor's degree in chemistry from the University of Groningen in the Netherlands and is now pursuing his master's degree in chemistry (Spectroscopy). In 2019, Ferreira submitted his method for removing microplastics from water to several science fairs and was awarded the Global Grand Prize Winner of the Google Science Fair. This innovative device caught the attention of Robert Downey Jr.'s Footprint Coalition, and in 2020, Ferreira founded Fionn & Co. LLC to perfect and prepare his invention for patenting. He partnered with Stress Engineering Services to fine-tune, build and test his design.

While studying for his master's degree, Ferreira is working as a teaching assistant at the University of Groningen, teaching tutorials in Concepts of Chemistry and Engineering. Ferreira has won several awards, including the 2019 Google Science Fair Global Grand Prize Award and has been named one of the seven Plastic Action Champions by the Global Plastic Action Partnership. He has also been recognised as a National Geographic Young Explorer and a Forbes 30 Under 30 honoree and has been a keynote speaker at several global events, including the World Economic Forum and the European Commission Annual Research Conference.

**About the Young Inventors Prize**

The European Patent Office established the Young Inventors Prize in 2021 to inspire the next generation of inventors. Aimed at innovators aged 30 or below from all around the world, it recognises initiatives that use technology to contribute toward the United Nation's Sustainable Development Goals. The winner will receive EUR 20 000, the second and third placed finalists will receive EUR 10 000 and EUR 5 000, respectively. An independent jury comprising former finalists of the European Inventor Award selects the finalists and winner. The EPO will confer the prize at the European Inventor Award 2023 hybrid ceremony on 4 July. Unlike the traditional Award categories, the Young Inventors Prize finalists do not need a granted European patent to be considered for the prize. Read more on the Young Inventors Prize eligibility and selection criteria at [this page](https://new.epo.org/en/news-events/european-inventor-award/categories-and-prizes).

**About the EPO**

With 6 300 staff members, the [European Patent Office (EPO)](https://www.epo.org/?mtm_campaign=EIA2023&mtm_keyword=EIA-pressrelease&mtm_medium=press&mtm_group=press) is one of the largest public service institutions in Europe. Headquartered in Munich with offices in Berlin, Brussels, The Hague and Vienna, the EPO was founded with the aim of strengthening co-operation on patents in Europe. Through the EPO's centralised patent granting procedure, inventors are able to obtain high-quality patent protection in up to 44 countries, covering a market of some 700 million people. The EPO is also the world's leading authority in patent information and patent searching.