

Sharing our passion for science



Nematodes – tiny worms that are the future for biological pest control



Dr. Julia Maclachlan and Dr. Geoff Mackey explore how BASF is inspiring the next generation of young scientists through the Great Science Share for Schools

What do the wrapper of your chocolate bar, your smartphone, your shampoo, the paint on your car and solar panels have in common? They all rely on products and innovations from BASF. From pigments to adhesives, super-conductors and cathode active materials, we supply such a diverse range of industries that, if you had to sum up what we do in one sentence, it would be 'We Create Chemistry'.

About BASF

BASF is a global company with 117,000 employees and, to put that into perspective, there are enough of us to fill a city the size of Chester! Whether we are producing polymers in Nanjing, China, making the highly versatile substance that makes Post-it notes sticky and chewing gum chewy (Oppanol) at our headquarters in Germany, or manufacturing and supplying polyurethanes right here in the UK at our Alfreton site, what connects us all is our love for scientific innovation. As a company, our aim is

to develop solutions for the greatest challenges of our time – so we can better protect the climate, make optimal use of limited resources and provide food, energy and clean water for a growing global population. We have sites across the UK and Ireland, reaching from Littlehampton on the south coast, where we breed nematodes, to the Isle of Lewis on the Outer Hebrides, where we manufacture highly concentrated omega-3 fatty acids for pharmaceutical and nutritional applications. But we don't just want to create chemistry; we also work to inspire the next generation of young scientists. We aim to shift young people's thinking so that they have greater awareness of who can be a scientist and how diverse STEM careers can be.

How are we involved in the Great Science Share for Schools?

Our passion for science and a commitment to promote science education is why we support the Great Science Share for Schools (GSSfS). We offer:

- #AskAQuestion profiles of our employees, especially promoting women in STEM;
- incentives for schools (science dictionaries in particular!);
- advocacy within STEM industry networks and government;
- annual funding to support the GSSfS patchwork quilt funding model; and
- advice and guidance to the GSSfS team.

What we gain:

- a brokered, meaningful and credible engagement with teachers and pupils UK-wide and beyond!
- engagement of our staff virtually and also physically at GSSfS events;
- positive messaging within our own sector through GSSfS multiple Awards, including the National Chemical Industries Association Reputation Award;
- support and collaboration through joint activities, e.g. the Big Bang Fair, ASE Annual Conference; and awareness-raising through having our name and logo on GSSfS marketing and communications: websites, certificates, social media, etc.

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'To create a strong, bright future, we have to encourage young people to be full of questions, creativity and innovative thought. The Great Science Share for Schools is a fantastic example of an evolving and growing initiative, which encourages this on a massive scale. We have always believed in the Great Science Share for Schools. For all our futures we have to collaborate and invest in these types of outreach initiatives. We are proud to be working closely with the University of Manchester and other partners on the Great Science Share campaign, which we saw make such an impact in 2020' (Dr. Geoff Mackey, Corporate Affairs & Sustainability Director).

Memorable GSSfs experiences so far
Reaching out to schools nationwide through our commitment to providing schools with BASF dictionaries as part of Great Science Share 2018:
<https://twitter.com/ctkrcps/status/1009359622413717504?s=20>



The message to industry as to why get involved in the GSSfs or similar initiatives is simple. As we face the challenges of the future, we need groundbreaking science at the heart of everything we do, but we also need people at the forefront of technology to help us develop sustainable and safe production techniques. We need creative minds to help us market our products in new ways and we need sharp communicators who can explain to society the role of science, in a way that we've not been able to before. We can't get there without new and different talent, and we can't attract

those talented people without a culture of inclusivity and inspiring a diverse new generation of scientists. For BASF, this means that reaching out to young people across the country is now more important than ever. The Great Science Share plays a key role in exploring new ways in collaborative scientific learning and thinking, allowing more young people to join in and shape the conversation about the role science can play in building a better future.

Other work we do with primary schools: ScienceXperience

'What does a scientist look like?' is one of the first questions we ask the primary

The Etihad experience of 2017!
 An Etihad campus experience for Great Science Share 2017, with Geoff inspiring the young people about science in the palm of their hands.



(Above) Visiting MRI during GSSfs 2019
 A visit to Manchester Royal Infirmary saw Lisa Kelly, Head of BASF's chemical distribution business, BTC, and Dr. Geoff Mackey delivering goodie bags and seeing children on a urology ward taking part in science investigation with parents at their bedside, as part of the Great Science Share 2019.



Looking ahead to another bumper year!



school children who come through the doors of our ScienceXperience, which is a hands-on learning experience and school outreach programme at our Alfreton site near Derby. This is designed to introduce children to the exciting world of chemistry and awaken their passion for STEM subjects. After hours of making slime and conducting investigations that challenge them to think like a scientist, their ideas about what people in STEM careers look like are often completely transformed. *'Not all scientists have crazy hair!'* said one, while another marvelled *'I didn't know that everything was made of chemistry'*, during a recent visit.

'At BASF we take a holistic approach to promoting STEM subjects to the next generation of young scientists. Our aim is to promote BASF, the chemical industry and inspire young people in STEM subjects. Our STEM and WISE (Women in Science and Engineering) Ambassador programmes are key pillars of our outreach work, enabling pupils to achieve their potential in STEM' (Richard Carter, Managing Director UK & Ireland).

BASF volunteers in school

BASF staff work with the STEM and WISE national networks by visiting schools to show young people how varied and diverse a career in science can be. They also take their outreach work to some unusual destinations, such as the Bluedot festival at Cheshire's Jodrell Bank observatory, which combines music and science and delivers hands-on teacher training, with the Royal Society of Chemistry supporting educators to be more science aware and allowing them to pass on their excitement for STEM subjects to their pupils.

Dr. Julia Maclachlan works in Communications at BASF plc. She also followed an unusual path into the world of science, having recently completed her PhD in Modern European History at the University of Manchester.

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Dr. Geoff Mackey is Group Corporate Affairs & Sustainability Director. A first degree in ecology and a doctorate in social networking give him a wide perspective from which to drive BASF's UK STEM outreach work.
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BASF
We create chemistry

Education is key to individual personal success and a sustainable society.

It opens up opportunities and is vital for participation and integration. That is why BASF focuses its social engagement efforts on education and engages in a large number of projects – from daycare to university level – all over the world, especially near our company sites.

As the leading chemical company, BASF aims to stimulate an interest in science and foster curiosity. In hands-on science and chemistry workshops, girls and boys get to be researchers and discover the world of science.

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