

Making chemistry accessible for all in the North West

SKILLS shortages are a significant challenge for the vast majority of STEM (Science, Technology, Engineering and Mathematics) industries and the chemicals sector is no different. The challenge for the sector is that people often don't think of careers in the chemical sector either because they either don't know about it or because of misconceptions about what jobs in this area actually are.

Addressing these misconceptions requires us to change the views of multiple groups including students, parents, teachers and schools.

Industry has a key role to play in addressing this by being proactive in communicating what working in the chemicals sector is actually like in 2023 – and so attracting the talent needed for the future. There are multiple ways individuals and employers can support this message, one of which is the STEM Ambassadors programme.

Funded by UKRI the STEM Ambassadors programme^[1] provides a volunteering infrastructure for companies to:

- Inspire students with STEM subjects
- Change mindsets of students/teachers so individuals aspire to pursue STEM careers
- Gain access to social value reporting
- Support staff in developing skills through volunteering and giving back

Out of the 2000 volunteers in the North West, we currently have around 300 STEM Ambassadors who consider themselves able to talk about chemistry. An increase in this number during 2024 would really help showcase the variety of careers and jobs in the North West chemicals sector.

Another reason to explain the chemical sector skills shortages is the challenge of inclusivity. A piece of research by Royal Society of Chemistry^[2] shows that “chemistry” currently isn't seen as “being accessible for all” – role models are a critical part of changing this, as you can't be what you can't see. More role models from diverse backgrounds engaging with students means chemistry starts to feel more inclusive and more “for me.”

Real impact on businesses can be seen through raising the visibility of opportunities. Dale Power Solutions in North Yorkshire are an example of where a company engaged their apprentices with the STEM Ambassadors programme and participated in a number of secondary school careers events in their local area. In the space of 12 months not only did their number of apprentice applications increase dramatically but the quality of individuals applying improved as well.

Supporting this mission also brings benefits to employees. Volunteering is a great way to show skills development in areas additional to job responsibilities and is shown to boost

job satisfaction. A 2022 study found that, from a cohort of 470 STEM Ambassadors, 96% of respondents stated that the STEM Ambassadors programme enhanced their ability to communicate with a range of audiences^[3]. In addition the Chemical Industries Association (CIA) ChemTalent^[4] initiative is a great way of getting young professionals within the industry to support each other and feel valued within the sector.

So get involved, be proactive, be part of the solution – join the STEM Ambassadors programme and start addressing those misconceptions around working in the chemical industry and make the sector far more inclusive.

For more information please contact Sarah Myers at STEM Learning - s.myers@stem.org.uk

References:

[1] STEM Ambassadors Programme

[2] Is chemistry accessible for all?

[3] Evaluation of the impact of the STEM Ambassadors programme upon STEM Ambassadors Dr Hannah Blake and Chris Percy, University of Derby, December 2022

[4] ChemTalent

