Chemicals northwest

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Spring 2026

A spotlight on the vibrant north west chemicals sector

Elements

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Awards Edition

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Contents Spring 2026

Membership

Would your company benefit from joining an organisation that supports and promotes the chemistry-using sector in the Northwest? Do you want to understand more, and contribute to, the industry issues within the region?
If you are a manufacturer, chemical user or offer products and services to the sector, why not join us today?

https://www.cia.org.uk/chemicalsnorthwest/Membership/Benefits-Costs/

2026 rates. ***(from 1st April 2026)***

Micro corporate membership	(1 - 10 employees)	£ 515.83 + VAT
Standard corporate membership	(11-100 employees)	£ 897.20 + VAT
Large corporate membership	(100+ employees)	£1141.78 + VAT

Our membership year runs from 1 April to 31 March. A pro-rata basis usually applies to joining at other times in the year and we'd be happy to discuss on application.

Welcome

Dear Reader,

Welcome to the Spring edition of *Elements*, filled with updates and highlights from Chemicals Northwest and our members.

We're delighted to share the winners of the 2026 Chemicals Northwest Awards, announced on the 19th March at the Titanic Hotel in Liverpool and hosted by Roger Johnson. It was a fantastic evening with excellent feedback from guests. You'll find the full list of winners and sponsors on pages 8–14.

Our December Breakfast at the Innovation Centre brought together more than 60 delegates and an inspiring line-up of speakers. Chris Hart (Graham Hart Process Technology) reflected on the company's 53-year journey, including its digital transformation and lean manufacturing initiatives. Iain Pritchard (Bachem UK) highlighted their ISO 13485-certified peptide manufacturing capabilities in St Helens. We also heard from Alex Brady (Carbis Loadtec Group), Paul Treloar (Sci-Tech Daresbury), Emmanuel Dupuis (STFC), and Jonathan Smith (Hartree Centre), each showcasing innovation and growth across the region. Coverage of our March Breakfast will appear in the Summer edition.

January's Sustainability Event, led by Caroline Dolan of SLR, explored how to turn data into meaningful insight and the importance of engagement in effective reporting. Richard Kinchin of Libra Speciality Chemicals offered a practical look at measuring carbon emissions and progressing toward Net Zero. Our next Sustainability Event takes place on 30 April and will also be featured in the Summer edition.

As always, we welcome your news, case studies, and thought leadership contributions for future editions of *Elements*.

Alex Abraitis - Member Services and Events Manager

About us...

Chemicals Northwest is an established business network owned by the Chemical Industries Association.

With around 130 members we actively promote this important regional sector and our objective is to

help membership to grow through;

- facilitating networking events, common interest groups and interactive workshops, all aimed at covering topical industry issues.
- supporting projects and programmes that identify and enhance business performance and generally support continuous improvement across the sector.
- promoting science and engineering based skills, helping to address the region's future needs.
- improving the image of the industry overall, including generating a positive reputation, through communicating achievements and success.
- contributing to the industry's strategic voice and the national growth agenda aligned to the work of the Chemical Industries Association.
- connecting the community of chemistry-using businesses and the vital supply chains here in the Northwest.

Here are the main features and benefits of membership...

- Annual Awards Dinner
- Breakfast Networking events
- Partner Events
- Common Interest Groups
- Quarterly Elements Magazine
- Website promotion and profiles
- Monthly E-bulletin & ad hoc bulletins with latest sector information
- LinkedIn Groups

Find out more here - https://www.cia.org.uk/chemicalsnorthwest/membership

Addressing the Growing Challenge of "Forever Chemicals" in Water

So-called "forever chemicals" comprise a broad and diverse class of nearly 10,000 synthetic substances, including per- and polyfluoroalkyl substances (PFASs) as well as other perfluorinated compounds (PFCs). These materials are defined by the exceptional stability of the carbon–fluorine bond, which confers resistance to thermal, chemical, and biological degradation. As a result, many PFASs persist in the environment, bioaccumulate in living organisms, and biomagnify through food chains. Long-chain compounds such as perfluorooctanoic acid (PFOA, also known as "C8") and perfluorooctane sulfonic acid (PFOS) have been particularly well documented in this regard.

The global inventory of fluorinated chemicals continues to expand, yet toxicological and environmental data are available for only a limited subset of these compounds. This knowledge gap, combined with the structural diversity of PFASs, presents significant challenges for environmental monitoring and regulatory compliance. Individual PFASs often occur at trace levels, even in drinking water, and their quantification typically requires advanced analytical instrumentation, skilled operators, and complex validation procedures. Consequently, routine monitoring of a broad range of fluorinated substances can be both time-consuming and costly.

A substantial proportion of synthetic organofluorine compounds in water is captured by the parameter "adsorbable organic fluorine" (AOF). Non-targeted determination of AOF using Metrohm's combustion ion chromatography (CIC) offers a practical and robust alternative to highly targeted PFAS analyses. By converting organically bound fluorine into inorganic fluoride for quantification, CIC enables rapid screening without prior knowledge of individual compound identities.

In this context, AOF measurement serves as an efficient first-tier assessment tool, providing a comprehensive overview of the total burden of organic fluorinated substances in water samples. Elevated AOF concentrations can then trigger follow-up analyses using targeted methods to identify and quantify specific PFASs of concern. This tiered analytical strategy supports more efficient resource allocation while improving insight into the presence and distribution of persistent fluorinated chemicals in aquatic environments.

Learn more: https://www.metrohm.com/en_gb/products/ion-chromatography/pfas-analysis.html
or visit https://www.metrohm.com/en_gb.html

Sci-Tech Daresbury – the North West's home for life for materials and biotechnology

As the North of England's only national science and innovation campus, Sci-Tech Daresbury is home to more than 20 pioneering material and biotechnology companies, and 35 companies providing engineering, instrumentation and digital technology solutions to the advanced manufacturing sectors. Its cutting-edge infrastructure, access to world-class expertise, and collaborative environment make it a powerhouse for transformative advancements in these sectors.

The campus hosts the internationally renowned Daresbury Laboratory, operated by the Science and Technology Facilities Council (STFC), part of UK Research and Innovation (UKRI) and one of the partners in the Sci-Tech Daresbury Joint Venture alongside Langtree and Halton Borough Council. This facility brings unparalleled expertise in sensor technology, cryogenics, high-performance computing, data science, and AI — key technologies driving innovation in materials, biotechnology and advanced manufacturing more generally.

One of the most significant assets at Sci-Tech Daresbury is the Hartree Centre, a world-leading facility that leverages advanced digital technologies such as supercomputing, AI, and quantum computing to support various industries, including materials, biotechnology and pharmaceuticals. They have worked collaboratively with the likes of Unilever, Lucideon, Astra Zeneca and GlaxoSmithKline.

The centre's work in materials innovation includes collaborating with Unilever to improve home and personal care product formulation and packaging design using advanced simulation and data analytics. With its cutting-edge digital capabilities and strategic partnerships, the Hartree Centre empowers businesses to drive innovation, reduce costs, and boost productivity.

Sci-Tech Daresbury's investment in life sciences is further amplified by its role within the Life Sciences and Healthcare Innovation Zone in the Liverpool City Region. With plans to develop over 750,000 sq ft of high-tech laboratories and pilot facilities, offices, and technical facilities, the campus is poised for major growth. Its expansion strategy aims to increase the workforce from 2,000 to approximately 10,000 reinforcing its position as a major employment and innovation hub. Violet Phase Two is the next stage of development delivering two laboratory buildings. V4 will provide floorplates of 3,000-6,000 sq ft for engineering, instrumentation and materials companies needing both offices and technical laboratory/workshops. The V5 building will provide units of 5,000-20,000 sq ft that can accommodate Class 2 scale-up laboratories through to pilot facilities or even small-scale manufacture. Both buildings are part of the Liverpool City Region Innovation Zone and offer incentives to tenants including 5-years Business Rates relief, Enhanced Capital Allowances and National Insurance contribution holidays.

The campus fosters an ecosystem of collaboration, where three-quarters of businesses engage in joint projects with other on-site organisations. This synergy has led to groundbreaking advancements, in areas such as quantum dot technology, industrial biotechnology, and physical vapour deposition coatings.

It has also helped reduce business failure rates to 6%, significantly below the UK average, and supported average sales growth rates in campus companies of 25% per year.

Established companies such as Lubrizol and Croda develop novel sustainable materials for home and personal care products using industrial biotechnology processes. At the same time, dynamic start-ups and SMEs are exploiting the range of incubation laboratories and on-sight analytical and sample preparation equipment to help accelerate their R&D whilst minimising their required upfront investment in their lab operations. Light Coatings provides R&D services and support to the coatings industry utilising PVD technology to develop and supply novel materials.

Nationally and internationally-established automation and process control experts such as Conet, March Engineering and iconsys have established and grown bases on the campus bringing their expertise to the chemicals, pharmaceuticals and FMCG industries. Similarly, Applied Materials bring their innovative process analytical technology (PAT) solution to the pharmaceuticals and nutritional foods sectors.

Sci-Tech Daresbury's strategic location between Liverpool and Manchester, with easy access to two international airports, two West Coast Mainline stations and the regional motorway network provide a talent pool of four million people within a one-hour commute. This accessibility has helped companies attract and retain highly skilled professionals, with significantly fewer businesses citing talent shortages as a growth impediment compared to the UK average.

With its 'Home for Life' strategy, Sci-Tech Daresbury supports materials and engineering startups, scaleups and established firms by offering both flexible, fitted-out and shell laboratory spaces alongside high quality office spaces in buildings. This approach allows companies to scale seamlessly without the need for relocation, further cementing the campus as an innovation hub for life sciences.

Harnessing the power of AI, data science, and process control solutions alongside scalable laboratory and pilot facilities, Sci-Tech Daresbury is transforming the materials sector on a local, national, and global scale. Through its continued growth, strategic partnerships, and cutting-edge research facilities, the campus is on a growth journey to be a strategic player.

"Techspace One at Sci-Tech Daresbury was vital in helping us level up our process to pilot scale. The facilities and support provided enabled us to bridge the gap between lab development and full-scale manufacturing seamlessly." – **Holiferm**

For further details visit - https://sci-techdaresbury.com/

RAS

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RAS Limited is a well-established, specialist risk consultancy working with an extensive portfolio of large corporate clients which manage complex industrial sites and businesses. Our team of expert consultants have experience in a wide range of sectors - from pharmaceutical to energy, aviation and specialist chemical sectors.

We are a Chester-based company with a national and international client list. We work differently because of our great team of specialists. Our multi-disciplinary approach to solving challenges enables us to stand out from the crowd. We are passionate about supporting industry to be safer, smarter and more sustainable.

People are the centre of everything we do. We do not believe in off-the-shelf solutions. We partner with our clients to find the best solution for their particular challenges and businesses.

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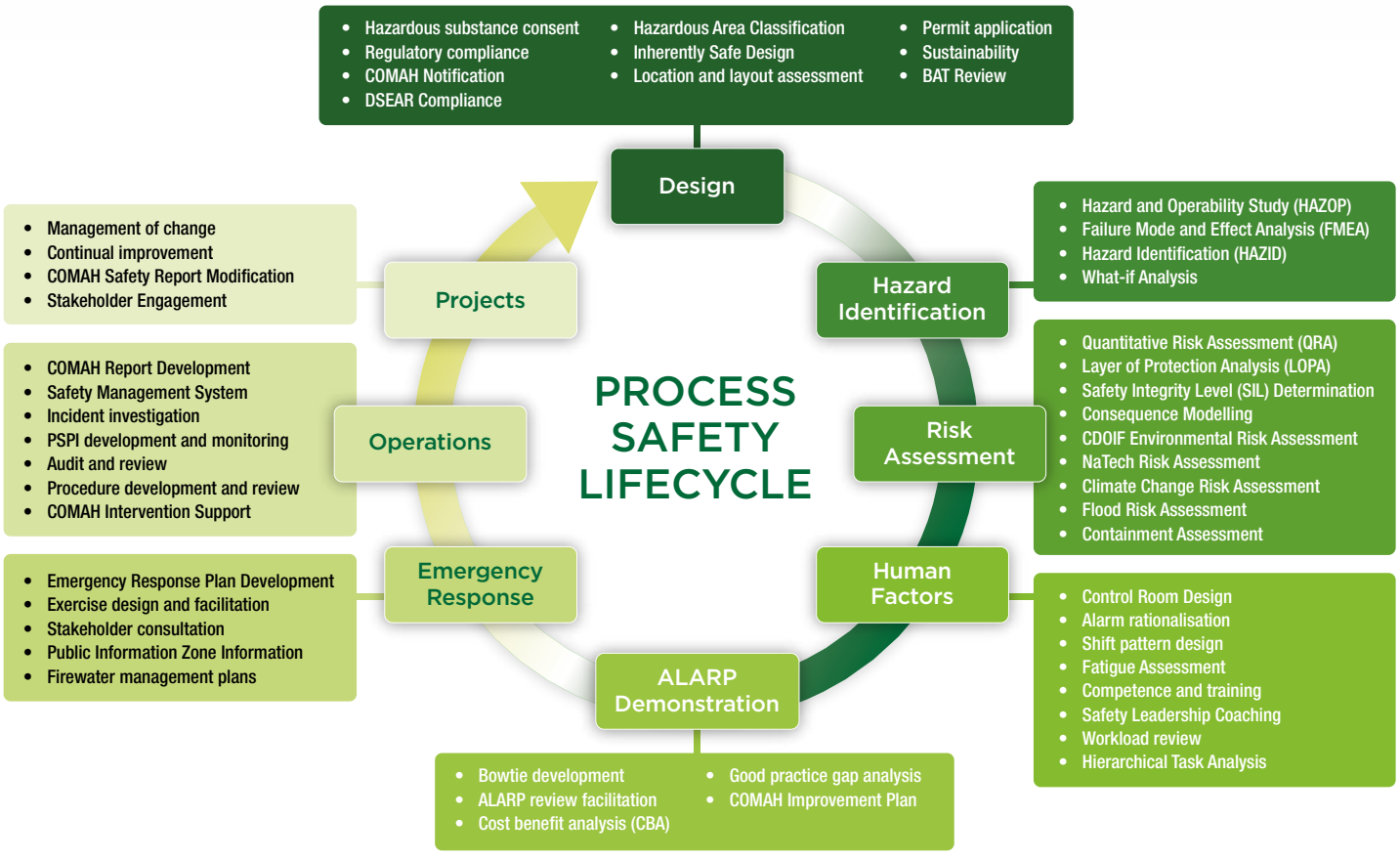

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40 Years on from the Space Shuttle Challenger Disaster – Highlighting the importance of Safety Management Systems

40 years on from this infamous event, the lessons learned on management of change and material suitability for intended service still resonate across the process industries today.

On the 28th of January 1986 NASA launched its Space Shuttle Challenger into space with seven crew members on board. Their primary mission was to deploy a satellite which would study Halley's Comet, whilst a secondary task garnered greater media attention; with schoolteacher Christa McAuliffe as one of the crew members, the Teacher in Space Project would see her become the first of her profession to go to space. What was supposed to be an inspiring event for millions of students and adults alike quickly turned catastrophic, as just 73 seconds into its flight, Challenger broke apart, abruptly ending the mission and tragically taking the lives of all seven crew members.

The disaster was a pivotal moment, which acted as a wakeup call to a high reliability organisation, but how exactly did this seemingly routine mission go so badly wrong and have the subsequent lessons learned bred change?

What caused the incident?

The direct cause of the accident was the failure of two rubber O-rings in the solid rocket booster. The cold weather on the morning of the launch caused the O-rings to lose their elasticity, leaving them unable to properly seal the joints. Hence, poor engineering design and failure to consider the full range of conditions to which materials may be exposed can be considered to be the high-level cause.

Applying the principles of incident investigation and digging further into why this occurred reveals the wider organisational failures behind the disaster which include:

- Disregarding safety concerns: Engineers had expressed concerns over the reliability of the O-rings to supervisors for years prior to the incident, with no action taken
- Insufficient resource: NASA had limited resource and manpower to manage the ongoing programme of launches
- Communication failures: Concerns were reportedly not escalated to top level NASA officials.
- Schedule pressure: Maintaining a frequent launch schedule to justify funding and keep public interest high lead to overlooking safety concerns which may delay launches
- Poorly informed decision making: A lack of information on the full and worst-case consequences of failure meant that decisions were made without fully understanding the potential outcome

Particularly relevant to the high-hazard industry are the errors in underestimating the likelihood of failure and not evaluating the worst-case consequences.

Universal Lessons learned

Though it occurred in a very specific industry, the Challenger disaster led to questions and progress on the lessons learnt across a range of sectors. It is warning of the potential outcome of prioritising schedule and business demands over safety and the human cost of a disaster which are exponentially greater than a missed deadline or going slightly over budget.

The incident highlights the importance of a strong, positive safety culture within an organisation, in which people are encouraged to voice safety concerns and have the confidence that their concerns will be addressed.

Furthermore, It is a reminder of the criticality of a safety management system to support safety systems and to ensure that sufficient resources and manpower are in place to manage the potential for major accidents.

Getting the basics right forms the foundation of high-hazard risk management and minimises the potential for high severity but low likelihood outcomes. Consistently practicing and implementing the fundamentals of process safety across industry is best way to prevent disasters like this reoccurring.

How we can help

We exploit our experience across a range of industries to provide pragmatic solutions which prioritise safety whilst meeting business needs. RAS work in partnership with our clients to meet regulatory compliance and providing then with the tools they need to flourish.

On top of our award-winning expertise in carrying out hazard identification and risk assessments, RAS can support you to build your safety management system to provide effective oversight of your major hazards.

Our services range from project support and implementation of inherently safe design through to good practice gap analysis, emergency response plan development. **If you would like to get in touch, please email us here or go to our website: https://ras.ltd.uk**

By Alexandra Hurst – Senior Process afety Consultant, RAS Ltd

Chemicals Northwest 2026 Awards

What a fantastic evening!

On the 19th March, the team at Chemicals Northwest proudly welcomed more than 300 guests to the iconic Titanic Hotel in Liverpool for an evening of celebration, connection and recognition. Once again, feedback on both the Awards and the venue was outstanding. We were delighted to see many longstanding members alongside new faces, all contributing to a vibrant and memorable atmosphere.

The chemical industry underpins modern life. From the materials in our homes and the packaging that protects our food, to the components powering electric vehicles and the innovations accelerating cleaner energy, chemistry is woven quietly but fundamentally into our everyday world. The Chemicals Northwest Awards celebrate this entire supply chain — and the people and organisations who turn possibility into reality.

While this year has presented many challenges, the achievements showcased at the Awards told a powerful story of resilience, innovation and determination. Companies have improved processes, reduced emissions, enhanced safety standards, launched new technologies and strengthened strategic partnerships. In short, the bar has been raised once again.

The Chemicals Northwest team and our independent panel of judges were immensely impressed by the exceptional quality of entries for the 2026 Awards. It is a privilege to celebrate excellence within such a vital industry, and we extend our sincere thanks to everyone who took the time to submit an entry.

We also offer special thanks to our Award sponsors. Without your continued support, the Awards process and ceremony simply would not be possible. Your partnership — alongside the dedication of our judges — made planning this evening both seamless and a pleasure. Further details about our sponsors can be found at the end of this feature.

Guiding us through the evening was our host, Roger Johnson. Roger is a lead news presenter on North West Tonight. Roger brought professionalism, warmth and unmistakable class to the stage.

Announcing the Winners

Winner - Studley Ltd

Sponsored by Rio Tinto

Studley are a multi-disciplinary engineering contractor who operate in high hazard COMAH environments. They deliver through openness, transparency and partnership recognising need for continuous improvement. Creating a culture of confidence in speaking up is critical. In 2025 Studley introduced full digitalisation of the Safety Issue Report (SIR) process. System fully accessible across Chemical sites through QR codes with reports seamlessly directed to responsible groups, leaders. System also used to share best practise and reward vigilance and innovation. Significant investment in training was given to ensure benefits are multiplied, SIR submissions increased by 30% over 2024.

Winner - Orbia Fluor & Energy Materials

Sponsored by Bitrez Ltd

Orbia Fluor & Energy Materials have been world leaders in metered dose inhalers (MDI) for 70 years. 70% of global inhalers contain Orbia propellants, However the propellants are powerful greenhouse gases, the NHS calculated that 3% of its carbon footprint is from MDIs. Orbia researched a lower Global Warming Potential alternative and Zephex® 152a, offering a 90% reduction in GWP, was developed. The scale up opportunities are huge. Recent investment has led to the first ISO tank of this propellant to be filled and delivered to a customer in Loughborough. Further investment, in Runcorn, has established a large scale processing plant that becomes operational this year.

Winner - Libra Speciality Chemicals

Sponsored by Laker-Vent Engineering Limited

Libra Speciality Chemicals have recognized the instability in global markets and continued to improve their export performance. Annual growth of 9% and exports sales of 13,169 metric tonnes of betain were secured in 2025. Libra continue to identify the US as a growth market and have expanded its distributor market. The company continue to secure new business in the US despite the challenge of uncertain tariffs. Libra now export to 42 countries with exports accounting for 35% of total manufactured volume.

Winner - Rio Tinto

Sponsored by Orbia Fluor & Energy Materials

Rio Tinto achieved success by implementing lean manufacturing principles, including A3 problem solving. Data was collected to identify inefficiencies and prioritise solutions. The company achieved a reduction of waste, minimised variability and established a framework for clear problem solving. Lean tools instilled best practise leading to measurable improvements. Empowering colleagues through training was critical. Change management was critical, the company has welcomed improved plant start-ups, more resilient supply chains and stock take improvements.

Winner - adi Group

Sponsored by SLR

adi Group are committed to strengthening local communities through creating clear, supported routes into skilled work. A pioneering pre-apprenticeship programme was established 10 years ago. From aged 14, students spend an afternoon each week with the company for two years. Students develop hands-on electrical and mechanical skills and a formal qualification is secured by those completing the programme. adi Group have an Apprentice Academy and 17 of those pre-apprentices have been offered full apprenticeships at the company delivering a skilled and committed pipeline of talent. adi engage the local community in fundraising and volunteering, focusing on local priorities including education, homelessness, food poverty and Birmingham Children's hospital.

Winner - Orbia Fluor & Energy Materials

Sponsored by Business of Science Conference Ltd

Orbia Fluor & Energy Materials – Klea Edge 485A provided a breakthrough in refrigerant technology. The key technology is the ability to lower operating pressure by 10 bar, technology can be retrofitted and an example was shared. A non-PFAS formulation and extended applicability enhances the product. Case study delivered 20% improvement in energy efficiency saving £70k in costs. Also much less stress placed on all equipment. Klea is meaningful, measurable, sustainable, reliable and delivers economic value.

Winner - Carbis Loadtec Group with Lanxess Solutions UK Ltd

Sponsored by Corrous Industrial Group

Carbis Loadtec Group collaborated with Lanxess Solutions UK Ltd in Trafford Park. Lanxess had begun using a particularly hazardous raw material that required the repositioning of the tanker unloading position. Rather than manage risk the companies engineered out the problem through designing and installing a purpose built vertically elevating loading platform. The solution eliminated risk, improved operational resilience and improved safety performance.

Winner - RAS

Sponsored by Hibiscus Plc

RAS are committed to developing a diverse and inclusive team, that's been a priority for the last 30 years. RAS are an independent, woman-owned business with women making up 65% of the staff and 75% of the senior leadership team. While roles are assigned on merit the company culture has organically delivered this "norm". The foundations are largely based on excellent recruitment and trust in employees to act in good faith and for the benefit of the business. RAS invest generously in career development and all can see there are no limits on progression. Cultural values have been written into employment policies and staff retention far exceeds the industry average.

Winner - Naomi Simmons

James Robinson Speciality Ingredients

Sponsored by SRG

Naomi Simmons is research scientist at James Robinson Speciality Ingredients (JRSI). Since joining in January 2025 Naomi has had an immediate impact, contributing to project planning, leading commercial awareness, and integration. Naomi's research is in natural and sustainable products. Naomi led a project including critical R&D at the intersection of biochemistry, microbiology and biomedical science. Naomi delivered beyond lab work and considered commercial aspects, logistics and quality awareness. Naomi has worked across the team and continues to present relevant information clearly to ensure sound decisions are made. Wow, what a year, what a star.

Winner - DMD Design Solutions

Sponsored by Lokring UK

DMD Design Solutions – is a fast-growing, multi-discipline engineering design and detail engineering consultancy based in Warrington. In three years of trading the company have increased staff numbers to 15 and year-on-year growth exceeding 50%. DMD deliver technical rigour and the disciplined application of digital engineering to reduce project risk, inefficiency and environmental impact. A client list that includes many large manufacturers is impressive for a young company. Equally so is partnered delivery in India, Germany and in Scandinavia.

Winner - Hibiscus Plc

Sponsored by Chemical Industries Association (CIA)

Hibiscus Plc has delivered targeted, meaningful innovation that directly strengthens the UK chemical supply chain. Their new DGSA Training & Consultancy division fills a long standing industry gap, providing expert led, practical compliance training that improves safety, builds competence, and reduces operational risk. They have reinforced this impact by growing the team by 15% and developing senior leaders through MBA apprenticeships, ensuring they continue offering exceptional technical and strategic support.
Their partnerships demonstrate real problem solving. With Brenntag, they delivered an integrated labelling system that boosts efficiency and eliminates mislabelling risk. With Epson, they introduced the UK's first roll to roll C8000 solution with Aquajet BS5609 approved labels, enabling fast, compliant, on demand printing. Hibiscus elevates the industry through innovation, expertise, and genuine partnership.

Winner - William Blythe

Sponsored by Studley Ltd

Export restriction from China on a critical raw material led to a massive increase in demand for Flamtard, a William Blythe manufactured product. In parallel the company launched a continuous improvement project involving a multi-disciplinary team and a new product which allowed the doubling of plant capacity in a short space of time to take on the challenge of the increase in demand. Alongside this, a capex investment project is running which will come online this year and lead to a further increase in capacity. Indications are that product demand will remain strong throughout 2026.

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Bc BusOfSci **Business** of **Science** Conference

Business of Science Conference Ltd – Sponsor of the Innovation Award 2026

Since 2016, this conference has been bringing together the brightest minds from across the science and innovation ecosystem to explore how Skills, AI, climate solutions, infrastructure, and life science advancements will impact the business of science. Plans are now underway for the next exciting Business of Science Conference, to be held at The Jubilee Conference Centre, Jubilee Campus, University of Nottingham on Thursday 14th May 2026. Keep up to date with developments at:

https://www.businessofscience.co.uk/

CHEMUK2026

CHEMUK 2026 – Headline partner of the Chemicals Northwest 2026 Awards

CHEMUK 2026 Group of Events, the UK's largest B2B trade show supporting the chemicals, process engineering, and formulated product industries. The expo presents 600+ specialist exhibitors and 100+ expert speaker sessions, split between five focused show zones:

- Chemicals Supply Show Zone
- Chemicals Management Show Zone
- Process & Chemical Engineering Show Zone
- Chemical Laboratory Show Zone
- Formulated Product Manufacture

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CHEMICAL INDUSTRIES ASSOCIATION

Chemical Industries Association (CIA) – Sponsor of the Supplier to the Chemical Industry Award 2026

Currently celebrating their 61st Year, the Chemical Industries Association (CIA) is the UK's leading trade association dedicated to representing and advising chemical and pharmaceutical companies across the United Kingdom, both nationally and internationally. Established as a membership organisation, the CIA is funded by subscription. With over 200 members their core membership includes a number of major multinationals, a growing number of SMEs and associate members. From providing expert advice to facilitating networking between members, sharing good practice and reporting on policy developments the CIA stands ready to support their members to ensure the chemical industry continues to drive growth and innovation in the UK.

Their representation includes lobbying legislators, policy-makers and stakeholders on the issues that affect member companies the most.

Visit https://www.cia.org.uk/ to find out more.

Chemicals northwest

Chemicals Northwest (CNW) is a dynamic industry-led cluster that brings together chemical manufacturers, supply-chain partners, innovators, and educators across the North West and beyond to strengthen one of the UK's most important industrial regions. With a strong focus on collaboration, sustainability, and technological advancement, the organisation provides a platform for networking, knowledge-sharing, and strategic support that helps members thrive in a competitive global market. By championing innovation and fostering meaningful connections, Chemicals Northwest plays a vital role in driving growth, supporting skills development, and showcasing the region's world-class chemical expertise. Owned by the Chemical Industries Association (CIA), it serves over 110 members and has celebrated 26 years in operation. Find out more here -

https://www.cia.org.uk/chemicalsnorthwest

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Corrous Industrial Group is a UK-based industrial services provider delivering critical, multidiscipline support across industrial and infrastructure environments nationwide. Unlike single-discipline providers, Corrous reduces shutdown interfaces by combining access, cleaning & preparation, inspection & integrity works, and protective coating through a single, accountable partner. Find out more here -

https://corrous.co.uk/

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Hibiscus Plc – Sponsor of the Equality, Diversity and Inclusion Award 2026

Hibiscus are The UK's Leading Manufacturer of Hazardous Goods Labels & Chemical Labelling Software. Launched in 1981 this family run business specialises in producing labelling solutions specifically for the chemical industry. Hibiscus Plc is also now offering DGSA training, tutoring and professional Dangerous Goods courses. Find out more here -

https://www.hibiscus-plc.co.uk/

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Orbia Fluor & Energy Materials is a global leader in the development, manufacture and supply of fluoroproducts that play a fundamental role in enhancing everyday lives. But where will you find these fluoroproducts? They can be found in a vast range of applications, including construction, batteries, polymers, refrigerants, medical devices and active pharmaceutical ingredients, among others. Find more information here -

www.orbia-fem.com

Rio Tinto – Sponsor of the Health & Safety Award 2026

Rio Tinto has more than 150 years of mining and processing experience and operates in 35 countries where their 60,000+ employees are working to find better ways to provide the materials the world needs. Their portfolio includes iron ore, copper, aluminium, lithium and a range of other minerals and materials needed for people, communities and nations to grow and prosper, and for the world to cut carbon emissions to net zero. Further details about Rio Tinto can be found here -

https://www.riotinto.com/en

SLR - Sponsor of the Corporate Social Responsibility Award 2026

SLR is a leading global environmental and sustainability consultancy. SLR has been advising clients for over 30 years at every point of their project life-cycle. Starting as a UK business, they now operate as a global company with more than 4,500 people delivering client solutions across six regions. Find out more here:

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Industry leaders in Chemicals, Life Science, Engineering and Clinical Recruitment, SRG connect talented individuals with industry-leading businesses to help shape tomorrow's world and power the future of STEM. With an expanding global network, over 35 years' experience and specialist industry knowledge, they recruit across the full spectrum of technical roles and the product life cycle, from scientific research & development, through analysis, manufacturing, and engineering to market access. SRG are particularly passionate about the next generation of STEM professionals, supporting companies all over the UK and Europe with early career hires and our award-winning Recruit, Train, Deploy service, which provides and end-to-end solution for hiring apprentices. Find out more at -

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Studley – Sponsor of the Manufacturing Company of the Year Award 2026

Studley is a multi-disciplinary mechanical, electrical and scaffolding contractor, providing a comprehensive service to the process industries. They are renowned for their flexible and responsive approach to meeting and exceeding customer needs. As an owner-managed business, the Directors and management team take personal responsibility for every contract. Supported by a carefully selected and well-trained workforce, they take pride in having the best, most capable, customer-focused team. Their success is largely due to a high proportion of repeat business, earned through their commitment to the principles established over 40 years ago. These principles remain central to their approach and have been adapted to meet the demands of the 21st century. For further information visit -

https://studleyltd.com/

ReAgent Launches Charitable Foundation

Runcorn-based chemical manufacturer ReAgent is proud to announce the launch of a charitable organisation on an important mission. The ReAgent Foundation aims to strengthen communities and protect the natural world through focused partnerships, volunteering initiatives and fundraising events.

Funded by ReAgent's profits, the ReAgent Foundation donates to causes that align with its core values of responsibility, integrity and community. It believes that businesses have a responsibility to create value beyond what they provide to their customers.

"The ReAgent Foundation allows us to channel ReAgent's success into meaningful impact. We believe that good business should lead to good outcomes; not just for our customers, but for our communities and the world around us," said Rich Hudson, CEO of ReAgent Chemical Services and Chair of the ReAgent Foundation.

The ReAgent Foundation has identified three causes it feels will create the most impact: improving the lives of those suffering from life-altering illnesses, promoting access to STEM education and supporting environmental conservation. By making three annual donations to charities that support each cause, the team hopes to make a real difference.

This Year's Charitable Partners

The ReAgent Foundation has already announced its charitable partnerships for 2026:

- MS-UK helps people with multiple sclerosis live healthier, happier lives through services such as a mental health helpline, online and in-person activities and peer support groups.
- Science Museum educates and inspires young people with award-winning exhibitions that explore science, technology, engineering and mathematics (STEM).
- Snowdonia Society works to protect and enhance the natural beauty of Snowdonia. Through conservation efforts, fundraising and environmental education, they work to preserve one of the UK's most iconic landscapes for future generations to enjoy.

Going Beyond Donations by Getting Involved

Effecting change requires dedication. The ReAgent Foundation understands this, which is why charitable donations are only one layer of its approach. Team members also get proactive through volunteering initiatives with partner charities. This hands-on work is key to the ReAgent Foundation's mission to make a tangible, meaningful impact.

Alongside volunteering, annual fundraising events support future charitable donations. This year's fundraising event is the 24-hour Three Peaks Challenge, where team members will attempt to hike Ben Nevis in Scotland, Scafell Pike in England and Snowdon in Wales. Sponsorship funds will extend the ReAgent Foundation's reach while giving team members a chance to enjoy the natural landscapes they're working to protect.

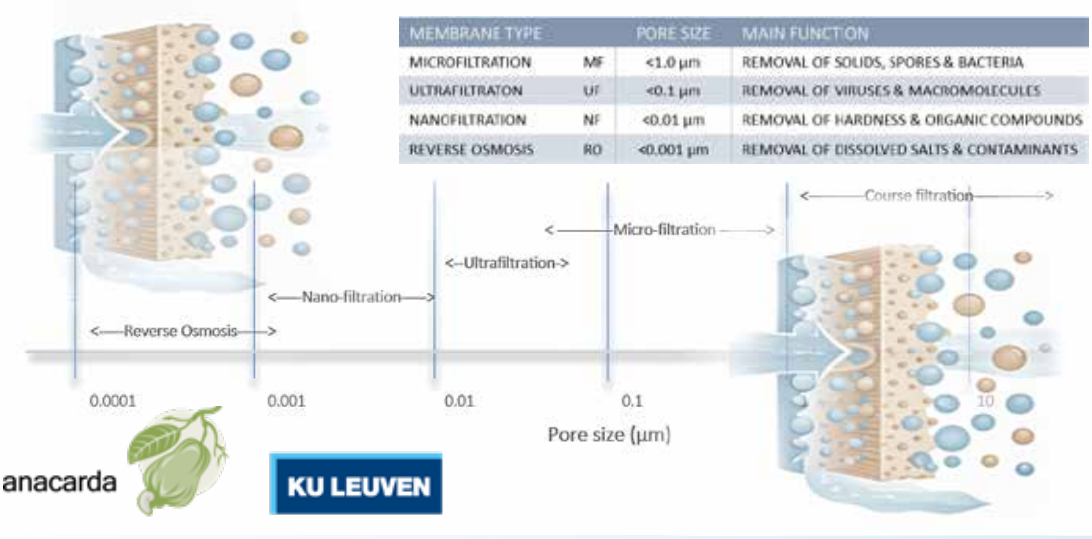
For further details visit - https://www.reagent.co.uk/

Northwest Innovator looks at Permeating New Business

Water is a basic a life-sustaining molecule essential for all known organisms, covers over 2/3rd of our planet and constitutes over half of your body composition. Despite its abundance, only a small fraction of the Earth's water is suitable for consumption, making its conservation crucial.

With an ever-increasing population, continued industrialisation, and climate change, immense pressure has been placed on freshwater resources. As a result, effective water treatment technologies are critical for protecting public health, supporting economic development, and preserving ecosystems. Among the most advanced and reliable methods available today is water cleaning through membrane technologies. Membrane-based water treatment plays a vital role in providing clean water by efficiently removing contaminants, improving water quality, and enabling sustainable water management.

Membrane water cleaning works by passing water through a semi-permeable barrier that allows water molecules to pass while blocking unwanted substances such as suspended solids, bacteria, viruses, salts, and organic compounds. Common membrane processes include microfiltration, ultrafiltration, nanofiltration, and reverse osmosis, each designed to remove contaminants of different sizes.



This versatility makes membrane technology suitable for a wide range of applications, from drinking water purification and wastewater treatment to desalination and industrial water reuse.

One of the most important advantages of membrane water cleaning, is its high efficiency in contaminant removal. Traditional treatment methods, such as sedimentation and chemical disinfection, may not fully eliminate microscopic pathogens or dissolved pollutants. Membranes, particularly ultrafiltration and reverse osmosis systems, can physically block bacteria, viruses, and harmful chemicals with exceptional precision. This results in water that meets or exceeds international safety standards, significantly reducing the risk of waterborne diseases such as cholera, dysentery, and typhoid fever.

Whilst the membrane industry is no stranger to innovation, every so often a development emerges that has the potential to redefine what is technically possible. One such breakthrough began in the research labs of KU Leuven, where Dr. Rhea Verbke and Laurent Hubert laid the groundwork for what would become eXo. Their work took a decisive turn during Dr. Verbke's research stay at Yale University, where she explored the largely untapped potential of epoxy chemistry within membrane science. It was there that she made a pivotal discovery: epoxy networks could be engineered into exceptionally stable membranes. As the Membrane Technology Group at KU Leuven continued to investigate the platform, the versatility of these membranes quickly became apparent. Early results demonstrated strong promise in gas separation, solvent-resistant filtration, and ion-exchange application, areas where conventional polymer membranes often face durability limits.

While the academic team was refining the science, industrial partners were needed to assist in unlocking the full potential. Anacarda Directors Paul Jones and Eric Van Nevel, both with established links to KU Leuven and recognised the strategic significance of the emerging epoxy membrane platform. With deep expertise in epoxy resin technologies, and a portfolio that includes both resins and curatives, Anacarda saw an opportunity to accelerate the development of this new materials class.

Initial discussions between Anacarda and the founders of eXo quickly evolved into a technically rich collaboration. Anacarda's extensive library of specialty epoxy resins and curatives opened the door to tailored formulations designed specifically for membrane performance. By adjusting molecular architecture, crosslink density, and curing chemistry, the partners began exploring epoxy systems capable of withstanding broad pH ranges, oxidizing environments, and aggressive solvent streams, conditions that typically challenge even the most advanced polymer membranes.

The ability to design bespoke epoxy systems is a key differentiator, and the partnership between eXo and Anacarda illustrates how academic innovation can transition into industrially relevant technology when supported by the right materials expertise. As the membrane industry continues to seek solutions that combine chemical resistance with high performance, epoxy-based membranes are emerging as a promising new platform, one that may redefine what is achievable in separation science.

Paul is renowned for innovative polymer design and patented products focused on sustainability and improved health benefits, and I asked him why this project? Paul responded, "Driving innovation through sustainable feedstocks and developing materials free from carcinogens or substances linked to chronic illness is something I am passionate about. Seeing these safer, next-generation materials deployed in technologies that deliver broader societal benefits is incredibly rewarding."

With ongoing research, expanding application testing, and a growing ecosystem of tailored epoxy formulations, the field is poised for rapid advancement. What began as a research insight at KU Leuven is now evolving into a robust technological foundation with the potential to reshape multiple sectors, from chemical processing to environmental engineering.

In conclusion, water cleaning via membranes is of immense importance in the modern world. It provides highly effective purification, supports desalination and water reuse, protects public health, and promotes environmental sustainability. As global water challenges intensify, epoxy-based membrane water treatment could become a cornerstone of efforts to ensure safe, reliable, and sustainable water supplies for current and future generations.

By Wendy Howarth

For further details visit https://www.anacarda.com/

Going Green – Patenting Green Technologies

There is a growing consensus that changes must be made to existing technologies, processes and even entire industries to address climate change and other environmental issues. Whether this is via the development of recyclable products, greener energy or manufacturing processes with fewer harmful by-products, there is a part to be played by all sectors, including the chemicals industry. However, such changes inevitably come at a cost, which needs to be mitigated or outweighed by the financial gains those developments bring. One way to help offset development costs could be via patent protection and in this article, WP Thompson look at some of the routes available in the UK, Europe and beyond to make a green patent portfolio work for you.

Going Green in the UK

The United Kingdom Intellectual Property Office (UKIPO) offers the Green Channel service to accelerate processing of patent applications for inventions that have environmental benefits, potentially allowing them to reach grant faster. The Green Channel can only be accessed on request and, whilst there is no substantive gatekeeping, a reasoned justification for an invention being eligible for the program must be provided. Conveniently, you can apply to enter an application into the program at any time at no official cost.

In the last 10 years, a total of 2,791 Green Channel patent applications were filed at the UKIPO, with just under 60% now granted, which is comparable with the proportion across all UK patent applications over the same period. Encouragingly, only 17.5% of those Green Channel applications have lapsed or been refused, which is half the proportion across all UK patent applications, perhaps reflecting the clear inventive steps driving developments in sustainability and green technologies.

Crossing Channels and Highways

With mitigation of development costs often key, the same is likely also true of the cost of a patent portfolio. To that end, there is an added benefit in entering a UK patent application into the Green Channel when managing an international portfolio. The UK is part of the multi-national Patent Prosecution Highway (PPH) scheme, under which an allowable set of claims in one member country can provide the basis for accelerated prosecution in another. A UK application accelerated under the Green Channel could be granted faster, thereby allowing sister applications in other jurisdictions to be accelerated from an earlier date under the PPH. This could bring families of applications to grant faster, as well as potentially encouraging examiners to engage in fewer rounds of examination, reducing costs.

Although the European Patent Office does not have a dedicated channel for green technologies, it is part of the PPH scheme. With just under 148,000 European patent applications relating to “Smart Grids” technologies and inventions that contribute to climate change mitigation having priority dates (effective filing dates) in the last decade, there is therefore also the potential for accelerated prosecution of a considerable number of foreign applications if their European counterparts are granted.

Spreading the Word

Sometimes, owners lack the infrastructure or finances to work their invention, in which case they may wish to find a financial and/or business partner. Knowing where to look for opportunities can be difficult, but the World Intellectual Property Office (WIPO) aims to facilitate this specifically for green technologies to aid the formation of partnerships and the implementation of those technologies around the world.

The free-to-register WIPO GREEN database currently lists nearly 145,000 green technologies, making their details readily and publicly available. Whilst it is not a prerequisite that those technologies be the subjects of patents or patent applications, it is often prudent to have a patent application at least underway before making the details of an invention public. This might explain why the majority of technologies listed on the database are based on patent applications.

Of course, these are not the only programs and resources available for encouraging the development and protection of green technologies. Speaking with intellectual property specialists can help you identify and utilise relevant facilities and schemes to best exploit and monetise patent protection for your invention.

To find out more from WP Thompson, including how to make your IP more financially beneficial, please visit https://www.wpt.co.uk or contact us at london@wpt.co.uk

A Hazard Communication Inflection Point

The EU's additional hazard classes under Delegated Regulation (EU) 2023/707 are often described as a technical update to the Classification, Labelling and Packaging Regulation (CLP). That framing misses the point.

In practice, these changes mark a clear inflection point for hazard communication. By formally introducing of endocrine disruptors, PBT and vPvB, and PMT and vPvM into the classification framework, the regulation expands not just what must be classified, but what must be justified, documented and communicated across supply chains.

For organisations managing established chemical portfolios, this is not a simple labelling refresh. It tests whether existing SDS processes are genuinely capable of managing change.

The additional hazard classes focus on chronic, persistent and system-level concerns. Endocrine disruption for human health and the environment, persistent and bioaccumulation, and mobility in water systems are now explicitly embedded within CLP. These topics are no longer confined to specialist regulatory debate. They increasingly sit at the centre of procurement requirements, ESG scrutiny and customer due diligence.

As a result, hazard communication teams are under growing pressure to ensure that classification decisions are not only compliant but internally coherent and defensible when questioned.

The implementation timeline turns this from future planning into portfolio reality.

From 1 May 2025, new substances placed on the market must comply with the new requirements. From 1 November 2026, the transition period ends for substances already on the market before that date. For mixtures, the corresponding dates extend into 2026 and 2028.

For those responsible for SDS portfolios, 1 November 2026 is when this becomes an operational reality. It forces a practical question that many organisations have not yet fully scoped: how many substances will move classification, and how many downstream mixtures will inherit that change?

The answer determines the scale of Safety Data Sheet revision required.

When classification changes, attention often centres on Section 2 of the Safety Data Sheet. Hazard statements, signal words and label elements are visible and easily scrutinised.

However, in practice, classification rarely changes in isolation.

They frequently create pressure across:

- Section 3, where ingredient disclosure and component classifications must remain aligned
- Section 8, where exposure control advice must remain credible against the updated hazard profile
- Sections 11 and 12, where toxicological and ecological narratives must support the classification rationale
- Section 15, which many downstream stakeholders use as a validation checkpoint

When sections do not align, customers notice. That leads to queries, rework and erosion of confidence. For this reason, the additional hazard classes should be treated as a governance challenge, not a drafting exercise.

Where substances are registered under EU REACH, classification changes can trigger dossier maintenance in IUCLID and, in some cases, updates to the Chemical Safety Assessment and Chemical Safety Report. Registrants are required to keep dossiers up to date.

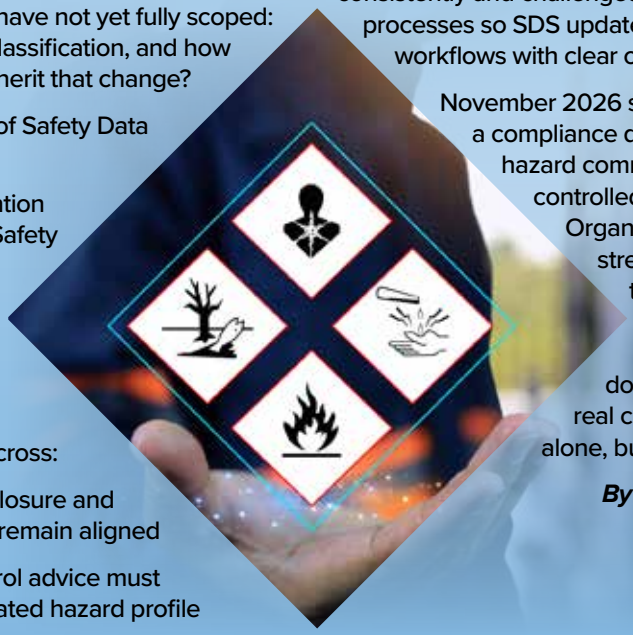
From a hazard communication perspective, misalignment between dossier position and SDS creates avoidable friction. It drives repeated document revisions, slows customer responses and weakens defensibility when classification decisions are questioned.

A controlled approach treats dossier maintenance as an upstream enabler of SDS confidence, not a separate regulatory obligation.

Even where EU CLP is the primary driver, the communication impact rarely remains confined to one jurisdiction. EU classifications are often used as internal global benchmarks. Multinational organisations harmonise SDS families across regions. As a result, an EU-driven reclassification can trigger wider document alignment and customer notifications and internal training activity.

Handled well, this reduces global rework. Handled reactively, it multiplies it.

Most organisations can produce compliant Safety Data Sheets. Fewer have built operating models capable of managing continuous regulatory change at scale. A sustainable approach typically includes three elements: portfolio triage to prioritise substances and mixtures with the highest likelihood of classification movement; decision traceability so classification rationales can be reused consistently and challenged efficiently; and controlled release processes so SDS updates move through governed workflows with clear ownership and communication.



November 2026 should not be viewed simply as a compliance deadline. It is a test of whether hazard communication processes are controlled, documented and scalable. Organisations that use this moment to strengthen governance and decision traceability will enhance both compliance and credibility. Those who treat it as a last-minute document update may find that the real challenge was never classification alone, but control.

By Fiona Moir, Managing Regulatory Consultant, Yordas Group

For further information visit the Yordas Group website.

Chemical mixtures in aquatic environments

With the anticipated growth in chemical production over the coming decades, an increase of unintended chemical mixtures present in the environment seems inevitable. Many of these chemical mixtures are unregulated, and the current regulatory approaches are not suitable to assess the environmental risk they pose.

As pollution of aquatic ecosystems has been a hot topic for some time, improvements in water quality and macroinvertebrate diversity have been reported; however, whilst the emissions of a few well-known polluting chemicals have decreased, many chemicals are not currently monitored. In addition, the baseline for historical biodiversity levels is not considered when assessing the reported improved biodiversity and the rate of change is slowing.

A report published in October 2025 by the Royal Society, 'Chemical mixtures in aquatic environments: understanding and preventing harm' has highlighted the issue and provides five key recommendations:

1. Implementation of pragmatic and precautionary regulation for chemical mixtures which should evolve as the current high level of uncertainty decreases.
2. Adopt innovative approaches to risk assessment for monitoring, managing and regulating chemical mixtures in the aquatic environment.
3. Develop a centralised, open-access chemical pollutants data hub.
4. Develop an interdisciplinary research strategy targeting critical evidence gaps.
5. Prioritise the development of suitably trained regulatory scientists.

The current approach to chemical risk assessment is for chemicals to be considered individually, with assessments typically based on laboratory derived data representing a limited number of species; however, this approach is very limited when considering that the combined effects of unintended chemical mixtures remain unknown.

One method under consideration is the Mixture Assessment Factor (MAF) concept. MAFs require each chemical in a mixture to have adequate toxicity data to enable assessment and implementation of the MAF. Research conducted by DUCC (published in April 2025) investigated the use of MAFs across a range of chemical sectors, the results of which suggested that implementation of a blanket MAF factor of 10 would result in vast numbers of substances failing risk assessments, resulting in further higher tier animal testing, increasing costs and regulatory burden. Currently it is unclear if MAFs could be used for the assessment of unintended chemical mixtures occurring in aquatic environments.

When assessing the environmental toxicity of chemical mixtures, combined effects are categorised as additive, antagonistic or synergistic. Research has suggested many chemicals (75-90%) interact in additive ways. Under this scenario, chemical mixtures where each individual substance is present at defined safe concentrations may still induce toxic effects because of the additive effects targeting the same biological pathway.

Synergistic effects represent the worst-case scenario, here the total toxic effect observed exceeds the anticipated additive effect. Synergism has been shown to occur in 5-10% of cases; however, this number is based on research from a relatively small number of chemicals, so the true frequency is currently uncertain.

Antagonistic effects result in less toxicity than the anticipated additive effect and as such this effect is considered a low priority concern.

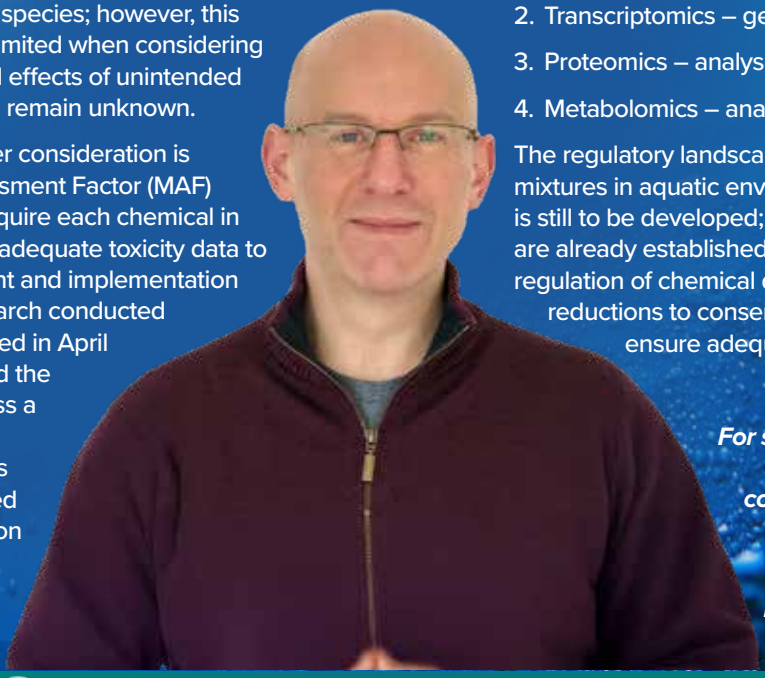
Further adding to the uncertainties are the impact of climatic stressors and that the available laboratory data is heavily focussed on freshwater species with estuarine and marine species poorly represented.

Considering the potential shortcomings of the current regulatory landscape with regards to unintended chemical mixtures, it is clear that a new approach is required. The report identifies a few new methods, a combination of which could make up the next generation of risk assessment. The report also highlights how the adopted approach should be more resource efficient and incorporate high throughput screening tests and the use of artificial intelligence.

Omics techniques (as introduced in several recently revised OECD test guidelines for Ecotoxicology studies) can be used to monitor biological responses to chemical exposure.

1. Genomics – genetic code and structure
2. Transcriptomics – gene expression
3. Proteomics – analyses proteins
4. Metabolomics – analyses metabolites

The regulatory landscape addressing unintended chemical mixtures in aquatic environments across the UK and Europe is still to be developed; however, environmental impacts are already established and liable to increase. Increased regulation of chemical discharges appears inevitable and reductions to consent limits will likely be necessary to ensure adequate environmental protection.



For support with your mixture assessment or environmental assessment needs, contact our Chemical Compliance team at REACH@wsp.com

Dominic Sacker

FROM REGULATION TO REALITY:

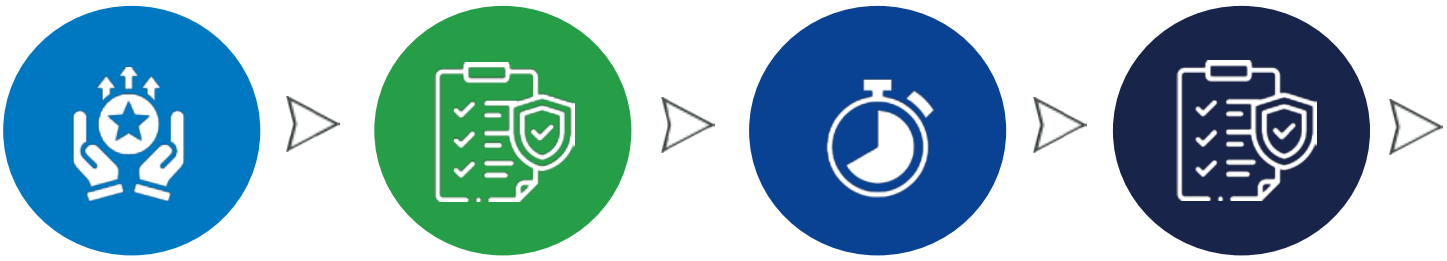
THE CLIMATE CHALLENGE FOR COMAH SITES

UK COMAH operators face an unprecedented challenge. The climate has already changed measurably since most facilities were designed and constructed. Average temperatures during the hottest days have increased from 26°C (19611990) to 26.8°C (2008-2017), with subsequent years showing continued warming. Flood risk areas are expanding, storm intensity is increasing, and extreme weather events that were once rare are becoming more frequent.

For sites handling dangerous substances, these changes translate directly into increased major accident risk. Equipment designed to operate within specific environmental parameters may be pushed beyond safe operating envelopes. Safety barriers calibrated for historical weather patterns may prove inadequate under future conditions. Emergency response plans developed without considering concurrent extreme weather may fail when most needed.

CDOIF AND CLIMATE CHANGE:

ARTHIAN AND THE ADAPTIVE MANAGEMENT FRAMEWORK



PRE-PLANNING AND LEADERSHIP

Establish organisational commitment and adaptive capacity

RISK ASSESSMENT PROCEDURE

Embed NaTech hazards into COMAH Major Accident Hazard identification and evaluation processes

IDENTIFY POTENTIAL IMPACTS (SCREENING)

Conduct initial screening to identify credible NaTech scenarios under present-day and +2 and +4°C warming conditions

RISK ASSESSMENT PART A

Evaluate risk against present-day, +2°C (2050), and +2 and +4°C (2100) scenarios

THE REGULATORY EXPECTATION

1 COMAH REGULATIONS

Requirement to take "All Measures Necessary" to prevent major accidents, which now explicitly includes consideration of natural hazards.

2 ENVIRONMENTAL PERMITTING REGULATIONS

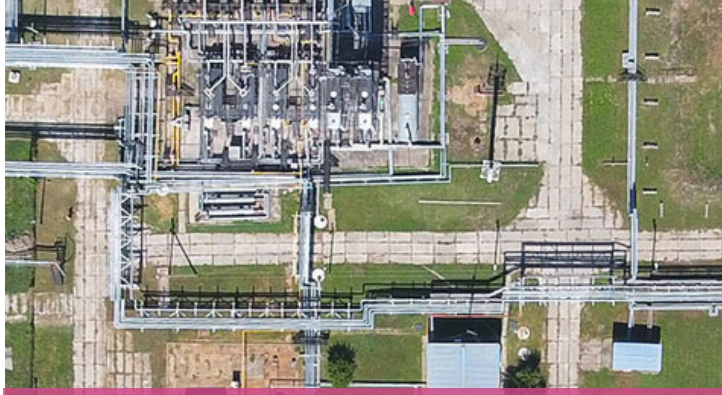
Requirements for climate adaptation to be embedded in Environmental Management Systems.

3 CDOIF GUIDELINE - ADAPTING TO CLIMATE CHANGE

Industry best practice framework establishing expectations for NaTech risk assessment.

4 OPERATIONAL DELIVERY GUIDE: NATECH AND CLIMATE CHANGE ADAPTATION

Regulatory inspection benchmarking criteria



STRENGTHEN YOUR SITE'S CLIMATE RESILIENCE.

Reach out to our specialists to talk through our value added solutions for COMAH installations.

Liz Copland
Senior Director, Development
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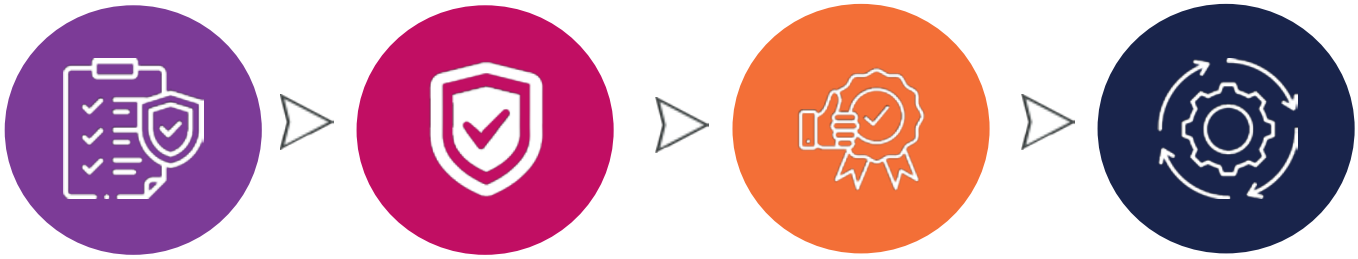
Peter Schofield
Senior Director, Climate & Carbon
peter.schofield@arthian.com

James Forbes
Senior Director, Engineering
james.forbes@arthian.com

READ THE FULL ARTICLE AT WWW.ARTHIAN.COM



RISK ASSESSMENT PART B

Understand how risks change over time and under different climate scenarios

IDENTIFY & APPRAISE RISK REDUCTION

Identify reasonably practicable measures to maintain major accident risk ALARP

PLAN & IMPLEMENT ADAPTATION MEASURES

Develop and execute adaptation plan ensuring timely implementation of risk controls

MONITOR, RECORD & REVIEW

Continuous monitoring of adaptation effectiveness and emerging risks

The project delivery specialists

Process Hazard Analysis Revalidation on Existing Sites

The Importance of PHA Revalidation on Existing Sites

Process Hazard Analysis (PHA) revalidation is essential for keeping chemical manufacturing sites safe and compliant. Systematic updates ensure each PHA reflects current operations, risks and safeguards.

As facilities age and processes evolve, hazardous material and operational risks also change. Without regular PHA revalidation, sites may face a higher chance of fires, explosions, or chemical releases. These incidents can cause injury, harm the environment and lead to regulatory penalties. They can also damage an organisation's reputation.

Seona Turner, PM Group's UK Head of Process Safety, notes, "Risk assessments become outdated without a strong revalidation programme. Minor changes may be reviewed through Management of Change processes. However, the combined effect of these changes on risk profile is considered during PHA revalidation. Undetected incremental change can compromise safety and regulatory compliance for sites."

A structured revalidation programme brings major benefits. Regular review of hazard identification and risk assessments helps organisations proactively address both existing and emerging risks.

The revalidation process ensures that changes to processes, equipment, or procedures are properly assessed. This reduces the likelihood of such changes introducing unforeseen hazards. Reviewing safety measures and their effectiveness against hazards improves site and community safety. This also enhances operational reliability and minimises costly incidents.

It demonstrates regulatory compliance, providing evidence of due diligence to regulators. As a result, the organisation's reputation as a responsible chemical sector operator is reinforced.

Challenges in Implementing PHA Revalidation Programmes

Many sites struggle to implement PHA revalidation programmes. Limited internal resources and competing priorities make it difficult to dedicate the required time and expertise. Older systems and incomplete documentation can slow the process. Changing regulations may also require extra training for personnel. Organisations can also struggle to secure stakeholder buy-in and maintain momentum throughout the revalidation cycle.

How PHA Revalidation Is Executed

PHA revalidation usually takes place every five years. It involves reviewing and updating past hazard analyses. The results reflect changes, incidents and procedural updates since the last study. An experienced PHA facilitator leads the process and records information using appropriate software.

A multidisciplinary team participates in the revalidation. This typically includes process engineers, safety specialists, and operations and maintenance staff. The review focuses on:

- Changes made during the intervening period, including both engineering and revised procedural changes.
- Cumulative effect of incremental changes.
- Incident/Near miss reviews and updated safety information since the last study.
- Any revised standards or regulatory requirements.

How PM Group Can Help

PM Group has deep expertise in process safety management. Its specialists and chartered engineers bring decades of high-hazard industry experience. They support chemical manufacturers with the planning and implementation of PHA revalidation programmes.

Its collaborative approach addresses site's unique risks and regulatory requirements. This provides chemical manufacturers with up to date, robust PHA revalidation processes. Sites can remain safe, compliant and aligned with best practice.

Contact us for support with your process safety requirements:

Call: +44 1928 752 500 Email: processsafetyrequests@pmgroup-global.com www.pmgroup-global.com

Master Data Management for Chemical Compliance: Navigating ERP Migration Challenges

The management of product master data in the chemical industry is a highly complex, often confusing, yet critical function. With ERP (Enterprise Resource Planning) systems containing thousands of substances, raw materials, and finished products—each governed by evolving global and local regulations covering product safety and hazard communication, registration / notification and ever-increasing sustainability requirements—accurate, consistent, and up to date data are critical.

Thankfully, most modern companies aren't managing these obligations using a few dozen filing cabinets. They typically have digital ERP (Enterprise Resource Planning) systems bulging with product specifications, compliance documentation, customer declarations, automated workflows, inventories etc.

Operating these systems can be challenging enough but companies also often face the imperative to migrate all or part of their master data between ERP systems. This can be due to mergers, carve-outs, system obsolescence or the strategic adoption of more sophisticated platforms. These transitions are not merely technical upgrades; they are regulatory and operational transformations that can make or break compliance continuity.

Through various client projects we've learned a great deal about the hurdles and pitfalls of these transformations. knoell's Chemicals and Product Safety divisions routinely work in numerous different software platforms, from the well know leaders like SAP and Sphera to bespoke client-specific systems. We've also been lucky enough to support several leading global chemical companies through their SAP S/4HANA® transformation projects. Here are some of the best practices we've picked up along the way:

Involve Product Stewardship / Regulatory Affairs teams early on.
These functions are critical to both commercial operations and safety and must have the ability to provide input towards relevant decisions. They need significant advanced warning of additional work to ensure suitable capacities. Typically, business operations are planned to continue as normal during the transition yet significant extra work on clean-up, testing, remediation and even dual maintenance of data in parallel systems will still need to take place.

Perform analysis and clean-up of data before the migration.
This ensures the quality and consistency of migrated data and avoids wasting time migrating redundant or inaccurate data and subsequently correcting it in the new system. This is a perfect opportunity to confirm the accuracy of regulatory data such as substance listings, restrictions, harmonised classifications etc. Reviewing internal data such as product compositions, bill of materials, customer-specific data etc for completeness is also important.

Plan and test data migration and future operations in the new system thoroughly.
Take the opportunity to review the new data architecture, decide which, how and when data will be moved. From our work on SAP® transformations specifically, we also see the benefits of moving closer to the SAP standard and reducing or simplifying customisations made in the past. Remember that document creation / distribution, product / substance notifications / registrations, workflows etc will all need to work seamlessly in the new system – so spend some time here to avoid costly delays and workarounds later on.

Ensure effective and efficient master data governance.
Take advantage of any improvements to data architecture such as automated workflows or simplified data maintenance and propose useful improvements to business processes. Perhaps you've struggled in the past with capturing the required data from suppliers or keeping abreast of reformulation activities – now is the time to fix these issues. Update or develop guidelines, manuals and end-user training to ensure efficient work and avoid mistakes and re-work. Integrate Product Stewardship and Regulatory Affairs into wider governance processes such as product development, logistics and new supplier qualification.

In case you need any support with the scoping, planning or implementation of your Product Safety and Stewardship ERP transformation then please don't hesitate to reach out to us!

knoell can provide:

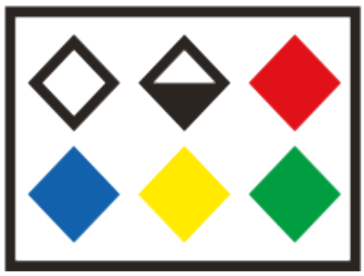
- Support with all aspects of Master Data Management for chemical compliance
- Portfolio and System Gap Analysis
- User Acceptance Testing
- Governance and Process Mapping

If you're facing an SAP transformation specifically then check out our service brochure and free webinar here

John Adams, Senior Product Safety Manager
Dr. Knoell Consult Ltd.

Hibiscus Plc

Experts in Chemical Labelling

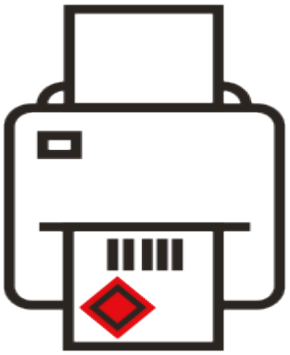


Chemical Labels

DGSA Training

SDS Software

Printers



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OT Cyber Security. A board-level imperative for resilient and safe operations

Operational technology underpins the delivery of critical services across energy, manufacturing, transport, and process industries. These systems control physical processes that, if they fail, can result in injury, environmental harm, service disruption, and significant financial loss. Yet OT cybersecurity is still too often treated as a technical or engineering concern rather than a material business risk.

Across industry, capable OT and cyber specialists are actively addressing real risk. However, without structured, evidence-based assurance, it is difficult to know whether all relevant risks are consistently identified, prioritised, and controlled. OT cyber risk is therefore not failing due to a lack of effort or expertise. It is failing because assurance and reporting are not consistently elevated to board level.

The threat reality and what the evidence shows
As OT environments become more connected, cyber exposure increasingly manifests as disruption to physical processes rather than data loss.

Research published in August 2025 by Cornell University identified nearly 70,000 OT devices globally directly accessible from the public internet, including exposed HMIs and SCADA interfaces supporting live operations. These assets directly support production, safety, and service delivery. Their exposure illustrates what unmanaged gaps look like when assurance relies on assumption rather than evidence.

Industry research reinforces this picture. The 2025 OT Cyber Threat Report from Waterfall Security Solutions highlights a marked increase in OT cyber incidents resulting in operational disruption and physical impact, often exploiting known weaknesses such as unmanaged remote access and insufficient segmentation.

Together, these findings show that OT cyber risk is observable, persistent, and increasingly associated with operational and safety consequences.

Why this is a business and safety issue
From a resilience perspective, OT cyber incidents increase the likelihood of unplanned outages and prolonged recovery. From a safety perspective, they introduce credible pathways for interference with systems designed to prevent harm.

This aligns with guidance from the Health and Safety Executive, which recognises cyber security as a potential contributor to major accident scenarios, and the National Cyber Security Centre, which continues to emphasise resilience and disruption across essential services.

Where governance breaks down
When OT cyber risk is not assured and reported at board level, it is not treated as part of the enterprise cyber strategy. As a result, IT underweights its importance and operational teams are left to manage risk without strategic backing.

Boards rarely receive the same level of assurance on OT cyber risk as they do on safety, financial, or operational performance. Without evidence, confidence is assumed rather than demonstrated.

Assurance as the connecting mechanism
Evidence-based assurance links board oversight to operational delivery, drawing on the Cyber Assessment Framework for outcome-based assessment, OG86 as operational guidance for managing cyber risk within safety systems, and IEC 62443 as the recognised standard for securing industrial control systems.

Owning the assurance process
An independent review has value. However, relying solely on periodic external assessment does not create resilience. Effective governance requires organisations to maintain their own authoritative, current view of OT cyber risk.

Structured self-assessment, aligned with recognised frameworks and standards, enables organisations to continuously refine and strengthen their programmes. It allows teams to evidence control effectiveness, identify emerging gaps, and report risk in business terms.

When supported by appropriate assurance systems, this process becomes disciplined and repeatable. Boards gain visibility based on evidence rather than assumptions.

Conclusion
OT cyber risk may well be being actively addressed, but without assurance, it cannot be governed with confidence. Boards that demand evidence-based assurance will close the gap between effort and outcome, strengthening resilience and safety.

For further details visit -
OpenPSM - Process safety management software

Driving profitable growth through resource efficiency.

In today's competitive landscape, businesses are under constant pressure to increase productivity and reduce costs - often at the same time. While this can seem like an impossible task, exploring resource efficiency measures can uncover low-hanging fruit that have a massive impact on both operating costs *and* productivity.

Green Economy are a not-for-profit organisation providing industrial businesses with expert, impartial solutions that reduce waste, optimise production processes and improve resource efficiency.

We provided intensive support to almost **500 businesses** last year across a wide variety of industries and sectors.

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- Ensure long term business continuity and prosperity.

Our specialists are on hand to help your business, no matter the challenges you might be facing.

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Simple solutions, significant impacts

Businesses exploring resource efficiency often focus first on buildings and major equipment upgrades. While those improvements are important, many of the quickest wins come from examining day-to-day processes:

- ☑ How long is equipment running?
- ☑ Does runtime match actual usage?
- ☑ Where is heat being lost?
- ☑ Are machines under- or over-utilised?
- ☑ Are compressed air systems leaking?

Green Economy's specialists can answer questions like these with **robust data** and **clear recommendations**, giving you confidence in resource efficiency measures and investments.

"It can feel like a leap of faith investing in technologies like solar. Being able to corroborate our thinking with the Green Economy team provided reassurance that we were doing the right thing and quantified the CO2 savings."

Zoe Brimelow, DuoUK

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Squeezing Compliance into the Corners: Engineering a Compact Effluent Solution

When a major UK chemical manufacturer faced a 75% reduction in available floor space for a critical wastewater upgrade, O'Hare Engineering Design utilised 3D laser scanning and agile collaboration to deliver a solution that kept the site compliant and operational.

In the chemical manufacturing sector, environmental compliance is rarely a static target. As regulations regarding wastewater treatment tighten—particularly concerning suspended solids and PFAS—manufacturers face a dual challenge: upgrading infrastructure to meet new standards while ensuring business continuity.

For one major UK chemical manufacturer in mid-2024, this challenge was compounded by a severe logistical hurdle. A vital effluent treatment system upgrade was at risk of slipping behind schedule just as capital budget reviews necessitated a drastic change in scope. The allocated footprint for the new installation was cut by approximately 75%.

The stakes were high. The system was the linchpin of a wider environmental improvement programme. Any delay threatened not only regulatory standing but also the operational stability of a site employing over 200 people. At this critical juncture, O'Hare Engineering Design was engaged to recover the schedule and engineer a solution that could fit a high-performance system into a fraction of the original space.

The Challenge: High Performance, Limited Real Estate
The revised brief presented a complex engineering puzzle. The treatment plant needed to retain its full operational capacity for PFAS and solids removal, yet it had to be squeezed into a significantly reduced footprint.

Furthermore, the site was not a blank canvas. The new design had to weave through existing infrastructure, requiring seamless integration with complex structural, civil, and electrical engineering constraints. The risk of clashes was high, and the margin for error was non-existent.

The Solution: Data-Led Design
To solve the spatial crisis, O'Hare Engineering Design moved immediately to eliminate assumptions. The team deployed 3D laser scanning to capture a digital twin of the site, establishing accurate base data down to the millimetre.

Using this data, the team explored multiple layout options within a 3D modelling environment. This allowed for the optimization of every square metre of vertical and horizontal space, ensuring that the compact design remained operable and maintainable. Crucially, it allowed the team to identify and resolve potential clashes virtually, long before fabrication began.

"The final design delivered a complete, fully integrated effluent treatment system within just 25% of the space originally allocated."

Collaboration as a Catalyst
With time pressing, siloed working was not an option. O'Hare Engineering Design coordinated closely with equipment suppliers, skid fabricators, and electrical designers. A close partnership with Civil Design North West was instrumental in aligning the civil and structural elements with the mechanical design.

To manage the velocity of the project without sacrificing safety or quality, the team adhered to internal processes aligned with ISO 9001. This structured approach to documentation and project traceability ensured that despite the rapid changes, the client maintained full visibility and the design remained robust.

The Result: Operational Continuity
The final design successfully delivered a fully integrated effluent treatment system within the reduced footprint. Because the layout had been validated digitally, the physical installation proceeded without disrupting ongoing production—a vital requirement for the client.

By capturing accurate data early and integrating input across all stakeholders, the project avoided costly on-site rework. The result was a system that worked from day one: compliant with environmental regulations, accessible for maintenance, and seamlessly integrated into the site's operations.

For project managers working in similarly constrained environments, this case demonstrates that when space and time are limited, precision planning and high-quality design data are the keys to unlocking a solution.

Project Fast Facts

- Project Type: Effluent Treatment Plant Upgrade (PFAS & Suspended Solids)
- Location: UK Chemical Manufacturing Site
- Key Challenge: Budget pressures reduced installation footprint by 75%.
- Methodology: 3D Laser Scanning, Clash Detection, Multi-disciplinary Coordination.
- Outcome: Delivered on time with zero operational disruption.

O'Hare Engineering Design specialises in solving complex engineering problems through precision design and structured project management. We help clients reduce risk and meet their goals with confidence

Learn more at https://www.ohare-eng.co.uk/

Raising the Bar: Engineering Innovation that Eliminates Risk at Road Tanker Loading

A collaborative project between Carbis Loadtec Group and Lanxess Solutions UK Ltd has removed working-at-height risks from a highly corrosive road tanker unloading operation at Trafford Park.

In the heart of Trafford Park, Lanxess Solutions manufactures speciality chemicals used in applications ranging from flame retardants to lubrication, hydraulic fluids and water treatment. Handling these products safely requires careful control of both process risk and operator exposure - particularly during road tanker unloading.

Road tanker operations sit at the intersection of three major industrial hazards: working at height, hazardous chemical handling and heavy vehicle movement. At Lanxess' Trafford Park facility, the introduction of a new raw material ($POCl_3$) and the need to relocate the unloading point triggered a fundamental review of how risk was being managed.

Rather than relying on procedural controls or personal protective equipment, the project set out to move decisively up the safety hierarchy - from managing risk to eliminating it altogether.

Engineered safety by design

Carbis Loadtec Group was appointed to design and deliver a fully engineered solution tailored to the site's operational and chemical challenges. The result was the installation of a vertically elevating loading platform (VELP) paired with a PTFE-lined top-unloading station.

The solution removes the need for operators to access the tanker top directly, enclosing them within a guarded platform during connection and unloading. This eliminates fall risk at the source and removes reliance on harnesses or fall-arrest systems.

Ergonomics also played a central role. The top loading arm was engineered for ease of manoeuvrability, reducing manual handling strain, while a sealed-loop vapour return system ensures no product or vapour is released to the atmosphere - critical when handling corrosive and volatile chemicals.

A collaborative approach

According to Adam Stevens, Civils and Utilities Engineer at Lanxess Solutions, the project was shaped as much by collaboration as by engineering.

"We were facing several challenges at once - introducing a new raw material, relocating the unloading area, and ensuring compatibility with a highly corrosive chemical," he explains. "From the outset, Carbis Loadtec understood the operational pressures we were under and worked with us to develop a solution that improved safety without disrupting production."

Stevens highlights that key considerations included chemical compatibility, safe access and egress, emergency escape provisions and the need to minimise manual handling - all of which were addressed through engineering controls rather than procedural workarounds.

"They guided us through each issue, offering multiple options that we could review and agree on together. The final installation didn't just resolve the original challenges; it also gives us flexibility for future offloading requirements."

Delivered without disruption

Despite the project's complex scope, it was delivered on time and within budget, with no interruption to site operations - a critical factor in a live chemical manufacturing environment.

"Carbis Loadtec were excellent to work with throughout," Stevens adds. "The project was delivered smoothly, and the experience has been so positive that we're already progressing another offloading project with them."

Engineering as it should be

The Trafford Park installation demonstrates how well-considered engineering design can remove risk entirely, rather than simply managing it. By prioritising elimination and substitution at the top of the safety hierarchy, the project sets a benchmark for road tanker loading operations handling hazardous chemicals.

For Lanxess Solutions and Carbis Loadtec Group alike, it stands as a practical example of how collaborative engineering can deliver safer, more resilient operations - without compromise.

For further details visit - https://www.carbisloadtec.com/

Top 10 Reasons Internal Tank Linings Fail — and How to Prevent Them

Internal tank linings are widely used to protect steel and concrete assets from corrosion and chemical attack, extend service life, and reduce life-cycle cost. Despite this, premature lining breakdown remains common across fuels, chemicals, water and wastewater, and process storage.

Failure is often described as "bad luck" — blisters, pinholes, delamination, cracking, or rapid underfilm corrosion appearing within months of commissioning. In reality, most failures follow a predictable pattern. They typically stem from controllable weaknesses in specification, preparation, environmental management, application discipline, commissioning control, and post-handover operating practice.

Based on the authors' practical experience delivering multi-million-pound tank lining projects internationally, the following are ten frequent causes of lining failure — and practical measures that asset owners, specifiers, contractors, and inspectors can apply to materially reduce risk.

Top 10 causes of failure — and prevention measures

1) Incorrect lining selection for service conditions
A lining selected on familiarity or price rather than proven resistance to the actual product, temperature range, vapour space exposure, and cleaning chemicals.

Prevention: Verify chemical resistance for the exact service (including vapour phase), temperature, and credible upset conditions.

2) Inadequate surface preparation
Even high-performance linings cannot compensate for poor cleanliness, inadequate profile, or incomplete edge preparation.

Prevention: Specify and verify preparation standard (e.g., Sa 2½), profile range, and edge treatment; use defined inspection hold points.

3) Soluble salt contamination
Chlorides and sulphates are frequently the hidden cause behind osmotic blistering and underfilm corrosion.

Prevention: Embed salt testing into the plan (e.g., Bresle method), define acceptance criteria before mobilisation, wash/re-test as needed.

4) Poor environmental control during application
Condensation, high humidity, and low temperature can lead to amine blush, poor adhesion, pinholing, and cure inhibition.

Prevention: Monitor air/steel temperature, dew point, and humidity throughout the shift; maintain a dew point margin and stop work if limits are exceeded.

5) Incorrect film thickness (under-build or over-build)
Under-build reduces barrier performance; over-build increases solvent entrapment, cracking, and cure problems.

Prevention: Control WFT and DFT with defined min/max limits per coat and system, and record results by area.

6) Poor workmanship at critical details
Edges, welds, nozzles, and terminations are common initiation points for breakdown due to thin film and mechanical damage.

Prevention: Require stripe coats, edge grinding where necessary, and dedicated inspection of critical details prior to full application.

7) Inadequate cure and commissioning control
Premature immersion or exposure before the lining reaches full cure is a major cause of early failure, especially in cold conditions.

Prevention: Define cure acceptance criteria upfront and verify cure (time/temperature and/or hardness/solvent rub as appropriate) before introducing product.

8) Holiday testing gaps and ineffective repair
Pinholes and discontinuities allow rapid underfilm corrosion, particularly in immersion service.

Prevention: Make holiday testing a formal hold point with correct voltage, 100% coverage, defect logging, repair, and re-test.

9) Weak QA/inspection hold points and documentation
Without disciplined hold points, defects are "built in" and discovered only after commissioning.

Prevention: Use a documented Inspection and Test Plan (ITP) with clear hold/witness points and defined acceptance criteria.

10) Post-handover operational factors
Mechanical damage, aggressive cleaning, water bottoms, sludge, microbial activity, and temperature excursions can overwhelm the lining's design limits.

Prevention: Document operating limits and cleaning restrictions, monitor water bottoms, and plan routine inspections with compatible repair procedures.

The takeaway
Most lining failures are avoidable when teams treat lining work as an engineered activity rather than a "paint job". The coating brand matters — but the real differentiator is the discipline of specification and verification at hold points: Is the system fit for service? Is the steel clean (including salts)? Are conditions controlled? Is thickness within limits? Is cure verified? Is the lining continuous?

If those questions can be answered with evidence, service life becomes far more predictable and total cost of ownership reduces.

For further information visit - https://corrous.co.uk/

Written by Dominic Marshall BA, MCMI, ICorr II (Group Managing Director) and Steven Slack MICorr, ICorr III (Group Technical Director), Corrous Industrial Group

Maximising Efficiency with Liquid Ring Vacuum Pumps

In modern industry, efficiency and sustainability are essential. From chemical plants and pharmaceutical labs to food processing facilities and materials-handling, vacuum technology underpins countless processes. Among the solutions available, liquid ring vacuum pumps remain a reliable workhorse, capable of creating vacuums down to 33 mBar while handling high volumes of vapours, condensable gases and liquids with ease.

Why Liquid Ring Pumps Are Trusted

Liquid ring vacuum pumps are prized for their simplicity, reliability, and versatility. Their off-centre impeller uses a 'liquid ring' to compress and convey gases or vapours, producing near-isothermal operation and minimal wear. With only one moving part in the fluid cavity, maintenance is straightforward, uptime is high, and processes – from distillation and drying to filtration, plastic extrusion, and even live fish transfer – run smoothly.

Their adaptability extends to temperature management, fluid choice, and material construction, making them a trusted solution across a wide range of applications.

The Cost of Water and Effluent

Historically, liquid ring pumps relied on service water that often went straight to drain - cheap and convenient at the time. Today, water carries a cost, and effluent treatment adds further expense. With growing pressure across European industry to reduce utility consumption and environmental impact, vacuum systems are proving highly effective at cutting both water and effluent discharge.

Enter recirculation vacuum systems, engineered to maintain the proven performance of liquid ring pumps while reducing water consumption and effluent output.

Recirculation Systems: Partial and Full

CDR Pumps (UK) Ltd, in collaboration with Pompe Travaini, offers partial and full recirculation 'plug and play' vacuum systems.

- Partial recirculation reduces water use by 25–30%
- Full recirculation can cut water consumption by up to 80% without compromising vacuum performance

These systems can retrofit existing pumps or be supplied as fully ATEX-compliant units for explosive atmospheres. By recycling operating fluids, they also reduce the load on effluent treatment systems, helping companies meet both operational and sustainability goals.

Engineering insight: Reduced water consumption doesn't just save money – it lowers energy demands for pumping and treatment, improving overall process efficiency.

Why Recirculation Makes Liquid Ring Pumps Stand Out

Recirculation systems unlock the full potential of liquid ring vacuum technology. By carefully controlling the operating fluid, these systems allow pumps to perform reliably under demanding conditions, handling vapour-laden gases, minor liquid carryover, and aggressive chemicals without compromising uptime. Engineers gain the flexibility to adapt pumps to diverse processes, whether retrofitting existing systems or designing new installations, while ensuring compliance with ATEX and other safety standards.

In short, recirculation doesn't just save water – it enhances the robustness, flexibility, and predictability of vacuum operations, making liquid ring pumps a versatile, future-ready solution for complex industrial challenges.

The Bottom Line

For engineering professionals evaluating vacuum solutions, the case is clear: adopting liquid ring vacuum pumps with recirculation is a low-risk, high-reward strategy. They offer:

- Proven reliability across multiple industries
- Significant reductions in water and effluent costs
- Compliance with ATEX and other safety standards
- Flexibility to retrofit or install new systems

By integrating these systems, manufacturers can maintain high-performance operations while meeting financial and environmental targets. In a world where resource efficiency is increasingly critical, liquid ring vacuum technology – with modern recirculation – is a smart investment.

To discuss a tailored pumping solution for your applications, contact the specialist team at CDR Pumps: 01933 674777, sales@cdrpumps.co.uk

Ambition to Delivery: Turning UK Net Zero Strategy into Bankable Reality

On 4-5 February 2026, more than 450 senior leaders from across the UK energy, industrial, infrastructure, finance, and digital sectors convened in Liverpool for The Foresight Event 2026: the UK's leading industry-specific energy conferences dedicated to delivery, investment, and system-wide transformation of the energy sector.

Across two days of strategic keynotes, in-depth panels, and cross-sector dialogue, The Foresight Event brought together over 25 exhibitors and sponsors, including major manufacturers, nuclear developers, water sector leaders, and supply chain innovators such as Lauda, Murphy Group, Evides, Sizewell C, and Xometry.

The conference examined the delivery challenges and opportunities associated with the UK's energy transition, industrial decarbonisation, new nuclear development, and the rapid growth of data centres and AI infrastructure.

Currently, the UK has strong policy intent, capital availability, and technological capability, however, progress is increasingly constrained by grid infrastructure, supply chain capacity, planning processes, skills shortages, and long-term policy certainty.

The Foresight Event 2026 was designed precisely to address these constraints by creating a neutral, high-level platform where industry and government can bridge gaps, align timelines, and unlock investment confidence.

Over two days, sessions were structured around the most urgent priorities facing the sector:

Day One

- Grid Stability and System Transformation
- Industrial Decarbonisation
- New Nuclear and Innovation
- Data Centres and AI Infrastructure

Day Two

- Hydrogen Market Acceleration
- Renewables and Clean Power 2030
- Energy Storage and System Resilience

Each session reinforced the need for deeper coordination between businesses, the public sector, and investors if the UK is to convert ambition into bankable, investable projects. Here are some key takeaways and discussions which emerged during the conference:

Grid Reform: Unlocking Investment at Scale

Discussions at the conference on grid stability and long-term system planning underscored a critical consensus: grid reform represents one of the most significant and necessary transformations the energy sector has faced in decades.

The presence of Colm Murphy from NESO was a key advantage for the attendees. His insights provided an invaluable, real-life perspective on the practical, on-the-ground steps that the network operator is actively taking. This included learning about the complex engineering challenges, regulatory hurdles, and strategic investments being made to not only maintain current reliability but also future-proof the network.

Specific topics covered included investing in advanced transmission technologies, and developing sophisticated demand-side management protocols to manage the increasingly volatile and distributed nature of renewable energy generation.

Speakers emphasised that grid reform has the potential to unlock billions in private

investment provided that connection processes are accelerated and long-term spatial energy planning aligns infrastructure with regional growth.

Industrial Decarbonisation: Essential for Competitiveness
The decarbonisation of UK industry is viewed as a strategic imperative, not an optional environmental measure. Despite challenges like high energy prices and global competition, there is a consensus that a failure to decarbonise poses a risk of long-term decline for UK manufacturing and may lead to carbon leakage.

Energy-intensive sectors, including chemicals, refining, cement, food production, and glass emphasised that a multi-faceted approach is essential. No single solution is sufficient; a parallel deployment of electrification, hydrogen, carbon capture, fuel switching, and efficiency improvements is required.

Practical, scalable models, such as the regional cluster approach exemplified by HyNet, are already integrating CO_2 transport and storage, hydrogen production, and industrial fuel switching, with billions in investment already committed.

However, the primary constraint on deployment is no longer a lack of ambition, but rather concerns over policy certainty and delivery sequencing, which directly impact investor confidence. Specifically, long development timelines, regulatory ambiguity, and delayed allocation rounds are slowing down Final Investment Decisions.

New Nuclear:
The new nuclear sessions shifted focus from technology debates to delivery models. Speakers emphasised the importance of standardisation, modularisation, and community-centred development to accelerate deployment .

Small Modular Reactors (SMRs) and Advanced Modular Reactors (AMRs) were positioned as opportunities to rethink nuclear as a repeatable, product-based industry rather than a series of bespoke megaprojects .

Community engagement, social value integration, and supply chain readiness were repeatedly identified as critical success factors. Meaningful early engagement was framed not as a barrier but as practical risk management. Skills were a central topic throughout the nuclear discussions.

Data Centres and AI:
From Demand Challenge to System Enabler
One of the defining discussions of Foresight 2026 centred on the rapid growth of data centres and AI infrastructure. Once seen primarily as a strain on the grid, the sector is increasingly being reframed as a potential system enabler .

However, constraints are clear. Grid access, water availability, land permits and community acceptance were identified as critical bottlenecks requiring earlier coordination between developers, utilities, and planners.

The growing power of AI represents both a structural demand driver and a transformative opportunity for regional economic growth. Bridging the gap between rapidly rising demand and infrastructure readiness will require coordinated action across all stakeholders.

Public Sector Engagement
Day Two of The Foresight Event 2026 was opened by Bill Esterson MP, Chair of the Energy Security and Net Zero Select Committee, who framed the energy transition as one of the defining economic opportunities of the 21st century

In his opening address, he emphasised the urgent need to reduce electricity costs for households and industry, noting that high power prices remain a major barrier to competitiveness and electrification. He highlighted that lowering electricity costs is essential not only for supporting industrial decarbonisation, but also for maintaining investor confidence and accelerating the shift to clean power.

He also stressed the importance of policy certainty, long-term infrastructure investment, and clear communication of the co-benefits of the energy transition such as job creation, regional regeneration, and improved public health.

Hydrogen, Flexibility and Storage:
Building Market Confidence
Day Two focused heavily on hydrogen and system flexibility. Infrastructure, particularly transport and storage, remains critical to scaling beyond point-to-point projects. Secure offtake from industry and power generation is central to building confidence and accelerating Final Investment Decisions.

Clean Power 2030 modelling demonstrated that flexibility is not optional in a renewables-dominated system it is foundational. Oversupply, price volatility, and the need for long-duration storage will reshape system economics over the coming decade .

A portfolio of storage technologies short-duration batteries, long-duration solutions, and hydrogen or gas storage will be required to ensure resilience, affordability, and stability.

Bridging Business, Government and Investors
The key takeaway from all sessions was the absolute necessity of aligning the needs of businesses and government.

Investors need predictable timelines, a clear pipeline of projects, and policy stability. Businesses, on the other hand, require practical necessities: access to grid capacity, a skilled workforce, and robust supply chains. For the government, the focus is on coordinated project delivery that simultaneously meets regional growth ambitions and Net Zero targets. The Foresight Event 2026 successfully provided an essential, large-scale forum for these crucial, constructive, and open discussions.

Looking Ahead: Foresight 2027 and Beyond
As the UK moves deeper into delivery mode and the sector is continuing to evolve. We are excited to expand our programme during The Foresight Event 2027.

We will remain to be one of the UK's leading platforms for industry-specific energy dialogue, bringing together developers, supply chains, public sector leaders, and investors to turn ambition into action. The Foresight Event 2026 demonstrated that while challenges remain significant, collaboration, innovation, and coordinated delivery can unlock opportunity.

For further details visit
https://www.foresight.events/contact

Supporters Event Marks Progress on Catalyst's Synergy Project

On Friday 5th December 2025, Catalyst Science Discovery Centre and Museum welcomed supporters, patrons and partners from across the UK to a special event marking progress on the Synergy Project and sharing plans for the future.

Held at Catalyst's Grade II listed home in the former Gossage Soap Works building in Widnes, the event highlighted how a £1 million award from The National Lottery Heritage Fund is transforming access to the UK's only museum dedicated to the chemical industry and the chemical sciences.

Investing in Chemical Heritage
Awarded in late 2024, the National Lottery Heritage Fund grant is supporting the delivery of the Synergy Project, a major redevelopment of Catalyst's permanent galleries alongside a programme to digitise more than 100,000 historic artefacts and archival records.

Together, these collections document the global impact of the chemical industry and the pivotal role played by Halton and its people. The project will ensure these nationally significant stories are preserved and shared with wider audiences, both onsite and online.

The Supporters Event provided an opportunity to update supporters on progress to date, thank them for their continued commitment and outline the next stages of delivery.

A Well-Attended National Event
Visitors travelled from across the country to attend the event, reflecting Catalyst's national importance as a museum, educational resource and industrial archive. Attendees included trustees, patrons, representatives of charitable foundations and individuals with historic connections to the chemical industry.

The Mayor of Halton, Councillor Martha Lloyd Jones, and Consort Councillor Peter Lloyd Jones attended and met members of the Synergy Project team to hear about work completed so far and how local communities are being involved.

Following lunch, the Mayor unveiled a commemorative plaque naming the John and Rona Collins Room, in recognition of their long-standing contribution to education and heritage in the borough, which is fitting as the newly named room will be used daily by school and education groups. John Collins founded Catalyst nearly 38 years ago.

Heritage and Family Connections
The event also highlighted the personal stories behind Catalyst's collections. Among those attending were Sir Hugo Brunner, great-great-grandson of Sir John Brunner, co-founder of Brunner Mond, and Peter Gossage, great-great-grandson of William Gossage, founder of the Gossage Soap Works and father of Widnes' first Mayor.

A key moment was the donation of an important historic item by Dr Paul Zuckerman, great-great-grandson of Ludwig Mond and great-grandson of Alfred Mond, 1st Lord Melchett and creator of ICI Ltd in 1926. Dr Zuckerman donated a visitors' book belonging to Alfred Mond, kept at his London home and signed and annotated by guests.

Judith Wilde, Heritage Manager at Catalyst, said:
"This is a real treasure. It's incredibly special to receive an item of such importance, and I'm looking forward to examining it more closely to uncover the stories it contains. We are excited to share this marvellous piece of history with our visitors."

Project Progress and Future Plans
Supporters received an update on progress across all elements of the Synergy Project. Plans are well advanced to transform the existing Birth of an Industry gallery, designed as an immersive, multi-sensory space that brings the story of chemical science and industry to life.

Alongside the physical redevelopment, Catalyst's nationally significant archive is being fully digitised, improving access for researchers, schools, families and the wider public, while safeguarding irreplaceable material for the future.

The project also includes enhancements to the historic Fourth Floor Observatory Gallery, improving accessibility and offering enhanced panoramic views across Halton.

Looking Ahead to 2027
The refurbished Birth of an Industry Gallery is scheduled to open in January 2027. Catalyst will remain open throughout the redevelopment, with measures in place to minimise disruption for visitors and schools.

The new galleries will support daytime visits as well as evening and out-of-hours activities, including hands-on learning opportunities designed to make science engaging and memorable. A pop-up exhibition in the reception area currently provides a preview of the new gallery designs.

Nikki Burton, Chief Executive Officer of Catalyst Science Discovery Centre and Museum, said:

"This £1 million investment allows us to protect and share one of the most important industrial heritage collections in the UK. Through the Synergy Project, we are creating an inspiring, interactive environment that will connect future generations with the science, innovation and people that shaped modern Britain."

Support That Makes a Difference
As an independent charitable trust that receives no public funding, Catalyst relies on donations and partnerships to remain open and deliver its educational mission.

During the event, Catalyst received donations including £5,000 from the West Lancashire Freemasons Charitable Foundation and £2,500 from the St James' Place Charitable Foundation, presented to Hugh Dowding, Chair of Trustees.

Trustee Dr Diana Leitch MBE, who organised the event, said:
"We were delighted at the success of the Supporters Event which enabled us to update visitors about the Synergy Project, inform them about our latest educational activities and also receive valuable monetary and heritage donations."

How to Get Involved and Sponsorship Opportunities
There are many ways to support Catalyst and the Synergy Project. You can become a supporter, volunteer your time or expertise, or contribute to our educational and heritage programmes. We are currently expanding our Volunteer Programme, and those interested can get in touch at Heather.Royle@catalyst.org.uk

Catalyst is also seeking corporate and individual sponsors to support gallery development, education initiatives, archive digitisation, and public engagement activities.

Join us in shaping the future of chemical heritage and inspiring the next generation of scientists. To find out more or discuss sponsorship opportunities, please contact: Meryl Jameson, Marketing Manager, meryl@catalyst.org.uk

Cobalt Energy

Established in 2009, Cobalt Energy is an independent engineering and operational services company working across the renewable energy and waste to resources sectors. We provide expert support throughout the full project lifecycle, from initial commercial and strategic review, front end and detailed design, construction, long term operation, and end of life solutions. We currently operate five facilities, consisting of three gasification facilities (two of which are fuelled by waste wood (grade C wood) and one fuelled by refuse derived fuel (RDF)) and two grate based Energy from Waste facilities fuelled by municipal solid waste (MSW).

Our core capabilities include consulting, engineering, project delivery, and operations & maintenance (O&M). We also offer specialist services for asset decommissioning, repurposing, and life extension, helping clients adapt to market change and optimise asset value.

Much more than a traditional engineering consultancy, Cobalt Energy's strength lies in delivering practical, safe and effective solutions tailored to each unique project. We combine deep technical knowledge with a flexible, problem solving mindset to overcome complex challenges and drive successful outcomes. We are adaptable to our clients needs and undertake projects to support energy security with increasing interest in battery energy storage (BESS) and innovative solutions to secure grid connections and heat to industrial processes.

Our well established position in the waste to resources market, combined with strong relationships across the investment community, gives us the insight and resources to deliver projects efficiently and reliably. We bring the tools, experience, and management expertise required to meet demanding budgets, schedules, and performance targets without compromising safety or quality.

From consulting and design through to construction, commissioning, operations and maintenance, Cobalt Energy is committed to adding value at every stage of the journey. Our goal is simple: to help our clients develop, operate, and transition energy assets with confidence in a rapidly evolving low carbon economy.

Cobalt ENERGY

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Corrous Industrial Group

Corrous Industrial Group is a UK-based industrial services provider delivering critical, multi-discipline support across industrial and infrastructure environments nationwide. Unlike single-discipline providers, Corrous reduces shutdown interfaces by combining access, cleaning & preparation, inspection & integrity works, and protective coating through a single, accountable partner.

Our specialist team have decades of experience in combining surface preparation, protective coatings, asset inspection, and access solutions – now operating as a fully integrated delivery model under one roof that improves programme efficiency, reduces interface risk, and protects long-term asset performance.

Who We Are
Corrous Industrial Group has been established to meet the growing demand for streamlined industrial service delivery. We bring multiple work packages under one accountable partner, meaning:

- consistent **safety** governance
- seamless work package sequencing
- reduced contractor fragmentation and interface **risk**
- Greater programme **efficiency** and **turnaround** speed resulting in **less downtime**
- high-**quality** execution
- greater **control** across complex scopes
- A structured multi-service partner capable of supporting **complex projects nationwide**

Our Group Division

CORROUS INDUSTRIAL CLEANING | CORROUS PROTECTIVE COATING | CORROUS ASSET INSPECTION | CORROUS SCAFFOLDING

Typical Integrated Scope
Scaffold Access / Confined Space Entry ➤ Industrial Cleaning & Preparation (Abrasive Blasting) ➤ Asset Inspection & Integrity Works ➤ Reinstatement of Corrosion Protection ➤ Sign off as Compliant

ISO9001 | ISO14001 | ISO45001 | SafeContractor | UVDB Silver+ | ICorr

CORROUS INDUSTRIAL GROUP

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Eastgate Engineering

Eastgate Engineering, founded in 2007, is an engineering and construction specialist operating throughout the UK. We provide comprehensive, end to end services covering detailed engineering, construction, commissioning, start up, and long term maintenance, all delivered with clear cost certainty. Our expertise spans electrical, instrumentation, mechanical, offshore wind, special systems, telecoms/data, and commissioning services, enabling us to support complex multidisciplinary projects across a wide range of sectors.

Renowned for working in safety critical and highly technical environments, Eastgate supports clients in Offshore Wind, Power & Renewables, Oil, Gas & Chemicals, Pharmaceutical & Healthcare, Industrial & Manufacturing, Data Centres, and Mining. This broad capability allows us to bring deep technical understanding and proven delivery experience to every project we undertake.

At Eastgate, cost certainty is achieved through early involvement, clear scope definition, and a rigorous understanding of all design and technical requirements before work begins. Our teams collaborate closely with clients, consultants, and supply chain partners to validate specifications, challenge assumptions, and identify risks before they escalate. Through transparent pricing, accurate tendering, and consistent communication throughout the project lifecycle, we ensure budgets remain controlled, decisions are informed, and projects progress without financial surprises.

Notable projects include the Dogger Bank Offshore Wind Farm, the world's largest offshore wind development; the £8 billion Woodsmith Project featuring a 37 kilometre mineral transport tunnel; and major works for Mitsubishi Chemicals at their 350,000 tonne per year MMA facility. Additional key projects include a £50 million 150MW BESS installation at Wilton International, the Lostock Sustainable Energy Plant generating 69.9MW from residual waste, and ongoing term contract works across Sembcorp's 2,000 acre Wilton International site.

Eastgate Engineering delivers excellence through collaboration, technical expertise, transparent cost management, and an unwavering commitment to safety, combining cutting edge engineering with a people first philosophy.

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KGS Chemicals Ltd

With over 21 years of industry experience, KGS Chemicals Ltd was established in 2023, providing high-quality chemical blending, packing, sieving, and palletising services. We support major and reputable organisations, delivering reliable, flexible solutions tailored to customer needs.

The business was founded following redundancy after 19 years in the chemical industry. Rather than stepping away, I invested in machinery, secured a unit, and launched KGS Chemicals Ltd, all within an impressive 11-week timeframe.

KGS Chemicals Ltd has quickly built a strong reputation for attention to detail and customer satisfaction, earning five-star reviews and recognition as "the best palletiser in the North West" and are highly recommended in the industry.

The company is committed to safe, compliant, and consistent operations, working in line with GHS, REACH, and UK regulatory standards. While no in-house laboratory is operated, strict internal procedures, approved suppliers, batch control, and full traceability ensure product quality through to final dispatch.

Driven by experience, resilience, and a commitment to doing things right, KGS Chemicals Ltd continues to grow as a trusted partner within the chemical supply chain.

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The Business of Science Conference 2026

What does the future of science and innovation hold?

Since 2016 the Business of Science Conference has been bringing together the brightest minds from across the science and innovation ecosystem for a day of conversation, collaboration and the community building of people passionate about the commercialisation and future of science and innovation.

The conference sees business leaders, industrialists, academics, and policymakers explore the latest opportunities and challenges across the business of science. And we bring industry professionals together with students of all ages to help nurture scientific and innovative ideas that could become the products and services of tomorrow.

2026 will see a packed agenda of future viewpoints, panel discussions, and breakout sessions will explore how skills, AI, the bioeconomy, life science achievements, and materials innovation will impact our future.

Join the debate. For more information and to book tickets, visit:

www.businessofscience.co.uk

BOOK NOW

Thurs 14th May 2025 8am - 6pm

Jubilee Hotel & Conferences, Jubilee Campus, University of Nottingham, Triumph Road, Nottingham, NG7 2TC

£245pp + vat vat until 31st March 26
£275pp + vat from 1st April 26

Bc Business of Science Conference

Supplying to the Chemical Industry

Knowing your local supply chains is important, and suppliers of expertise, solutions and great products are right here in the northwest. CNW members have a strong association with and many years of experience supplying to the chemical industry. The companies listed in this directory cover a wide range of products and services. They have established customers in the sector, with proven track records. Many will be well known, long-standing firms and there will also be new and innovative businesses that you may not have heard about. Effective supply partnerships, delivering success for all! For more details, the websites for the listed companies and organisations can be found at:

https://www.cia.org.uk/chemicalsnorthwest/Membership/Our-Members/

Chemicals Distribution, logistics & chemical handling

2M Holdings Ltd
Chemical distribution and related services of sample management, storage and blending. Provision of AdBlue, Samsol products, packed chlorine and TRIKLONE & PERKLONE chlorinated solvents. Markets served include: automotive, precision cleaning, coating, oilfield & refineries, flavours, fragrances, surfactants for personal care, household and industrial cleaning and pharmaceuticals.

Actikem Ltd
An ISO9001 certified business, specialising in a range of chemical processes and manufacturing services, including mixing, storage and re-packaging. We provide toll and custom manufacturing services for SMEs as well as blue-chip organisations, and supply customers with on-tap production facilities, offering them potential cost-savings and greater flexibility.

Camida
Established in 1988, is a customer-focused supplier of specialised chemical products. We provide global sourcing solutions across industries, meeting strict international standards. Our expert sourcing team handles over 3,000 annual enquiries, ensuring seamless procurement. Camida simplifies your supply chain, acting as your trusted partner in sourcing and supply.

Hibiscus
Hibiscus is one of the UK's leading manufacturers of chemical labels and hazard communication compliance software. For over 40 years they have specialised in providing high-quality labelling solutions for the chemical and hazardous goods industries and are renowned for their knowledge of industry legislation and for the durability and excellent performance of their products.

Hosokawa Micron Ltd
Integrated powder processing technologies including: size reduction, air classification, mixing, drying, containment equipment such as gloveboxes and downflow booths. Contract processing services for 1kg to multi-tonne lots. Remote monitoring solutions that include: condition monitoring, analytics for improving product quality and energy efficiency and on-line diagnostics for predictive maintenance and improved plant availability.

Indaver Solvents Ltd
Part of the international environmental group Indaver. Indaver Solvents offers comprehensive in-house and end-to-end solutions for industrial (non) hazardous solvent waste and recycling requirements. They support with lab analysis, pilot scale trials, and recycling at commercial scale. With their Cheshire-based solvent recovery installations, combined with bespoke fine chemicals manufacturing, they provide continuous, sustainable and high-quality recovery solutions to the Chemical and Pharmaceutical industry . Find out more here - Solvent recycling - Indaver

Keyser & Mackay
Keyser & Mackay is a market oriented agent and distributor of chemical raw materials and industrial equipment, acting as an intermediary between customers and suppliers. Keyser and Mackay NV has their headquarters in Amsterdam, Holland and has been active since 1894. With over 125 years' experience, the company's success today is down to reaping the benefits of all those generations of staff that have been or still are working for it. Today, the group has offices in the Netherlands, Belgium, France, Switzerland, Germany, Poland and Spain, and has started another chapter with the recent entry into the UK market.

KGS Chemicals Ltd
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Klüber
Global manufacturer of over 2500 specialty lubricants for virtually every industry, Klüber Lubrication high-performance speciality lubricants and effective lubrication management programs enable customers to achieve their operational efficiency goals, increase reliability, and lower the total cost of ownership across assets.

The Rhenus Group
One of the leading logistics specialists with global business operations and annual turnover amounting to EUR 8.2 billion. 41,000 employees work at 1,330 business sites in more than 70+ countries and develop innovative solutions along the complete supply chain. Whether providing transport, warehousing, customs clearance or value-added services, the family-owned business pools its operations in various business units where the needs of customers are always the major focus.

Scott Pallets
An established timber pallet and packaging solutions business that delivers a wide range of goods and services to industrial, and manufacturing markets across the UK. We supply new manufactured pallets and packaging, reconditioned pallets and recover pallets across our strategic UK site network.

Education, training & skills

Catalyst Science Discovery Centre
An independent charitable trust playing a pivotal role in promoting science across the Northwest. Catalyst works in conjunction with industry partners to excite young people about all STEM subjects and careers available within the science sector. Companies can also sponsor a local school to visit and attend industry days.

Centre for Industry Education Collaboration
CIEC supports companies in making credible and sustainable links with primary schools, in order to inspire the next generation of scientists and engineers. We train STEM professionals to improve their communication skills, and develop industry-focused activities for use directly by teachers or by ambassadors visiting schools.

Chemistry with Cabbage
We work with students of all ages, demonstrating through practical experiments, the relevance of chemistry in solving problems. Research shows that children make career choices very early on, so capturing their imagination early is important. Chemical companies are welcome to support our hands-on work in primary schools.

IChemE
The leading professional qualifying body for chemical, biochemical and process engineers.

Engineering products & services

adi Group
delivers bespoke engineering projects across Chemical, Petrochemical, Oil & Gas, Food & Beverage, Automotive, Life Sciences and wider manufacturing sectors. As a trusted partner to major global brands, adi also provides services through 30+ specialist divisions. With approaching 1,000 staff in the UK and Ireland, nearly 10% of whom are full-time apprentices, adi Group offers unbroken delivery accountability.

AM Technology
AM Technology are experts in continuous manufacturing solutions for the chemical and pharmaceutical industries with their patented Coflore flow reactor technology suitable for a wide range of chemical processes, including multiphasic reactions with slurries, from grams to kilotons.

Beamex
Beamex helps its customers to find a better way to calibrate, according to the most demanding requirements of process instrumentation. Beamex offers a comprehensive range of products and services – from portable calibrators to workstations, calibration accessories, calibration software, industry-specific solutions and professional services.

CDR Pumps UK
An independent UK manufacturer of chemical process pumps and fluid handling solutions for the chemical, pharmaceutical, nuclear and manufacturing industries. We deliver an extensive range of high performance solutions for demanding applications, including magnetically-driven pumps, mechanically-sealed centrifugal pumps, diaphragm pumps, vacuum pumps and systems, side-channel pumps, thermal oil pumps, vertical pumps and turbine pumps. Our team of engineers provides bespoke solutions, tailored to meet each client's specific requirements. We focus on quality, reliability, and performance, ensuring every pump and system delivers optimal efficiency in even the most critical chemical, pharmaceutical, and nuclear processes.

Carbis Loadtec
Carbis Loadtec design, manufacture and supply safe road and rail tanker access systems and road / rail tanker, IBC and drum filling systems. Carbis Loadtec is leader in packaged solutions including loading arms, fall prevention systems, meter or blending skids and storage tank equipment.

CRP
A leading provider of Fluoropolymer PTFE/PFA lined piping and associated equipment. Suppling everything necessary to construct fully integrated piping systems, whilst also offering ongoing support and education from there experts. Their products withstand the most challenging environments, ensuring safety and reliability in even the most demanding applications.

Know your supply chains

Engineering products & services

Corrous Industrial Group
A UK-based industrial services provider delivering critical, multidiscipline support across industrial and infrastructure environments nationwide. Unlike single-discipline providers, Corrous reduces shutdown interfaces by combining access, cleaning & preparation, inspection & integrity works, and protective coating through a single, accountable partner.

Dron & Dickson
Dron & Dickson are recognised market leaders in the supply and maintenance of hazardous area electrical equipment. Our Engineering Services and Wholesale divisions offer bespoke solutions incorporating the very latest industry standard and safety legislation.

GPEC Group
Global Piping and Engineering Consultants. Made up of 4 business division including GPEC Ltd and GPEC Supply.
GPEC Ltd is the UK representative for manufacturers of valves, heat exchangers, expansion joints & other fabricated equipment for engineered and niche applications.
GPEC Supply is a supplier of valves and engineered equipment for MRO and Project specific requirements.

Laker Vent Engineering Ltd
Supply, fabrication and installation of process and utility piping systems. Project management, detailing, procurement, on and off-site fabrication and installation of pipework and coded welding. Associated steelwork supporting and mechanical installation of plant and equipment. Testing and Handover. Pipework and steelwork is fabricated to specific customer-needs and conforms to all appropriate ISO, BS EN and ASME standards and specifications.

Langfields
Langfields are specialist fabricators of process plant equipment for the Hydrogen, Waste to Energy, Pharmaceutical, Petrochemical, Chemical, Nuclear and other process industries.

Lokring UK
Lokring UK offer technical engineering support and sales for Lokring technology across the UK.

The Lokring “Cold Weld” pipe and tube joint reduces the need for hot work, NDT inspection and reduces on site resources. Code compliant with ASME B31. Lokring is a Safer, Faster, Lower Cost replacement for site welding and flanged fabrication.

Manntek AB
Supply of safety dry disconnect and safety breakaway couplings. Comprehensive range of specialist dry quick release couplings to suit 99% of known chemical applications. Bespoke solutions with a size range of ¾” to 8” nb. Dry disconnect couplings are made to NATO standard Stanag 3756.

O’Hare Engineering Design Ltd
Innovative, Detailed, Working Solutions.
O’Hare Engineering Design Ltd. are providers of 3D laser scanning, mechanical and pipe design solutions. With over 18 years’ experience, we know that accuracy is fundamentally the most important element in every engineering design project, so our client focused approach uses the latest technology to provide an effective solution that is sure to hit the brief, every time.

ProDecon®
Providing industrial service solutions to the Oil&Gas, Chemical, Power, Pharmaceutical and Industrial sectors. Specialising in hazardous hydrocarbon and chemical environments. ProDecon® has a unique range of technical expertise, that enables us to support customers with restoring process performance and providing maintenance risk management through bespoke industrial cleaning solutions.

Studley Engineering Ltd
A multi-disciplined mechanical and electrical engineering contractor, providing a comprehensive service to the process industries in disciplines including: steelwork, welding, maintenance, site services, pipework, tanks and vessels. Over time we have gained an enviable reputation as a reliable, responsive, motivated contractor that delivers safe, high quality, cost effective work.

Valvworx Ltd
Valve breakdowns are commonplace, and high on the list of painful problems for Chemical Plant Operators. At Valvworx Ltd, we can support you with valve maintenance & repair solutions, and offer advice, specification and supply of new valves, ensuring suitability for the process they are intended for, and lasting longer in service.

Yokogawa
Yokogawa is a leading provider of field instrumentation, safety systems, industrial automation and digital transformation solutions. IIOT, OT Cybersecurity and Alarm Management are specific areas of focus for Yokogawa’s Advanced Solutions team with a number of major projects currently being delivered across Europe.

Engineering project management & energy

Arthian
Combining three decades of high-hazard industry expertise with technical excellence to support every project phase, from feasibility and planning to design and construction. Our planning, environmental, engineering, and safety consultants deliver insights and innovative, sustainable solutions, empowering clients to make strategic, long-term decisions.

Atlas Copco Rental UK
Provides temporary cost and energy efficient solutions for long- or short-term demands, planned maintenance or unexpected emergencies. Our engineers design the most suitable temporary installation, utilising our fleet of state-of-the-art equipment which includes 100% oil-free Class 0 and oil-injected compressed air at medium or high pressure, generators for power, and nitrogen. Quality of service, environmental care and personnel safety are guaranteed by our triple ISO certification.

AXIOM
A multi-award-winning, asset management solutions provider, supporting the chemical, pharmaceutical, oil & gas, bulk storage, power, renewables and related industries. With integration of their Materials, Mechanical, Inspection, Process Engineering and Process Safety Services, Axiom are uniquely positioned to identify and mitigate key through-life risks across the entire asset life cycle.

Cobalt Energy
Delivering specialist consulting, project delivery, and operational support across the waste, renewables, and energy sectors. Spanning the full project lifecycle, from technical and commercial consulting to engineering, construction, and operations, we provide practical, sustainable, and commercially viable solutions for new developments, facility optimisation, and expert due diligence.

Eastgate Engineering
An engineering and construction specialist that delivers complex, high-risk infrastructure projects without compromising safety or quality. As a trusted partner to our clients, we integrate with their teams and focus on the success of their project through collaboration, technical expertise, clear cost certainty and a commitment to safety. Eastgate combines engineering excellence with a people-first approach rooted in its Irish heritage.

Graham Hart (Process Technology) Ltd
Graham Hart Process Technology Ltd is a global leader in the design and manufacture of high integrity heat transfer and specialist pressure equipment. Their knowledge, reputation and expertise makes them the first choice for many companies desiring guaranteed mechanical and process design solutions, for their individual heat exchanger and pressure vessel needs.Providing innovative, bespoke solutions to a variety of sectors for over 50 years, they have a skilled, agile and talented team that has achieved a 100% On Time In Full delivery record for their clients since 2016.

Geosyntec
a consulting and engineering firm serving the chemicals, pharmaceuticals and wider manufacturing sectors addressing new ventures and complex problems involving land contamination, transactions, permitting and compliance, and civil infrastructure. We operate from over 130 offices located in the UK & Ireland, North America, Sweden, Spain, Middle East, and Australia.

John F Hunt Regeneration Ltd
John F Hunt Regeneration are a trusted partner for brownfield demolition, remediation, water treatment and enabling services. As part of the John F Hunt Group, we have the scale and financial stability to provide a complete works package no matter the size of the scheme.

PM Group
PM Group is an international engineering and project delivery partner offering specialist environment, sustainability and process safety services to support safe, compliant, and low-carbon project delivery. From hazard identification, risk assessment, and regulatory compliance to net-zero strategies and sustainable facility design, PM Group helps clients manage risk and achieve environmental goals across complex, high-hazard facilities.

px Engineering
Deliver expert engineering, project delivery, and consultancy services across the energy, chemicals, oil and gas, and renewables industries. As part of px Group, we combine project execution capabilities with our knowledge and skills as owner and operator of Upper Tier COMAH facilities to support all phases of a project lifecycle from concept through to FEED, detail engineering design, procurement, construction, commissioning, and handover.

Engineering, IT & process consultants

Gexcon UK Ltd
Safety and risk management and advanced dispersion, explosion and fire modelling. Unique expertise and shared knowledge on how to prevent explosion accidents. Carrying out accident investigations and dedicated facilities for physical testing. Ventilation and dispersion modelling also available. Hazardous area classification and quantitative and qualitative risk analysis and assessment.

OpenPSM
OpenPSM® is a cloud-based software solution, developed to help businesses manufacturing or handling hazardous chemicals meet the requirements of modern risk-based process safety legislation. Providing a unique framework

allowing you to log and assess every aspect of your company's process safety management programme,

OpenPSM® necessarily supports engagement from shopfloor to boardroom, allowing everyone with an active part to play in process safety to have relevant information to hand.

Siemens Digital Factory & Process Industries and Drives

Siemens Digital Industries (DI) is a global leader in automation and digitalisation, dedicated to driving the digital transformation of the manufacturing and process industries. Their comprehensive Digital Enterprise portfolio offers an end-to-end suite of products, solutions, and services designed to integrate and digitalise the entire value chain. This portfolio is tailored to meet the specific needs of the Chemical Industry, enhancing productivity, flexibility and efficiency. By leveraging cutting-edge technologies and close collaboration with customers, Siemens DI helps businesses achieve greater innovation and competitiveness.

Environment, health & safety risk management

Ambipar

The global leader in environmental solutions, operating across six continents. It offers a comprehensive range of services, including emergency response to industrial accidents, hazardous spills, natural disasters, environmental management, waste disposal, sustainable recovery, and specialised training and consultancy. Ambipar supports governments, corporations, and infrastructure networks, ensuring regulatory compliance, risk mitigation, and long-term environmental stewardship worldwide.

BakerRisk Europe Ltd

Dedicated to help predict, prevent and mitigate hazards and explosions, fires and toxic releases. Specialising in process safety and risk management, we help clients understand their risks and offer cost-effective risk management solutions. Success id delivered through proven knowledge and experience, innovative research and unique engineering capabilities.

International Fire Protection

Specialises in providing fire safety solutions for high-hazard industries, including COMAH sites, power generation, and hydrocarbon processing facilities. Our expertise includes ATEX and SIL-rated Fire & Gas detection systems, as well as advanced fire detection and protection systems tailored to meet the specific safety needs of these critical sectors.

PM Group

PM Group is an international engineering and project delivery partner offering specialist environment, sustainability and process safety services to support safe, compliant, and low-carbon project delivery. From hazard identification, risk assessment, and regulatory compliance to net-zero strategies and sustainable facility design, PM Group helps clients manage risk and achieve environmental goals across complex, high-hazard facilities.

RAS Ltd

Expertise that covers the full range of risk assessment and management services across; safety risk, business risk and environmental risk. Carry out Quantitative risk Assessments and Predictive & consequence modelling, through 'softer' risks affecting an organisation's reputation.

SLR Consulting

A unique blend of leadership, management, consulting, engineering and training services is offered to the chemicals industry. A forerunner in sustainable process safety management combined with proven business improvement capabilities enables delivery of practical solutions to promote safety and efficiency in design, operation and maintenance of complex hazardous facilities.

Wareing Consulting

Roger Wareing is a business sustainability/ ESG consultant and former industrial chemist. Roger helps you navigate what ESG challenges mean for your company's future, shaping your response to growing regulatory obligations and rising expectations, and supporting delivery and reporting to drive value creation and resilience alongside wider positive outcomes.

Facilities, finance and other business services

Department for Business & Trade

Operational support for British exports as well as facilitating inward and outward investment activity. Support is given to first-time exporters or established exporters requiring more help with accessing more difficult markets or putting strategic alliances in place. Access to expert advice, trade services, training and events.

Pen Underwriting incorporating OAMPS

Specialist Insurance services to high hazard manufacturing and haulage industries. Motor fleets, property, liability and transit policies. We help clients minimise risk through proactive risk management and a range of training and response services to assist companies in planning for and dealing with incidents and emergencies.

Sci-Tech Daresbury

We are a national science and innovation campus, and enterprise zone providing a range of office, laboratory and workshop accommodation for technology companies (from a desk to large laboratory and office units). Companies have access to a range of facilities covering material analysis, virtual design & simulation, and rapid prototyping.

STFC Innovations Technology Access Centre

A unique, fully equipped space for innovation, research and development. Providing flexible access to laboratory space, "hot labs" and scientific equipment. Ideally suited to start-up companies, smaller and medium size enterprises and R&D team from established companies.

The Henry Royce Institute

The national institute for advanced materials research. Royce was established to ensure that the UK remains at the forefront of materials research and exploitation through collaborations with industry and academia, and by providing access for the UK materials community to state-of-the-art equipment and facilities. Royce's mission is to support and grow world-recognised excellence in UK materials research, accelerating commercial exploitation and delivering positive economic and societal impact for the UK.

Laboratory products, testing and services

Charles River

With 30+ years of experience, Charles River offers comprehensive regulatory testing, including toxicology and ecotoxicology, environmental fate and biodegradation, regulatory consultancy, and analytical support. With innovative in vitro / New Alternative Methods (NAMs) Charles River is pioneering in the reduction of animal usage in product safety, helping streamline programs for the most efficient and ethical path to registration.

Kemea Ltd

Offering expert formulation services, from concept to creation. With 25+ years of formulation experience, we'll guide you through the development process, focusing on your project needs. We also offer packaging, labelling, and delivery, both in the UK and internationally. Partner with Kemea Ltd to bring your product vision to life.

Metrohm

one of the world's most trusted names in high-precision instruments for chemical analysis. With a legacy of innovation and reliability, Metrohm is committed to delivering pioneering, sustainable solutions to customers across the globe. As a globally active company, Metrohm embraces its economic, social, and environmental responsibilities. We don't just innovate - we act with purpose.

Scymaris Ltd

We offer high quality and cost-effective ecotoxicology, environmental fate, and chemistry services to the global agrochemical, pharmaceutical, industrial chemicals & animal health industries. Our state-of-the-art laboratory is equipped with controlled temperature rooms, freshwater and seawater testing facilities and is accredited to work according to GLP and most Global regulatory requirements.

Legal & patents

Appleyard Lees LLP

Patent and trademark attorneys. Aim to obtain the best possible patent protection for clients. Experience of product clearance against competitor patents and in due diligence for mergers and acquisitions. Advice on licensing issues and collaboration agreements relating to IP.

Mathys & Squire LLP

Mathys & Squire LLP is a full-service intellectual property law firm with industry-leading expertise in patents, trade marks, design protection and IP litigation and including a dedicated chemistry team of highly experienced attorneys holding higher degrees and research or industrial experience who are passionate about innovation in the chemical field.

Squire Patton Boggs (UK) LLP

Global legal company providing legal, regulatory and advocacy assistance to the chemical and performance material industries. Expertise that emphasises areas that mean the most to industry such as environmental, mergers and acquisitions, commercial finance, construction, litigation, Ip, public policy and international expansion.

WP Thompson

Intellectual property attorneys providing high quality advice to start-ups, SMEs or FTSE 100 companies. Team of experienced IP attorneys specializing in chemistry and life sciences, with first degrees and PhDs in these fields. Securing the most appropriate, cost effective and commercially valuable protection for your intellectual investment and innovation.

Know your supply chains

REACH and chemicals services

Chemical Processing Services Ltd
[CPS] provides innovative technology and/or niche speciality polymers with a focus on an absence or reduced CMR content and regulatory compliance, sustainability, and high process or technical performance.

CIRS
CIRS Group was established in 2007 and is a leading product safety and regulatory consulting firm. It utilizes its technical expertise, resources, and international network to provide comprehensive compliance services including chemical notifications and registrations, global GHS compliance, laboratory testing, R&D, and data services across multiple industries globally.

Dr Knoell Consult Ltd
An independent service provider for the chemical and related industries. Globally the Knoell group has over 450 employees covering all aspects of regulatory compliance for industrial chemicals, agrochemicals and biocides: e.g., strategic planning, dossier preparation, exposure assessment, SDS preparation, and from REACH to K-REACH!

GlobalMSDS
A complete safety data sheet/literature and regulatory service for your entire product communications in any language, style and format required. Hazmix is a new 'pay as you go' web-browser product that is setting a new standard in SDS authoring. A Solutions service that also provides technical advice.

Intertek Regulatory Services
Health, environmental and regulatory services for implementation of chemicals management. Worldwide registration of chemicals, food contact compliance and notification, global chemicals compliance, design/optimisation of toxicological and eco-toxicological studies, hazardous substance management, EU cosmetic and biocidal products compliance, classification & labelling, SDS consulting.

WSP in the UK
Recognising that chemical companies face a wide range of regulatory challenges, WSP's centre of excellence can assist companies with chemical compliance and safety obligations. The team's role is to facilitate a company's route to compliance in areas such chemical registration (including EU and UK-REACH), supply chain management, GHS/CLP and DGSA, amongst other safety related services.

Yordas Group
Yordas Group is a leading provider of scientific, environmental, human health and global regulatory consulting services. They offer chemical regulatory support, expert scientific services and support on chemicals management and product stewardship, global hazard communication, hazard and risk assessment, analytical and (eco)tox testing.

Recruitment

Adepto Technical Recruitment
A specialist engineering, manufacturing and scientific recruitment consultancy that focuses upon the provision of permanent staff and contract resource to the Chemicals industry. Established in 2015, Adepto has quickly become the partner of choice for many blue-chip and SME manufacturers, engineering companies and consultancies due to our deep knowledge of the industry, credibility and professionalism.

Alchem Partners
Recruitment in the chemical industry shouldn't feel transactional - and at Alchem Partners, it never is.
We are a specialist recruitment business working across engineering, operations, commercial, sales, and supply chain roles within the chemical sector, supporting clients across the UK, EMEA, and North America.
Our work is built around two things: deep market knowledge and genuine human connection. Every assignment is underpinned by a fully mapped view of the market, allowing us to identify and engage the best talent - not just the most visible.
We meet every suitable candidate personally, whether on video or in person, because people don't join companies on paper, they join them in real life. Understanding what drives someone, what environment they thrive in, and where they want their career to go is at the heart of everything we do.
From ambitious start-ups to global corporations, Alchem Partners helps chemical businesses build leadership teams that actually last.

RMG
RMG is an award-winning headhunting consultancy with a difference - we make it our business to search and understand who's who in the Chemicals and STEM sectors and have the know-how to find talented people who will deliver lasting impact and add financial value to your organisation.

SRG
SRG are industry leaders in Science, Engineering and Clinical Recruitment. We empower individuals and businesses to power the future of STEM. With true specialist knowledge, we support a full spectrum of technical roles and talent solutions across the whole product life cycle, from R&D, through analysis, manufacturing, and engineering to market access.

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Process safety

- Hazard identification and risk analysis techniques (including HAZOP and LOPA)
- Process safety management
- Understanding different hazards (eg hydrogen)
- Human factors in the chemical and process industries

Contract and project management

- Contract law for engineering contracts
- Engineering project management
- Applying the IChemE Forms of Contract

Process and plant operations

- Chemical engineering core concepts
- Distillation technology
- Plant and production management
- Scale-up of chemical processes

Sustainable process engineering

- Introduction to sustainable process engineering
- Sustainability leadership
- Sustainability measurement
- Material resource management and the circular economy

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SLR

SLR has decades of successful experience advising clients throughout their project life cycle.

- Process Safety
  - COMAH
  - HAZOP
  - HAZID
  - DSEAR
- Environmental Management, Permitting & Compliance
- Corporate Sustainability Strategy
- Acoustics & Vibration
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Making Sustainability Happen

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Find out how we can make a positive change together at:

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