



HYDROGEN TECH EXPO

EVENT GUIDE

30 MARCH 2023

THE INTERNATIONAL CENTRE, TELFORD TF3 4JH

www.hydrogentechexpo.co.uk

16 of the UK's
leading speakers

35 exhibitors
showcasing
new technologies
and knowledge

An unparalleled
experience



David Reeks

Managing Director,
10Four Media

UK hydrogen demand is estimated to reach 80 to 140 terawatt-hours in 2035. The increase in UK hydrogen production ambition, with a greater focus on electrolytic hydrogen production, has opened potential opportunities to export hydrogen from the UK at scale, particularly to continental Europe where we see increasing hydrogen demand alongside established energy trading and interconnection with the UK. (Source: DTI)

The Hydrogen Tech Expo UK will provide a unique and exclusive opportunity to CONNECT with technology service leaders, DISCOVER advanced concepts, technologies and partners, enabling you to get your INNOVATIONS to market faster.

In the main exhibition hall you'll find leading exhibitors showcasing the very latest innovations alongside a fantastic speaker agenda with industry experts presenting on a variety of subjects.

We wish you a productive and inspiring day and look forward to seeing you in 2024!

D. Reeks

David Reeks

Events Team



Rebekah Ford



Helen Peden

Speaker agenda



Debnath Pal
Director
Stopford



09:25 - 09:45

Topic: Hydrogen and the Energy Trilemma

Stopford is an international multi-disciplinary consultancy, engineering design and project management services company, founded in 1982, headquartered in Manchester with offices in Ellesmere Port & Lancaster.

We have extensive experience in both the production and uses of hydrogen. Hydrogen 'production' knowledge gained from developing our own green technology and 'uses' undertaking technical due diligence studies on the hydrogen supply chain and delivering BEIS funded fuel switching projects for the safe introduction and integration of hydrogen into existing industrial processes.

Deb is Stopford's Director of Consultancy Services and brings more than 30 years of consulting experience in the chemicals, oil & gas, cement & minerals, water, fuel storage and the renewable energy sectors and is responsible for the strategic growth of the company's consultancy activities in the areas of Compliance, Low Carbon Solutions and Advisory Services.



Richard Brown
Global Commercial Leader - Hydrogen Compression Systems
Ingersoll Rand



09:50 - 10:10

Topic: Hydrogen Compression Systems

Richard Brown is the Global Commercial Leader of Ingersoll Rand's Hydrogen Compression Systems division. A Chartered Mechanical Engineer with more than 10 years' experience on reciprocating compressors, Richard has led projects both in engineering and commercial roles on air and gas compressor systems across the industry.

Hydrogen Tech Expo 2023



Joanna (Brahova) Richart
Head of Hydrogen
Ricardo



10:15 - 10:35

Topic: Engineering solutions unlocked with hydrogen test facility

Ing. Bc. Joanna Richart MBA, MCIPS, CEng, is Head of Hydrogen Business at Ricardo plc.

Joanna connects external clients to Ricardo experts in hydrogen-based technologies for global transport applications: from policy development, to infrastructure feasibility to implementation and integration. Prior to joining Ricardo, Joanna specialised in the commercialisation of PEM fuel cell technologies for automotive, aerospace, unmanned aerial vehicles, material handling and stationary power applications. Joanna has been part of various hydrogen mobility consortia including as a member of several European Union-funded programmes. She was appointed as an expert on the European Commission's Sustainable Transport Forum to support the deployment of the Clean Fuel for Transport Directive. She is a working group member of Hydrogen Europe, SHFCA, ZEMO partnership and Hydrogen Sussex.

Ricardo is a world-class environmental, engineering and strategic consulting company. With over 100 years of engineering excellence Ricardo provides exceptional levels of expertise in delivering leading edge and innovative cross sector sustainable products and solutions.

Speaker agenda



Dr Julius Partridge
**Senior Electrical
& Energy Transition
Engineer**

*Offshore Wind
Consultants*



10:40 - 11:00

Topic: Design of hydrogen-powered ferry

Julius is working as a senior electrical and energy transition engineer at ABL as part of the DP and Critical Systems team. During his time with ABL he has worked on a wide range of energy transition projects aimed at the production and use of hydrogen and other alternative fuels. This includes the concept design of a hydrogen fuel cell ferry (HySeas III) achieving Approval-in-Principle (AiP) from class and a concept design of the 'green hydrogen production barge' as part of the Innovate UK Clean Maritime Demonstration Competition (CMDC). He has further worked on several vessel decarbonisation projects utilising batteries, ammonia and methanol fuels.



Cameron Blackwell
**Senior Research
Engineer**

*Manufacturing
Technology Centre*



11:05 - 11:25

Topic: The role and opportunity for advanced manufacturing within a hydrogen economy

Cameron Blackwell is a Senior Research Engineer at the MTC and technical lead for the Hydrogen Sector. The MTC is engaged in multiple cross-sector initiatives supporting the growth of the Hydrogen economy, focused on the advanced manufacture and build of next generation solutions for hydrogen production, distribution, storage and end use. Cameron's background is in Materials Science after studying Nuclear Engineering at the University of Birmingham.

Hydrogen Tech Expo 2023



Kelly Cole
General Manager
Finning UK & Ireland



11:30 - 11:50

Topic: Power solutions for a brighter future

Kelly started her career as an engineering apprentice for GE Aviation, and achieved a first-class degree in Mechanical Engineering from the University of Wales, and MBA from Cardiff University. Early in her career, she developed a wealth of hands-on engineering and technical experience, including building and stripping engines and leading a manufacturing cell for printed circuit boards for flight power tiles and displays. Her next roles involved managing relationships with major airlines and growing GE Aviation's service business in multiple markets. She took on the role of General Manager of Electric Power at Finning in 2021.



**Konrad
Kamieniecki**
Engineer
Quickersim



Bartosz Górecki
Founder
Quickersim



11:55 - 12:15

Topic: Safety of hydrogen installations - ventilation simulations in case of hydrogen leakage

Konrad Kamieniecki is a fluid dynamics and structural engineer working at QuickerSim. Since over 10 years he supports companies all over the world in numerical simulations. He believes that green energy, including hydrogen, can grow faster thanks to numerical analysis. In parallel, he works as a researcher at Warsaw University of Technology. You are welcome to contact Konrad via email: k.kamieniecki@quickersim.com.

Bartosz Górecki is founder and owner of QuickerSim company. He holds a PhD in Computational Fluid Dynamics from Warsaw University of Technology. His deep academic and commercial experience helps customers design better products in industries as oil and gas, energy, fuel cells, batteries and many more. He is co-designer of Q-bat software for battery thermal management. To contact Bartosz visit quickersim.com or write an email: b.gorecki@quickersim.com.

Speaker agenda



Patrick Robinson
Consultant

Burges Salmon LLP



12:20 - 12:40

Topic: Planning is important to the hydrogen transition – what you should know about it

A consultant with the firm's Planning unit, Patrick is a Legal Associate of the RTPI and has Higher Rights of Audience in the High Court. He has acted in a wide range of energy planning projects covering nuclear (fission, fusion and radwaste), conventional energy generation, renewables and underground gas storage, via the DCO, DNS and TCPA regimes.

He is part of the team responsible for RUK's Green Hydrogen Consenting Report and is also a contributor to UKHFCA's recent publication on Nuclear Enabled Hydrogen Production and Burges Salmon's research paper on Consenting Hydrogen Projects.

Patrick is ranked in Chambers legal directory and clients say he has "excellent technical knowledge [and] is effective at communicating complex matters clearly and readily ascertains the focus of what is required."

Lunch break: 12:40 - 13:00

Cafe is open in the Newton Suite

Hydrogen Tech Expo 2023



David Thackray
**Strategic
Relations Officer**

*Tevva Hydrogen
Electric Trucks*



13:00 - 13:20

Topic: Hydrogen as the battery's ally in heavy electric truck applications

David Thackray has a deep knowledge of, and network within the logistics fleet sector in UK and overseas from more than 30 years operational and consulting experience. He is an internationally recognised speaker on fleet electrification and transport decarbonisation. David is an active member of the Transport Decarbonisation Alliance.

Tevva is a British electric and hydrogen truck pioneer. Tevva designs and manufactures zero-emission medium to heavy duty trucks with a revolutionary combination of battery electric and hydrogen fuel-cell range extender technology. Tevva trucks are built to revitalize urban freight and logistics, optimising range, cost, driver experience, and environmental impact. Tevva trucks are already on the road and have accrued hundreds of thousands of miles in customer hands.

As a purpose-led technology company, we do technology because it matters and makes a difference to humanity. Our third-generation truck was unveiled in September 2021 to enable freight operators to immediately decarbonize their fleets.

He is available for one to one meetings on March 30th.

Speaker agenda



Raffaella Ocone
OBE FEng
Professor of
Chemical
Engineering

*Institute of GeoEnergy
Engineering,
Heriot-Watt University*



13:25 - 13:45

Topic: Technologies making hydrogen happen

Raffaella Ocone graduated from the University of Naples Federico II in Chemical Engineering. In 1989 she achieved her MA and in 1992 her PhD, both from Princeton University.

She was awarded the Cavaliere of the Order of Merit of the Italian Republic in 2006 and in the 2019 New Year Honours, was appointed Order of the British Empire (OBE) for her services to engineering.

She is an authority on complex reactive systems, and their application in carbon capture and storage technologies. She has co-authored a Royal Academy of Engineering report, funded by the UK government, on the biofuels industry.

Before joining Heriot-Watt University in 1999, she was a reader in Chemical Engineering in the Department of Chemical Engineering at the University of Nottingham, a lecturer at the Università di Napoli, and visiting professor at Louisiana State University, USA and at the University Claude Bernard Lyon, France. She was the first "Caroline Herschel Visiting Professor" at RHUR Universität, Bochum, Germany and the recipient of a Visiting Research Fellowship from the Institute for Advanced Studies, University of Bologna, Italy.

She was the first female professor of chemical engineering in Scotland. In 2003 she became a Chartered Engineer with the Engineering Council and in 2013, was elected a Fellow of the Royal Academy of Engineering.

Her research team have recently announced a £1M research partnership under the PETRONAS Centre of Excellence in Subsurface Engineering and Energy Transition (PACESET), to advance techniques to use thermochemical reaction, to produce hydrogen from biomass and other waste materials.

She also has an interest in ethics and engineering, and chaired the Royal Academy of Engineering's Teaching Ethics group.

Hydrogen Tech Expo 2023



Alastair Hayfield
Senior Research
Director

Interact Analysis



13:50 - 14:10

Topic: Beyond the Car: Opportunities for Hydrogen in Trucks, Buses and Off-Road Vehicles

Alastair is a senior research director and co-founder at Interact Analysis. He leads the commercial vehicle research team and focuses on new powertrain technologies being used in trucks, buses and off-highway machinery. With a degree in physics and astronomy from the University of Durham, Alastair has helped hundreds of clients over the last two decades with their data, strategy and consultancy needs.



Paul Stevens
Technical Manager

Swagelok Manchester



14:15 - 14:35

Topic: Solving Challenges in Hydrogen Systems

Paul has over thirty years of industry experience which includes working almost two decades on commercial and technical solutions at Swagelok Manchester.

In his role as Technical Manager, Paul is a member of the Swagelok Global Field Engineering Team in the UK and EMEA region where his focus is to lead his team of Application and Project Engineers to provide customers with technical design solutions, improvements to existing processes and guidance and support during the installation and commissioning phases of a project.

Paul is a subject matter expert on pressure control and currently supports various active small bore tubing system solution projects in Clean Energy.

Speaker agenda



Michelle Lynch
CEO
Enabled Future Ltd



14:40 - 15:00

Topic: Critical resource management for Hydrogen Fuel Cells and Electrolysers

Michelle Lynch is a PhD in Chemicals and Catalysis and Fellow of the Royal Society of Chemistry (FRSC). Her 26 years of post-doctoral experience span catalyst R&D, catalyst and precious metals market research, patent analysis and consulting. She is currently the CEO of Enabled Future Limited (EFL) which offers consulting, training, industry tracking and thought leadership across the lifecycles of products used for catalysis, circular economy, hydrogen fuel cells, electrolysers, batteries and solar PV. Prior to setting up EFL, Michelle worked with IHS (S&P Global), Nexant and Johnson Matthey. She lives and runs her consultancy in the West Midlands, UK.



Nick Swift
Director
Hydrogen Afloat

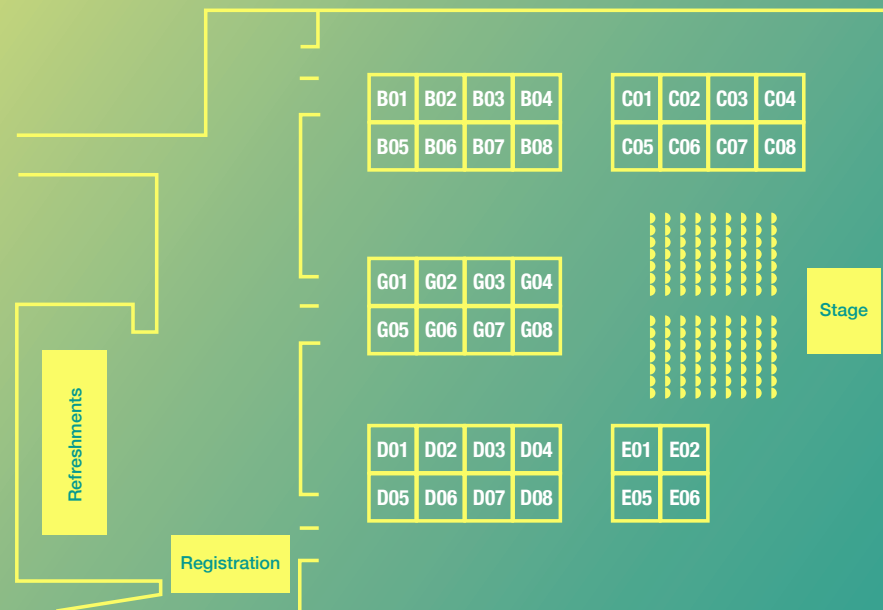


15:05 - 15:25

Topic: Hydrogen Fuel Cell domestic power on boats

Getting to nett zero in 27 years' time will require changes in all parts of society. Whilst policy and strategy have their place, we also need to roll out solutions to everyday, practical problems. Hydrogen Afloat Ltd is about applying what works now, in a niche application, to solve a problem and raise public awareness of new hydrogen technology. A Chartered Engineer within the transport industry, I like using innovation to create useful products. Like thousands of others, I live aboard as my permanent home in the UK, enjoying a life out of the fast lane.

Event floorplan



AERZEN MACHINES LTD - G06

Alvatek Limited - E01

Applied Thermal Control Limited - D06

Atlas Copco Ltd - D02

BPP Renewables - D01

Caltest Instruments, Ltd - E06

Cambustion Ltd - D07

co-ax valves uk ltd - B03

Crowcon Detection Instruments Ltd - C08

Dynex - G08

ESI - B07

ETPS Ltd - C03

Fire & Gas Detection Solutions Limited - D04

FT Pipelines Systems - B02

Gamma Technologies - C07

Hidden Analytical - G01

Huber - D05

Hydrotechnik - G04

IAAPS - G05

JULABO UK Ltd - G03

KELLER (UK) Ltd - C04

LAUDA Technology Ltd - E05

Manufacturing Technology Centre - B05

MEM INMOTION - C02

Netzsch Geraetebau GmbH - E02

Orbital Fabrications Ltd - B04

Phoenix Contact Ltd - B08

Pi-Kem - C01

Rittal Ltd - B01

Seetru Limited - G02

Stopford Limited - G07

Swagelok Manchester - C05

TECHNIA Ltd - D03

Trafag (UK) Limited - D08

WEH UK - C06

Wilde Analysis - B06

Exhibitors



AERZEN

AERZEN MACHINES

www.aerzen.com

STAND G06

AERZEN gas compression solutions

For over 150 years, AERZEN has been developing, manufacturing and supplying rotary lobe blowers and subsequently oil-free and oil-flooded screw compressors for complex and demanding air and gas applications. Our history has given rise to a unique knowledge of technological advances and know-how. AERZEN technology and experience gains in more traditional industries and applications are more and more frequently being applied to emerging industrial applications to meet the sustainable challenges facing all of us. Built with AERZEN know-how and wealth of experience come compression solutions engineered for Hydrogen applications.

Made by AERZEN, made in Germany.



ALVATEK

Alvatek Limited

www.alvatek.co.uk

STAND E01

Headquartered in the UK, we provide the systems, tools, materials and services needed for the design, build, test and development of hydrogen energy solutions including fuel cells, electrolyzers and hybrid technologies. We also offer a range of solutions and equipment for educational laboratories, classrooms and field projects. These include preprepared coursework and trainer materials.

Our broad product range and in-house expertise support our consultative approach, working closely with our customers to define the best solutions for their needs and, critically, to provide ongoing support services.

We represent leaders in the field including Scribner Associates and Heliocentris, LeanCat and FuelCellMaterials.

Exhibitors



Applied Thermal Control Limited

www.app-therm.com

STAND D06

Accurate and reliable temperature control is very important throughout various parts of the hydrogen supply chain, from electrolysis to storage and distribution.

Applied Thermal Control work closely with excellent UK based suppliers and in coordination with equipment manufacturers to design, manufacture, and supply a range of precision recirculating chillers, industrial chillers, rack mounted chillers, airblast coolers, water-to-water heat exchangers, and flatbed coolers that are capable of suiting requirements throughout various stages of the process.

Atlas Copco

Atlas Copco Ltd

www.atlascopco.com

STAND D02

With almost 150 years of experience in compressed air and gas solutions, Atlas Copco's products meet the applications, process needs and specific requirements of a wide cross-section of industries, including renewable energy and green hydrogen production. Atlas Copco supplies hydrogen compressors and boosters for on-site hydrogen generation. Our products are designed for mobility and easy installation and are engineered with a modular design to ensure reliability and uptime for the user. Our hydrogen compression technology comes fully tested and functional to support various sectors in their mission to supply cleaner fuel for a sustainable future.

Exhibitors



STAND D01

BPP Renewables

www.bpp-renewables.com

For over 30 years, BPP Renewables (a trading name of BPP Tech and BPP Cables), have been providing engineering services to the maritime and renewables industries. BPP's experienced engineers work across the energy, insurance and utilities sectors, particularly on the infrastructure and cabling of offshore wind farms. BPP's knowledge and experience is also increasingly being employed in the emerging green Hydrogen sector. BPP continually invests in developing innovative design methods and modes of cost-effective delivery to give client the solutions necessary for successful projects. BPP can support you, so come and visit us at stand D01.



STAND E06

Caltest Instruments Ltd

www.caltest.co.uk

Caltest Instruments offer high level technical/ applications support, an extensive range of sale, demo and rental equipment and a comprehensive service/ UKAS calibration department.

Caltest proudly represent a number of industry leading manufacturers including Arbin, NH Research and many more.

Exhibitors



STAND D07

Cambustion Ltd

www.cambustion.com

Cambustion provides powertrain engineering services and emission measurement products, with a particular focus on the automotive industry.

Cambustion's Products group produces ultra-fast response exhaust gas analyzers allow for the measurement of a range of gases during engine transient operation including from within a single exhaust stroke. They can be deployed for detecting the origin of lubricant burn, EGR control and with the possibility in future of fast H2O measurement.

Cambustion powertrain engineering services group provides powertrain testing services and emissions control consultancy from its base in Cambridge.

CamMotive is Cambustion's electric powertrain group, working on all areas of electric powertrain testing, including hydrogen fuel cells.



STAND B03

co-ax valves uk Ltd

<https://www.coaxvalves.com>

Muller Coax are the original manufacturer and developer of coaxial valve technology.

With world wide coverage we have over 60 years of experience in many differing areas of valve applications and supplying to blue chip companies including Linde, Rolls Royce, GE for varying needs including Hydrogen where we have a selection of valves to consider.

Exhibitors



Crowcon Detection Instruments Ltd

www.crowcon.com

STAND C08

Crowcon blends more than 50 years of gas safety experience with future-focused thinking to deliver cleaner, safer and healthier environments worldwide. As global leaders in gas sensing solutions, we have a solid reputation for reliability, innovation and customer service. Now we're harnessing these qualities to deliver new and innovative solutions including molecular property spectrometer (MPS™) sensor technology, the next generation of flammable gas detection and the best solution for hydrogen detection.



Dynex Semiconductor Ltd

www.dynexsemi.com

STAND G08

Dynex is a power semiconductor and assemblies manufacturer, with over 60 years experience in the design and manufacture of assemblies. We offer a range of air cooled and water cooled Hydrogen Electrolyser power supplies from one hundred kilowatt up to multi megawatt, designed to meet customer specifications in terms of electrical specifications, size and environmental operating conditions.

Exhibitors



STAND B07

ESI Technology Ltd

www.esi-tec.com

ESI Technology Ltd designs and manufactures pressure measurement equipment suitable for a range of applications including oil & gas, subsea, laboratory and instrumentation, and most recently Hydrogen. Tested to TUV standard, our range of Hydrogen compatible pressure measurement equipment is ATEX approved, and has been test passed to ISO1114-2:2017, according to the European Regulations EC 79/2009 and EU 406/2010.



ELECTRONIC TEST & POWER SYSTEMS

STAND C03

ETPS Ltd

www.etps.co.uk

ETPS specialise in programmable power supplies and electronic loads, used to simulate or load test fuel cells. Our new G5 modules start at 60V/low powers, with systems up to 3000V in the megawatt range possible. With two current ranges for high accuracy, the G5-SOURCE is ideal for simulating discharging fuel cells in a lab. An embedded function generator enables V/I and V/W relationships to be programmed against time. A current step can be as quick as 50us, enabling high speed drives to be supplied. Multi-module systems based around a centre tapped earth are possible, creating a +/- voltage output. Ideal for testing power systems used in ships and aircrafts.

Exhibitors



STAND D04

Fire & Gas Detection Solutions Limited

www.fgdetectionsolutions.com

FGDS is the UK exclusive distributor for leading suppliers of Fire & Gas Detectors and Systems, including FGD Inc. From our facility in Horsham West Sussex, our experienced team design and engineer bespoke Fire & Gas Systems, from initial engineering consultancy, through to build, installation, field service and training. We are specialists in the detection of Flame, Flammable and Toxic Gases for the low carbon economy, with applications including Hydrogen Production, Distribution, Storage and Fuelling, Lithium-Ion Battery Energy Storage (BESS) and many other high-risk applications. Our goal is to offer the best available solutions to meet the most challenging requirements.



STAND B02

FT Pipelines Systems

www.ftpipelinesystems.co.uk

FTPS designs, manufactures and commissions gas pressure control systems for natural gas, biogas, CNG and hydrogen from Class 2500 to millibar. We are the sole UK distributor for Gascat (manufacturers of world-leading control valves, slam shuts and governors) making our skid units exceptional in quality and safety.

We offer pure hydrogen systems and hydrogen pre-trimmed systems that ensure the future of methane / hydrogen mix without the need to replace existing non-hydrogen-ready control devices.

FTPS designs and builds our own gas pre-heat systems – water baths, vertical heat exchangers, heat packs – and our gas stations use the latest CAD 3D platforms.

Exhibitors



STAND C07

Gamma Technologies

www.gtisoft.com

Gamma Technologies develops and licenses GT-SUITE, a leading multi-physics CAE system simulation software. GT-SUITE includes a complete library of physics based modeling templates covering fluid flow, thermal, mechanical, electrical, magnetic, chemistry, and controls. In addition, higher level modeling templates are available that are specifically designed for specific applications.

GT-SUITE applications include: powertrain, engine, vehicles, driveline, transmission, hybrids, exhaust aftertreatment chemistry, acoustics, cooling & thermal management, HVAC, hydraulics, fuel systems, lubrication, chain, gear & belt drives, etc.

GT is dedicated in building the most advanced system simulation tools complemented with carefully designed software solutions that provide major productivity improvements for our customers.



STAND G01

Hidden Analytical

www.hidenanalytical.com

Hidden Analytical celebrates over 40 years of design, development and manufacture of quadrupole mass spectrometers. Our products address a diverse range of applications – precision gas analysis, plasma diagnostics by direct measurement of plasma ions and ion energies, SIMS probes for UHV surface science, catalysis performance quantification, thermogravimetric studies – over a pressure range extending from 30 bar processes down to UHV/XHV.

With sales and service centres situated across the globe, Hiden Analytical is committed to providing a fast, friendly and professional response, through our teams of application specialists, wherever our customers are located.

Exhibitors



Huber UK Temperature Control Ltd

www.huber-uk.co.uk

STAND D05

We are a leading supplier of high-precision temperature control solutions for research and industry. Worldwide, our products ensure precise temperature control in laboratories, pilot plants and production processes. Our product range offers innovative solutions for almost all tasks in the field of liquid temperature control from -125 to +425 °C.



Hydrotechnik UK Ltd

www.hydrotechnik.co.uk

STAND G04

Hydrotechnik will be showcasing its extensive range of Pressure and Temperature Sensors, Dataloggers and Test Rigs for the Hydrogen market.

Our wide range of sensors for Hydrogen includes EC79, ATEX up to 1,400 Bar as well as a revolutionary new dual pressure and temperature sensor up to 1,000 Bar.

Multi-channel Portable Dataloggers available for Research & Development, Service and Quality Control.

Our Test Rigs can proof test, burst test and cyclic test composite vessels up to 3,500 Bar. We manufacture tailored rigs as well as offering in-house testing to burst & cycle test in Nottingham.

Exhibitors



IAAPS

www.iaaps.co.uk

STAND G05

IAAPS is a world-leading centre for advanced propulsion R&I. A commercial subsidiary of the University of Bath, it boasts 11,300 m2 of state-of-the-art facilities. IAAPS' work and research specialism spans the whole spectrum of transport, from automotive and aerospace to hydrogen and heavy-duty transport, bringing together industry leaders, innovators and development specialists to deliver the skills and technologies needed for new generations of highly efficient, clean vehicle propulsion systems.



JULABO UK Ltd

www.julabo.com

STAND G03

JULABO is one of the world's leading manufacturers of temperature control instruments for research, industry and science. For over five decades our premium products have always provided our customers with the exact temperature at the desired time.

The professional and solution-oriented JULABO team focuses on custom applications. With our comprehensive accessory program offers suitable complete solution for every customer

JULABO offers high-performance and reliable instruments for the tests under realistic conditions as well as test simulations. To ensure reproducible temperatures, manufacturers and suppliers require premium instruments supporting more than standard applications.

Exhibitors



KELLER

STAND C04

KELLER (UK) Ltd

www.keller-druck.com/en

KELLER, Europe's largest manufacturer of isolated piezoresistive pressure sensors and a world leader in pressure sensing technology. We are continually developing new materials and manufacturing processes which is why we remain successful.

KELLER was established in 1974 by Hannes W. Keller, the inventor of the integrated silicon measuring cell. Today, his sons Tobias and Michael Keller run the business. The company is wholly family-owned and employs 450 staff.

KELLER headquarters and production facility is in Winterthur, Switzerland. As a result, all KELLER products bear the quality seal 'Made in Switzerland' and embody the Swiss values of quality, functionality and reliability.

LAUDA

STAND E05

LAUDA Technology Ltd

www.lauda-technology.co.uk

LAUDA is the global leader in the manufacture of innovative Constant temperature equipment and systems for science, application technology and R&D. With over 60 years experience, LAUDA has been providing solutions into the automotive sector and has seen a rapid growth in sales accompanying the expansion in new technologies, especially testing and temperature simulation in battery cells, dyno-rigs, climate chambers, fuels and also motors. LAUDA offers a wide temperature range from -150 degC to +550 degC.

Exhibitors



STAND B05

Manufacturing Technology Centre

www.the-mtc.org

The Manufacturing Technology Centre (MTC) was established to prove innovative manufacturing processes and technologies in an agile environment in partnership with industry, academia and other institutions. The MTC houses some of the most advanced manufacturing equipment in the world, creating a high-quality environment for the development and demonstration of new technologies on an industrial scale to support net zero. We support and enable the hydrogen industry through our expertise and innovation at every stage of the value chain, from production through to distribution and on to end use, accelerating the development and delivery of new hydrogen technologies.



STAND C02

MEM INMOTION

www.memuk.org/inmotion

Manufacturing & Engineering Magazine, abbreviated to MEM, is a leading UK engineering magazine and manufacturing news source, covering a wide assortment of industry news sectors such as: contract manufacturing, 3D printing, structural and civil engineering, automotive manufacturing, aerospace engineering, marine engineering, rail engineering, industrial engineering, CAD and schematic designs.

Exhibitors

NETZSCH

Proven Excellence.

STAND E02

Netzsch Geraetebau GmbH

www.netzsch-thermal-analysis.com

Netzsch Thermal Analysis is part of the Netzsch Group including Grinding/Dispersing and Pumps divisions.

The main technologies include Thermogravimetric Analysis, Differential Scanning Calorimetry (DSC), Dynamic Mechanical Analysis, Dilatometer, Laser Flash Analysis (LFA) in addition to a range of Rheometers.

In the field of Hydrogen technology, we are offering a variety of solutions including the TG-DSC systems such as the STA 449 Jupiter, Evolved gas analysis such as QMS or GC-MS, thermal diffusivity with the Laserflash 467 and High Pressure-DSC.

For research and development of new materials, thermal analysis is an indispensable tool for investigating a broad range of material properties.

ORBITAL FABRICATIONS

STAND B04

Orbital Fabrications Ltd

www.orbitalfabrications.co.uk

Orbital Fabrications are specialists in the field of manufacturing high purity stainless steel pipework, manifolds and control systems for hydrogen management. Showcasing our latest developments and innovations in TIG welding, utilising both automated orbital welding techniques alongside lathe and turntable TIG welding. Our support services include comprehensive in-house design, through to test and validation, including in house helium mass spectrometry for leak detection. High pressure testing to 700 bar and higher also available, along with full material certification. For high purity applications, all fabrication, assembly and test is conducted within our class 5 and class 6 cleanroom facilities.

PHOENIX CONTACT

STAND B08

Phoenix Contact Ltd

www.phoenixcontact.co.uk

With power-to-X create the All Electric Society

With the key technology power-to-X, renewable energies such as wind or solar power can be supplied in large quantities in a way that makes them distributable, storable, and available on-demand.

Make your energy production resource efficient with our open and secure digitalization solutions and innovative products. We will support you in automating, electrifying, and digitalizing the processes for solutions in the field of power-to-X.

Discover our explosion-proof, vibration, and temperature-resistant products for the hydrogen industry. Let us work together to create a sustainable future!



STAND C01

PI-KEM Limited

www.pi-kem.co.uk

Here at PI-KEM, we know that the future of energy is targeted toward a far-reaching and more sustainable, solid solution.

This is why we've invested heavily in sourcing and stocking the best equipment and materials needed to accelerate your hydrogen research and development. From solid oxide fuel cell chemicals and components to electrolyzers – we've got all the new energy conversion materials and consumables you need.

And that's not all. We firmly believe that knowledge is power. Our expert team is happy to offer guidance across a wide range of subjects from niche material sourcing to global trade and logistics expertise.

Exhibitors



STAND B01

Rittal Ltd

www.rittal.co.uk and www.eplan.co.uk

Founded in 1961, and available in 50+ countries, Rittal offers system solutions for energy storage applications, and works with partners and customers to design central infrastructure elements incorporating necessary system-tested components. Rittal 'The System' is a modular product portfolio that includes everything from enclosure, rack, and container solutions to power distribution and climate control technology, planning services, project management, and software tools, such as 3D ecad solutions from EPLAN. In addition to enclosure systems and containers housing batteries, Rittal offers ready-to-use energy storage solutions such as power distribution components, system accessories, and a range of world-leading climate control and monitoring options.



STAND G02

Seetru Limited

www.seetru.com

Seetru Limited are Bristol based manufacturers of safety relief & ancillary valves, liquid level gauges, and valve maintenance services available through Seetru's service arm Seetru Engineering Services (SES).

Our wide range of safety valves now includes our new, very high-pressure safety valve especially designed for the hydrogen industry.

With over 70 years' experience in safety valve design and manufacturing, Seetru are experts in overpressure safety and innovation.

LESER safety valves are also available through LESER UK, providing spring-loaded and pilot-operated safety valves for all industrial applications according to the Pressure Equipment Directive and ASME VIII.

Exhibitors



STAND G07

Stopford

www.stopford.co.uk

Stopford is an international multi-disciplinary consultancy, engineering, design and project management services company founded in the UK in 1982.

We work with companies around the world in emerging and existing industries, our ambition is to 'lead the way in engineering a sustainable world through the transition to a low carbon economy'

Stopford have extensive experience in both the production and uses of hydrogen. Hydrogen 'production' knowledge gained from developing our own clean green technology and 'uses' from over 40 years of engineering experience of utilising hydrogen and it's use to decarbonise multiple industry sectors, including minerals, cement and food.



STAND C05

Swagelok Manchester

www.manchester.swagelok.solutions

Swagelok Manchester offers a wide range of fluid system components for use in many types of hydrogen-related applications including the infrastructure that produces, transports, compresses, stores, and fills cylinders with hydrogen and for on-vehicle use. One of the most formidable challenges in the development of safe, reliable, and leak-tight hydrogen fuel cell vehicles and infrastructure is the nature of hydrogen itself. In 2023, Swagelok Manchester is celebrating 45 years of experience as a fluid system solutions provider, assisting our customers with high-quality product provision through to unique problem resolution.

Exhibitors



TECHNIA Ltd

www.technia.com

STAND D03

TECHNIA is Making Product Creation Sustainable.

Go Explore the boundaries of product development with a robust portfolio of cutting-edge digital solutions. Work Together with the world's leading PLM & engineering consultants. Keep Learning with a fleet of experienced discipline experts. Build Trust and broaden your customer base with industry-defining innovations.

The Virtual Twin Expert Partner paves the way for your creativity and prosperity | For more information visit www.technia.com



Trafag (UK) Limited

www.trafag.com

STAND D08

Trafag is one of the world's leading suppliers of high-quality sensors and monitoring devices for pressure, temperature and SF6 gas density. In addition to a wide range of standardised, configurable products, Trafag also develops tailored solutions for OEM customers. Trafag's pressure transmitters, pressure switches, temperature transmitters and thermostats are used in shipbuilding, hydraulics, the railway industry, large engines, EX zones, water treatment systems, test benches, and more.

High-performance development and production departments not only guarantee the fast and reliable delivery of our high-quality and high-precision products, but also ensure that customization's can be implemented in no time at all.



WEH UK

www.weh.com

STAND C06

WEH has long since been an established market leader in the development and manufacture of quick test connectors, having been established in 1973 by the WEH family.

WEH GmbH's foresight for the future of alternative fuels led the company in 1986 to develop the range of alternative refueling components for natural gas (CNG) and hydrogen (H2). Today, WEH is also the world market leader for alternative refueling components.

The well proven design, ease of operation, safety and reliability of WEH Products – from fuelling nozzles, hoses, breakaway couplings and filters for fuelling stations to receptacles and check valves in vehicles, have stimulated a growing consumer acceptance of alternative fuels.



Wilde Analysis

www.wildeanalysis.co.uk

STAND B06

Supplier of digital engineering solutions enabling design improvement and optimisation of structures, fluids, thermal challenges at component and system-level as well as risk management solutions to address critical safety and reliability requirements. Wilde has a team of experts with experience in solutions from Ansys, Flownex and Reliasoft.

Save the date



**HYDROGEN
TECH EXPO**

28th March 2024

www.hydrogentechexpo.co.uk