



## EXCITEMENT BUILDS FOR PEFTEC 2017



The organisers of PEFTEC 2017 (Antwerp, 29-30th November) have published the Conference themes for this year's event and announced that registration is now open via [www.peftec.com](http://www.peftec.com) for anyone with an involvement with testing and monitoring in the petrochemical industries.



PEFTEC is a specialist event focused on the testing, analysis and monitoring of downstream oil products, chemicals and petrochemicals. Created to provide the latest guidance on regulations, methods and technologies for analytical chemists, scientists, process operators, laboratory personnel and environmental managers, PEFTEC 2017 builds on the success of the inaugural event that took place in 2015.

Located at the Antwerp Expo in Belgium, PEFTEC 2017 will be situated at the centre of one of the world's largest clusters of petrochemical companies, and will include 4 Conferences focusing on analytical techniques, environmental monitoring, methane measurement and safety issues in hazardous situations.

The event will provide the petrochemical industry with an opportunity to discover the latest information on testing and monitoring, in the laboratory, in the field and on-site. A major international exhibition will feature over 150 of the world's leading providers of analytical testing and monitoring equipment and services, and technical conferences will address the topics of greatest interest to industry practitioners.

### PEFTEC Analytical Conference (29th & 30th November)

This 2 day conference is divided into 4 half-day themed sessions which are planned to allow delegates with particular technique interests to cover their topic of interest in the conference whilst also consulting the wide range of relevant instrument manufacturers and providers in the exhibition. The Analytical Techniques sessions will discuss the latest developments and trends in analysis in the petrochemical industries through presentations from leading academic and industry experts.

The morning session on Day 1 will cover Elemental Analysis and Speciation including trace metal analysis and the speciation of mercury, phosphorus, arsenic and oxygen compounds in a range of petrochemical samples. The afternoon session of day 1 will be dedicated to the latest developments in Mass Spectrometry.

The increased availability of affordable, reliable and easy to operate high resolution mass spectrometers when combined with sample ionisation techniques which offer a degree of chemical selectivity has led to a recent dramatic rise in the use of these techniques. In this session, leading researchers in this field from academia and industry will cover all of the main techniques and their application.

The morning session on Day 2 will address Separation Science techniques including GC, HPLC and SFC with a focus on multidimensional and hyphenated systems. GC continues to be the most



commonly used chromatographic technique in the industry and the application of multidimensional GC techniques will be covered in the first 2 presentations, followed by a talk on the application of in silico modelling of GC separations. The remainder of the session will cover the application of SFC and HPLC and their combinations to achieve improved separations.

The final afternoon session will cover spectroscopic techniques and on-line analysis, focusing on the rapid rise of Vacuum Ultra-Violet Spectroscopy (VUV) in the industry. VUV is a selective and sensitive detector for hydrocarbon analysis which in a relatively brief time has been widely accepted by the industry and in combination with GC has recently been approved as an ASTM method for the analysis of finished gasoline (ASTM D8071). The application of thermo-gravimetric analysis coupled with infra-red spectroscopy (TGA-IR) for fouling deposit analysis and the application of comprehensive two dimensional GC for on-line analysis will complete the session and the analytical technique conference.

### PEFTEC Environmental Monitoring Conference (Wednesday 29th November)

Prof Alastair Lewis from the University of York (UK) will introduce this one day conference focusing





on the management of gaseous and particulate emissions to the atmosphere - a vital component of environmental sustainability in the petrochemical and refining industries. The presentations will examine the latest theoretical, observational and modeling approaches that are available for quantifying both greenhouse gases such as methane and CO<sub>2</sub> and short-lived air pollutants including NO<sub>x</sub>, mercury and hydrocarbons. The presentations will cover the latest techniques that can be used to better quantify emissions from existing industrial activities and that provide insight into the future impacts of new industry practices and regulations.

A programme of international speakers from the UK, Spain, Netherlands, Germany and Austria has been assembled from academic and industry sectors. The speakers will cover issues ranging from measurement science, emissions quantification, regulation and future environmental priorities for the industry.

Abstracts for all of the presentations are available from [www.peftec.com](http://www.peftec.com).



## Industrial Methane (2 day) and Hazardex (1 day) Conferences

Two further Conferences will run alongside the PEFTEC event, enabling all conference visitors to optimise their time in Antwerp by visiting the PEFTEC exhibition. The Industrial Methane Measurement Conference will focus on industry requirements in an increasingly regulated post-Paris Agreement world. Leading experts will discuss the latest field studies, policy developments, methods and technologies for monitoring fugitive methane emissions including leak detection, identification and quantification, as well as long term monitoring.

The Hazardex Conference continues a decade long series of events providing safety-related intelligence to process plant and hazardous area specialists. This event was created for engineers, safety managers, directors with corporate liability and other members of the hazardous area community from all the process and high hazard industries, including oil & gas, petrochemicals, fine chemicals, pharmaceuticals, mining, manufacturing and the food & beverage sector, amongst others.

## PEFTEC Exhibition

Many of the exhibitors will use the event to launch a new product or unveil their latest technology. For example, AMETEK Grabner Instruments will release a new high-speed, compact, FTIR fuel analyser for automatic and comprehensive measurement of gasoline, jet and diesel fuels. This new

instrument increases analysis speed by a factor of ten in comparison with previous models.

APIX will unveil the Chrompix: a new Gas Chromatography system for Multiplexed GC Analyses, mounted in a standard 19" rack with up to 4 plug & play analytical modules for simultaneous analyses of a single sample. To control natural gas composition, Chromatotec® has developed the energyMEDOR® which speciates and measures the sulphur compounds generally present in natural gas: H<sub>2</sub>S/DMS/DMDS/Mercaptans. These new instruments are designed to work in hazardous areas.

Fluxana will demonstrate their latest application developments such as the quartz crucibles for their fusion machine, and Galvanic Applied Sciences Inc. will introduce a new Viscometer - the ViscoSite has Modbus communication and is now ATEX / IECEx rated for Class 1 Div 2 applications. The ViscoSite can measure viscosities from 0.1 to 106 cP and therefore can be used in many applications including coating manufacture, polymer processing, asphalt blending and fuel blending in refineries.



Qmicro will launch the new DynamiQ-X Explosion proof microGC process gas analyser. The DynamiQ micro GC platform is designed for fast reliable gas mixture analysis, for on-line monitoring. It allows fully autonomous gas analysis and can run unattended pre-configured analysis methods, including peak identification, integration and result communication via industry standards.

FLIR Systems will showcase the FLIR GFx320, an optical gas imaging camera for the oil and gas industry, designed for use in potentially explosive atmospheres. The FLIR GFx320 is certified Intrinsically Safe and detects/visualises invisible gas emissions such as methane and common VOCs. Similarly, Opgal's EyeCGas® handheld camera allows users to clearly, quickly, and effectively, detect gas leaks and fugitive emissions for over 30 hydrocarbon gases.

Visitors to the P S Analytical stand will be provided with help and guidance on complete solutions from sampling through to continuous measurement systems. Specialising in the online and offline determination and speciation of mercury and the hydride forming elements (arsenic, selenium and antimony) PSA offers expertise in Petrochemical, Industrial and Environmental applications.

With so much to see at the Exhibition, PEFTEC organiser Marcus Pattison is urging delegates at all four conferences to plan their time carefully and allocate plenty of time to learn about the latest innovations on show at the exhibition.

The cost of admission to the PEFTEC Conferences is €125/day, but entry to the Exhibition (from any of the conferences) is free of charge for those that pre-register at [www.PEFTEC.com](http://www.PEFTEC.com).

