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EXPERTS IN GAS ANALYSIS

Issue – February 2007

Customer care: from 9 am to 6 pm, we are at your disposal for service gas analyser/software/computer/ maintenance and calibration. To receive our news, send your email to info@chromatotec.com

Chromatotec Newsletter

SUMMARY

EXHIBITIONS 2007

ANALYSE INDUSTRIELLE
PARIS-LA DEFENSE
30 January – 1st February 2007
www.mci-salons-fr/ai

ARAB LAB – Dubai
11 – 14 February 2007
www.arablab.com

AMERICANA - Montréal
20 - 22 march 2007

ACHEMASIA – Beijing
14 – 18 May 2007
www.achemasia.de

EURODEUR – Marseille
26 - 28 June 2007
www.eurodeur.com

AWMA – Pittsburgh
26 - 29 June 2007
www.awma.org

CEM – Zürich (Dübendorf)
5 – 6 September 2007
www.cem.uk.com

Activity in the Middle East

After the 2006 edition, this is the second time CHROMATOTEC participates to the ARAB LAB exhibition and this is with great pleasure we come back to Dubaï!
The Middle Eastern area is well known for its important oil and gas industry, but our large range of analysers can answer applications in other industrial fields.

Already present in 2005 on the Environnement exhibition in Abu Dhabi, CHROMATOTEC is regularly present in the Middle Eastern area. That is how Mr Franck Amiet attended the Technical Exchange Meeting organized by the Air Quality & Meteorology Unit of Saudi Aramco's Environmental Protection Department in November 2006.

Mr Amiet received a trophy for his presentation on our airmOzone cabinet entitled Automated On-Line Monitoring of VOC at the ppb Level (airmOzone BTX Included).

The first 2007 success of CHROMATOTEC in the Middle East is the tender it wan in Syria for airTOXIC BTEX analyzers

Saudi Aramco

ARAB LAB The Expo 2007
The International Show for Tomorrow's Technology

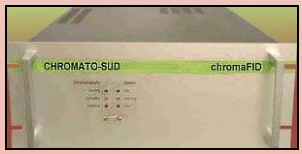
Visit us on Hall 7 – Booth 242

Analysis of MTBE and VOC in water

Our Representative agent in Saudi Arabia, the company Abdul Karim H. Al-Sinan & Partner For Trading Co., has informed us of a interesting enquiry concerning the monitoring of MTBE in water.

More and more often big oil and gas companies are concerned with environmental issues and invest financial and technical means to reduce the damages caused by their industrial activity: in this case the monitoring of MTBE in drinking water grid.

MTBE stands for Methyl Ter Butyl Ether which is an oxylate ether, added to petrol as a replacement for the old lead based anti-knock agents (used to reduce engine knocking and increase the fuel's octane rating). However, in improving air quality through lowering lead emissions, water pollution through MTBE has now become an important issue. MTBE is more water-soluble than other components of petrol, and if spilt will therefore travel further and contaminate greater volumes of groundwater than the other components of petrol.



ChromaFID system – Ref. C31000

MTBE (in soils and waters) as part of the VOC (Volatile Organic Compounds) suite can be analysed by our FID detector instrument chromaFID (loop injection) and for ppb levels the aimoVOC (FID detector) with a trap to concentrate MTBE.

These tests can include BTEX compounds (Benzene, Toluene, Ethyl Benzene and Xylenes) at ppm levels, which are also constituents of petrol, and consequently environmental contaminants.

Sulfur compounds Analysis in refinery

The problem :

Natural gas is becoming a very important energy source. Due to their human toxicity and corrosive properties (catalytics), the volatile **sulfur compounds**, constituants of the gas, demand a **continuous control at low levels**.

The solution: by the airmoQUALITY-NG system

The cabinet allows the operation from **sampling to data transfer**. The GC with double flame photometric detector enables to **separate H2S and COS** as well as to delete any interference with methane. Besides a traceable calibration mixture of **6 sulfur compounds** balanced in **pure methane** is used. The **high signal-to-noise output** makes the monitoring at low / mid ppb levels possible.
This cabinet is well adapted for field installation in accordance with **EEX guidelines**.

Results :

- Improved monitoring of supply gas analysis (up to 12 cylinders).
- Time required for the analysis is less than 10 minutes.

ChromaS system – ref. C51000

Very easy use and high reliable process control cabinet.

Follow-up of VOC and chlorinated solvents on industrial effluents

airmoVOC cabinet (FID)

The name of «volatile organic compounds» refers to several hundreds of compounds which result from different origins such as the manufacturing industries.
According to the environmental conditions the COV can react with nitrogen oxides and so can produce some ozone in the low coats of the atmosphere (troposphere), hence the term “ozone precursors”.
Some of them such as benzene known as being carcinogenic, are monitored according to strict specific rules in ambient air.

However for other VOC some guide values also exist: they are gathered on a list of 30 compounds in Europe (European directive 2002/3/CE) and 56 compounds in the USA (PAMS list of the l'US EPA: Photochemical Assessment Monitoring Stations).
Other gas dumpings also concern the chlorinated solvents of industrial origin and must be also analyzed.
Some of them are included in the so-called list TO14.
In this case CHROMATOTEC proposes the **chroma FID**, analyzer using flame ionization detection. It allows on-line and continuous measurement in the gas sky resulting from industrial effluents in ppm range with quantitative reliable and precise analyses.

44 compounds of the TO14 list have an excellent analytical response with FID, and very good response factor.
However with an equivalent analyzer with PID detector, compounds CCl4, 1,2 dichloro-propane, 1,1,2 trichloro-ethane do not have any analytical response.
As a conclusion, CHROMATOTEC guarantees wider analyses with FID.

TRS MEDOR in multi site project: the Halifax project

The Challenge:

Cabinet for sulfur compounds analysis

The TRS MEDOR is now well known as a highly tried technique. CHROMATOTEC receives many orders for this instrument with for example the Halifax project in Canada.
CHROMATOTEC supplies 3 cabinets of analyses integrating the TRS MEDOR on 3 different sites of the Halifax area: Dartmouth, Herring Cove and Halifax itself, to monitor the deodorisation of 3 water-treatment plants of urban waters. Alarm level at 4 ppb.

The real challenge is no longer to have reliable results with the instrument (it is now acquired above all in France) but to satisfy more and more demanding specifications:

- order in number
- to obtain the Canadian accreditations of correspondence: CSA (Canadian Standard Association), CEC..
- Intervention within 24 hours in case of breakdown.
- Annual maintenance contracts

The solution:

- Constitution of cabinets of analysis IP 55 including the TRS MEDOR, an air purifier, a system of calibration and the sampling system with pump from analyser to sample in stack emission.
- Continuous and on-line measurements of the TRS "Total Reduced Sulfur". CHROMATOTEC could join one of the most highly-rated distributors in Canada: ROMATEC.

CHROMATOTEC enriched its strength by recruiting a project manager to follow and organize all the stages of the projects

CHROMATOTEC proposes a support by *PC anywhere* " allowing accessing to any remote computer"

New services

CHROMATOTEC products are in CSA conformity

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