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EXPERTS IN GAS ANALYSIS

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

Chromatotec Bulletin

Issue – July 2006

*Medor
 celebrated its 30th anniversary
 on July 2005*

Summary

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EXHIBITIONS 2006

**ANALYSE INDUSTRIELLE –
 PARIS-LA DEFENSE**
31 January – 2 February 2006
<http://www.mci-salons.fr/ai>

ARAB LAB – DUBAI
13 – 16 February 2006
<http://www.arablab.com>

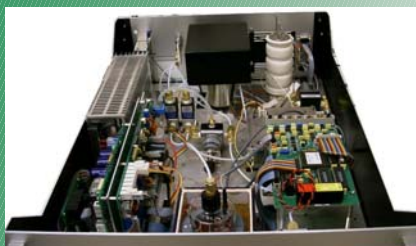
ACHEMA – FRANKFURT
15 – 19 May 2006 – Booth 10.1K41
<http://www.achema.de>

AWMA – NEW ORLEANS
20 – 22 June 2006 – Booth 325
<http://www.awma.org>

GTI – HOUSTON
10 – 13 July 2006
<http://www.Gastechnology.org>

POLLUTEC – LYON Eurexpo
27 Nov – 1st Dec
<http://www.pollutec.com>

energyMEDOR INSIDE VIEW



Calibration

- Internal System Calibration DMS permeation tube
- Result validation & Autocalibration

Carrier gas : **Dry air or N₂**

Detection limit:

energyMedor:
 H₂S and DMS : 0.1 ppm (0.14mg/m³)

energyMedor ppb
 H₂S : 5 ppb (7.0 µg/m³)

High Stability

RSD<5% on concentration over 48h
 RSD>0.6% on retention time over 48h

Vistachrom Software

- **Vizualisation and data storage**
- **Calculation module** Daily average calculation on selected components.
- **Result Transfer** with communication protocol
- ppm or ppb level
- a continuous analyser dedicated to sulphur compounds
- ISO 6326/2 norm and DIN 1855/7

gti.

Case Studies in USA/Europe/Japan in the analysis of H₂S/Mercaptans/THT

More than 30 years experience in the analysis of H₂S Mercaptans/ THT has allowed us to face different case studies worldwide.

- ❖ **USA/Europe: odorization** at PPM level.
 We have numerous instruments in metering stations and state owned gas companies in the United States for detection of mercaptans/H₂S/a mix such as THT/TBM or TBM/DMS at ppm level
- ❖ **Japan: odourless at ppb level** in LPG. Butane / propane
- ❖ **CO₂ quality control in Europe:** pure gas quality in CO₂ for beverages
- ❖ **South Korea THT Medor** in an exp area. Collection data with software windows XP

The energyMEDOR is piloted by the powerful software program **VISTACHROM in a computer** and the transfer of the results/data can occur in either local or remote mode via different analog or networking protocols.

The software allows an **auto-calibration** of the analyser. It is the automatic adjustment of the base sensitivity factor of the analyzer according to one or multiple known and stable reference gas measurements. It can also make **specific calculations** like a sum of compounds or an average on results.

30 years of sulfur compounds analysis GC instrumentation



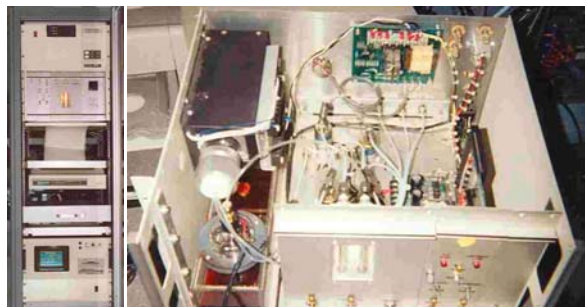
MEDOR 1975



Inside view – MEDOR 1975



MEDOR 8000



American MEDOR with DMS permeation tube - 1990



American MEDOR - 1997

American Cabinet
2000

Inside view – EnergyMEDOR - 2005

Let's give the word to users in the USA

I am pleased with the operation and the performance of the MEDOR.

I found that the technicians are very knowledgeable of the equipment and were able to give instruction over the phone to trouble shoot.

We have the MEDOR for about two years and its running very well.

Merrick L. Harris, PSGE NJ

The Medor has been operating unattended in our laboratory since February 2005. The only up keep it ever requires is the change of the Nitrogen carrier gas about once every 2.5 months (300 cf size cylinder) and add water to the reaction cell. Since installing this unit we have become aware of the rhythm of the odorant level during a 24 hour period. We have found the level changes as much as .05 lbs/mmcf especially during the night. We were never able to notice this with the Barton titrators.

William Jackson, Philadelphia Gas, PA

Our company has been a user of Medor gas analyzers to measure sulfurs, mercaptans, and organic sulfides used to odorize natural gas in gas transmission and distribution pipelines since the late 1980's. The Medor technology using a wet cell has proven to be a simple but effective technology which requires minimal routine maintenance.

As a user of this technology since early in its development, we have witnessed the technology progression from analyzers using HP integrator technology to operate the electro-mechanical analyzer externally through the technology change to internal electronic control of the analyzer with communication to an executive software program externally using current PC and Microsoft Windows systems.

The current windows based technology lends itself to be flexible with user control and SCADA systems requiring realtime data from these analyzers for operation of gas transmission and distribution lines. The analyzer has retained its basic simple technology over the course of electronic technology changes and still remains a simple but reliable sulfur / odorant analyzer system.

D. Young, Pacific Gas Electric and Electric company, CA

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