

**CHROMATOTEC Inc**  
 18333 Egret Bay Blvd, Suite 270  
 HOUSTON TX 77058  
 Phone : 281 335 4944 Fax : 281 335 4943  
 e-mail : info@chromatotec.com



## 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](mailto:info@chromatotec.com)**

Issue – July 2005

**gti.**

## Chromatotec Bulletin

*Medor  
 Happy anniversary  
 30 years  
 1975-2005*

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### energyMEDOR INSIDE VIEW



#### Calibration

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

Carrier gas : **Dry air or N<sub>2</sub>**

#### Detection limit:

*energyMedor:*  
 H<sub>2</sub>S and DMS : 0.1 ppm (0.14mg/m<sup>3</sup>)

*energyMedor ppb*  
 H<sub>2</sub>S : 5 ppb (7,0 µg/m<sup>3</sup>)

#### 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

### CONFERENCE AND EXHIBITION

## Natural Gas and LP Odorization

> July 25-27, 2005—Chicago

### MEDOR : 1975 – 2005 30 YEARS EXPERIENCE IN H<sub>2</sub>S AND MERCAPTANS ANALYSIS

Because of its use in the odorization of the natural gas, the analysis of Volatile Sulfur Compounds has become a necessity.

The different sources or usages of sulfur compounds are the following :

- ◆ Natural Gas odorized with THT or a mix such as THT/TBM or TBM/DMS
- ◆ process like Petrochemical industry or quality control at the plant after cleaning
- ◆ pure gas quality such as CO<sub>2</sub> for beverages or Butane / Propane

The energyMEDOR is dedicated to Natural Gas analysis (PPM level) and pure gas analysis (PPB level) for the survey of H<sub>2</sub>S, mercaptans, sulfides and THT.

The system is designed as industrial gas chromatograph with a wet cell, specific detector for sulfur compounds. It conforms to two international norms which specify gas chromatography and electrochemical detection for the continuous monitoring of sulfur compounds. It can be used in fixed or portable installations.

The energyMEDOR is piloted by the powerful software program VISTACHROM in a PC 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.

### EXHIBITIONS 2005

**CIEPEC BEIJING**  
**7<sup>th</sup> – 10<sup>th</sup> June 2005**  
 CHINA INTERNATIONAL  
 EXHIBITION CENTER  
<http://www.chinaenvironment.com/ciepec2005>

**GTI CHICAGO**  
**25 – 27<sup>th</sup> July 2005**  
<http://www.Gastechnology.org>

**POLLUTEC –PARIS**  
**VILLEPINTE**  
**29 November – 2 December 2005**  
<http://www.Pollutec.com>

## 30 years of sulfur compounds analysis GC instrumentation



MEDOR 1975



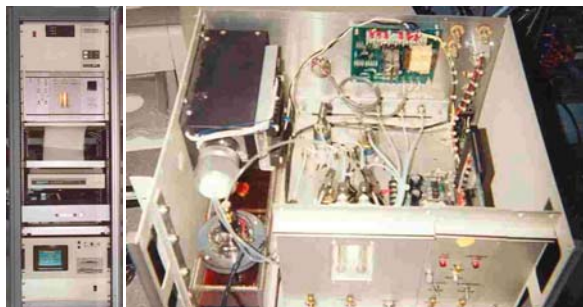
Inside view – MEDOR 1975



MEDOR 8000 - 1985



MEDOR 8000



American MEDOR with DMS permeation tube - 1990



American MEDOR - 1997



American Cabinet  
2000



EnergyMEDOR - 2005



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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