

### **Turnkey Global Analytical Solutions for Gas and Liquid Analysis:**

#### **A New Challenge for Instrumentation in the Energy Market**

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In the previous years the Oil and Gas industry has experienced important evolutions that have changed the needs in terms of analysis and control. Reinforcement in regulations, policies and compliance has led the industry to ask for more tailored applications dedicated to specific-compounds monitoring. Standard instruments are not fitted to answer all these new challenges and the instrumentation market has to be able to propose customized advanced solutions dedicated to unique analysis context.

Constant investment in research and development is then essential for manufacturers and providers to maintain focus on the accuracy of the analysis at low levels and the sustainability of the instruments. Working in collaboration with industrial R&D centers can help to design accurate dedicated solutions relying on new or emerging technologies.

Projects for major chemical and petrochemical industries have successfully been developed in the past two years, based on industrial automatic auto-GC solutions including online analysis and artificial intelligence. This includes for instance the development of transportable ATEX analyzers for monitoring the sulfurizing process of catalytic units used in the oil industry, the production of process GC for VOCs analysis in liquid matrices, GPC-UV analysis through compact liquid analyzer, biogas monitoring by miniGC TCD with integrated carrier gas generators for hazardous industrial areas or micro-portable instruments for VOCs, BTEX or Formaldehyde on-field analysis.