

Newsletter #10 - September 2018



### Case study #1

#### Process optimization in the heart of the chemical industry

Adisseo (world leader in animal nutrition), located in Roussillon between Lyon and Valence, is engaged in a continuous process improvement. More specifically on the HCN synthesis process.

Adisseo has commissioned, tested and successfully qualified for more than 1 year two [ProCeeas® gas analyzers](#) to measure online:

- the input of the converters: NH<sub>3</sub>, CH<sub>4</sub>, and O<sub>2</sub> concentrations.
- the output of the converters: HCN, NH<sub>3</sub>, CH<sub>4</sub>, and H<sub>2</sub>O concentrations.

Before this acquisition, the previous analytical method only allowed one measurement every 20 minutes and was highly interfered by H<sub>2</sub>O.

After some sampling adaptations, the AP2E analytical cabinets, installed in ATEX Zone 2 now allow real-time measurement of these parameters on both converters without water interference problems. The real-time measurement brings a better knowledge of the possible drifts of the process thus improves the efficiency of the installation.



### In the air

#### Gas measurements in chlorine seminar

Hydrogen measurement in chlorine seminar

At the different steps of the chlorine alkali process, some gas components can be found at trace level. Their concentrations can fluctuate over time and are depending on process parameters. H<sub>2</sub> is measured for safety reasons to avoid any explosion of the installation. Species like O<sub>2</sub>, CO<sub>2</sub>, H<sub>2</sub>O are tracked in the chlorine gas matrix to insure the efficiency of the production process.

AP2E developed 4 years ago the first [hydrogen analyzer](#) based on laser technology, with a limit of detection as low as 3ppm, with an advanced accuracy (better than +/- 0,5% relative), and an online measurement. ProCeeas® was specifically adapted to measure [hydrogen in chlorine](#), in combination with the measurement of other compounds (O<sub>2</sub>, CO<sub>2</sub>, H<sub>2</sub>O).

On October 2nd, AP2E will organize in its facilities, a technical workshop about the measurement of gases in chlorine. This workshop will present to all attendees the advanced metrological performances of our multi-gas online analyzer: high accuracy, high selectivity, low detection limits, that make the ProCeeas® an appropriate analyzer for the chlorine production industry.

**POLLUTEC**  
2018

**ISA** Analysis  
Division

### AP2E events

#### POLLUTEC 2018

AP2E will co-exhibit on [POLLUTEC](#), together with DURAG GROUP, booth 5-B110.

POLLUTEC is an international show dedicated to environmental equipment and technologies. It will take place in Lyon Eurexpo, November 27th – 30th.

We will welcome all our customers and partners on our booth.

Do not hesitate to schedule early appointments with our experts.

#### ISA Analysis Division Symposium- Singapore & Abu Dhabi

AP2E will present its technologies at ISA Symposiums, on September 27th in [Singapore](#), and on October 9th and 10th in [Abu Dhabi](#). The conference will describe how the combination of OFCEAS Spectroscopy and Low-Pressure-Sampling, will be the future of emission monitoring.