

The progression of industrial analysis project

Sylvain CHARQUET

Introduction

RHODIA is a member of the group SOLVAY and is a world leader in specialty chemicals. The production of chemical products requires a lot of information and more and more details about the process. Manufacturers need to control reactions and transformations, therefore they need industrial analysts. The laboratory of industrial analysis resolves issues encountered by manufacturers who are looking for analysis solutions to adapt their production, and control reactions.

Experimental conditions

An industrial client comes for the industrial analyst and wants to develop an analytical method on his industrial complex. Client and industrial analyst have some meetings to know exactly what the customer wanted to measure and what is the operational condition of the process. All of this information is very important for industrial analyst. Then, he can propose the optimal method to measure what the client wants to do and in which accuracy. At the end of the phase 1, the industrial analyst can propose solution. It is possible to use different technical analysis and material like gas or liquid chromatography, micro GC, IR spectrometry, Raman, UV, O₂ detector, pHmetry etc.

With the client's agreement, the analyst can start phase 2. He begins the preliminary tests. During that phase, he can be in contact with suppliers to see what equipment should be proposed to respond to the problematic of the project. The industrial analyst is sharing to client the first results that he obtains and the investment that the client might do to install the material on his industrial site.

Next the industrial analyst realizes feasibility test trying to reproduce industrial's conditions, to show if the method is possible or not. If the result are good and the client is satisfied, the test can be realized on the industrial site online in the process condition, the method could be optimized to the desire of the client

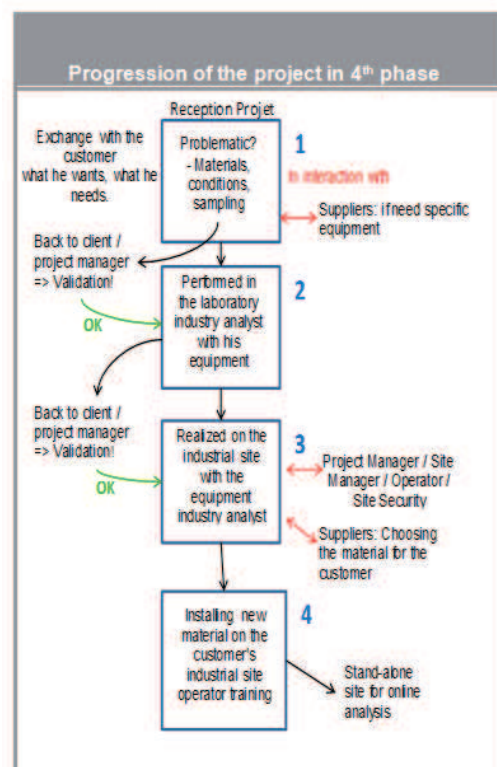
The industrial analyst submits its report to the client on the feasibility of testing. At the moment the analyst has been in contact with many people, the project's manager, industrial sites responsible, the operator and supplier.

If the customer agrees to continue the project with the current results, the final stage can begin. On the 4th phase, the client has to invest in the analysis equipment for the installation on site.

The analyst put in place equipment and checks if the results are consistent with results obtained previously and the wishes of the customer. He must train staff who will be entitled to use the equipment installed and manage the maintenance

Conclusion

Industrial analysts must master analytical techniques and fully understand chemical and industrial processes. They are able to develop and find innovative approaches to increasingly difficult projects.



RHODIA CRTL
Centre de Recherche et Technologie de Lyon
82 Rue des frères Perret
69192 Saint FONS