



WCCE11 - 11th WORLD CONGRESS OF CHEMICAL ENGINEERING

IACCHE - XXX INTERAMERICAN CONGRESS OF CHEMICAL ENGINEERING
CAIQ2023 - XI ARGENTINIAN CONGRESS OF CHEMICAL ENGINEERING
CIBIQ2023 - II IBEROAMERICAN CONGRESS OF CHEMICAL ENGINEERING

Buenos Aires - Argentina - June 4-8, 2023

"The global chemical engineering working for a better future world"

The Plant of the Future

People, Profit, Planet → Product

Wednesday 7 11:30 - 12:30hs

Jean Pierre Da Pont, President Société Des Experts-Chimistes

Willi Meier, Scientific Secretary, World Chemical Engineering Council

During the last decade we see a different paradigm shift in the Process Industries in the different regions of the world. In Europe high value products play a more and more important role. The production of Bulk Chemicals is shifted from Europe to Asia especially to China. The recent rise of energy prizes in Europe accelerates this process. The same holds for the US, but relatively low energy prizes allow still the production of bulk chemicals.

Also during the last decade significant successes have been reported in the field of artificial intelligence. This has been complemented by the availability of large amounts of data and widespread digital networking. Numerous research projects have been launched to work out the impact of these new developments on process and product development. The question arises which of these developments have led to a real improvement and which are only of academic interest.

This paper attempts to present a review of the current state of the art of these applications. In particular, parallels are drawn with the 1990s, when these developments once promised to revolutionize the process industry. The differences to the developments at that time are pointed out and successful case studies are shown. These are from the oil and gas industry, food and pharma, and chemical industry.