

# NFD PUSHES ITS BUSINESSES IN COMPUTER-AIDED DESIGNING

Shanghai, CHINA – October 3, 2017 – NFD's strategic goal is to decisively take advantage of the enormous opportunities that digitalization offers along the entire value chain. In doing so, research and development play a key role when it comes to further increasing innovative strength and competitiveness by using new technologies.

## **NFD offer the support of computer-aided**

We offer computer aids throughout idea generation and project design, as well as tool design and production. We can help you simplify new product development processes, avoid mistakes or errors in design and production, generate prime ideas, and create products that customers prefer.

Based on our extensive market experience and in-depth understanding of materials, we can make better use of computer aids in product design and production, so you have more time and energy to market development.

And we can also provide customers with failure analysis and finite element analysis of mechanical properties of plastic products, in order to help our customers find the root causes accurately and swiftly.

With the increased use of digital technologies in research and development, we are strengthening NFD's position as the innovative company in the chemical industry. In particular, the new supercomputer will enable NFD experts to very efficiently investigate complex questions and it will further shorten the time it takes to launch new products, thus be even better able to meet our customers.

## **Computer Virtual and real-life experiments complement each other**

Digital technologies have a rapidly expanding influence on research and development. Managing large quantities of data has become a decisive factor for future scientific and economic success. With NFD's digital approach, virtual modeling and computer simulation go hand in hand with physical experiments in the lab – they complement each other. Simulations help with the design of experiments and facilitate forecasting, while experiments deliver measurable results and evaluate the computer models. This results in a better understanding of chemical products and processes, and thus enables greater innovation to be achieved in a shorter period of time.

digitalization gives researchers additional opportunities to implement their creative ideas and to collaborate intensively with others around the world. In the view of NFD experts, it is essential to integrate digital technologies directly into the daily work of the R&D units. Direct access to

knowledge-based systems is necessary to enable effective problem-solving and it opens up new horizons. A cloud-based app platform, for example, will make it considerably easier for all researchers to expand knowledge networks.