

News Release

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BASF opens innovative research center for catalysts and processes in Ludwigshafen

- **Optimized pilot plant facility infrastructure accelerates research projects**
- **Highly automated testing facilities for continuous data supply**
- **Professional data management simplifies the planning and analysis of experiments**

BASF today officially opened a pioneering research center at the heart of the Verbund site in Ludwigshafen, close to the famous Ammonia Lab. This new pilot plant facility for catalyst and process development will be operated by the global research unit Process Research & Chemical Engineering. It houses highly automated experimental facilities for efficient process development and testing of new process catalysts. The highlights of the modernized lab include modular construction of the testing facilities, the use of digital technologies to better visualize and manage the pilot plant facilities, and a digitalized working environment.

To implement this concept, a 60-year old building was completely gutted and updated over the past two years. Now that the cutting-edge research facility has opened on the ground floor, renovations will continue on the floor above. BASF is investing a single-digit million euro sum each year in this complex project. Once the upgrades are completed in a few years, this building will be the central hub for experimental work with automated pilot plants for liquid and gaseous substances.

“With the increasing importance of the BASF segments Chemicals and Industrial Solutions, there is a growing need for product research and especially process

research,” said Dr. Detlef Kratz, head of the research unit Process Research & Chemical Engineering. “In our pilot plant facility, we are using state-of-the-art infrastructure to carry out experiments. This enables us to pursue new research approaches and reduce the length of research and development projects, while also continuing to improve the quality of the data collected. We are thus systematically pursuing our goal of increasing the likelihood of success of our projects.”

Particular focus on user-friendliness and data security

During the planning and construction of the pilot plants, some of which are modular, aspects such as user-friendliness and easy maintenance were just as important as the aim of simplifying work processes via digitalization. The pilot plants can be managed and monitored from separate quiet workspaces or directly in front of the pilot plant via computer, tablet or smartphone. With the software hteControl™, experimental programs can be visually planned and carried out with various distributed control systems. Measurement and analysis data are automatically collected, logically amalgamated and made available for further evaluation.

Professional data management completes the concept of the new technical center. The individual data systems at the pilot plants are perfectly harmonized. Seamless integration of process and analytical data enables automatic integration and evaluation of processes. Employees now have the optimal conditions to discover new solutions for process development and catalysis.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of around €63 billion in 2018. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at www.basf.com.