

Innovation

Innovation is the backbone of BASF's success as a leading chemical company and is the key driver for its profitable growth. China is now the largest chemical market in the world, and there is a growing demand for more sustainable products and solutions. We focus on developing sustainable solutions for our customers by helping them to reduce their products' carbon footprint, to use resources more efficiently or to manufacture products in a more eco-friendly way. This is how we safeguard our competitiveness in the long term and make our contribution to the society.

Growing R&D capabilities in China

- **Total investment in Innovation Campus Shanghai is around €280 million**
- **BASF is strengthening its R&D footprint across China**
- **Growing R&D capabilities will further accelerate innovations for BASF's customers in China and across Asia**

BASF has been continuously expanding its research and development footprint in China to drive innovation by integrating customer and market needs at an early stage. The Innovation Campus allows BASF to bring together all the stakeholders in the innovation chain, including research and development (R&D), business, and production units in an integrated site. The Innovation Campus is an integral part of BASF's global innovation network and runs global, regional, and local R&D projects.

The Innovation Campus Shanghai, located at the BASF Shanghai Pudong Innovation Park, was inaugurated in 2012, and expanded in 2015, 2019 and 2023. Combining the technical development capabilities of the operating divisions with industrial design expertise, the Innovation Campus Shanghai serves the demand of almost all major industries. The total investment in Innovation Campus Shanghai is around €280 million.

In 2024, BASF opened its brand-new microbiological lab at the Innovation Campus Shanghai. This new facility marks a new step forward for its research capabilities in Asia. The new lab empowers BASF to conduct comprehensive microbiological testing. Researchers can precisely monitor the microbial content and predict the microbial contamination risk of their products.

Digital technologies are indispensable for everyday R&D work.

Researchers are discussing particle size distribution data. Data generated from the high throughput system help scientists better understand and predict the complex chemical and physical interactions between particle surfaces and the solvent in which they are suspended, allowing experiment design to be more effective and reasonable.



BASF's largest R&D center in Asia Pacific

Innovation Campus Shanghai

Focus: R&D for chemicals and catalysis, materials, specialty chemicals, analytics, digitalization for R&D, Creation Center

The BASF Branch of the Pudong District Postdoctoral Programme has been upgraded to national-level upon approval of China's National Human Resources and Social Security Department and National Postdoctoral Management Committee in 2024. This is a significant breakthrough for BASF in developing scientific research platforms and the cultivation of high-level Research and Development talents, which will further enhance the company's competitive advantages in attracting top talents and obtaining support on R&D from the authorities.

BASF is strengthening its R&D footprint across China. In February, BASF inaugurated its Verbund Technology Center at the Zhanjiang Verbund site. The Center is dedicated to the research and development of Verbund process optimization, digitalization, and sustainable development. In August, BASF inaugurated its new Application and Technical Center of the Coatings division in Jiangmen, China. Located within the site of BASF Coatings (Guangdong) Co., Ltd., the center marks another major milestone in the continuous expansion of BASF Coatings' global refinish technology network.

In 2024, BASF strengthened innovation with local customers towards green transformation. For example, BASF launched Haptex® 4.0, an innovative polyurethane solution for the production of synthetic leather that is 100% recyclable. Without the need of layer peel-off process, synthetic leather made with Haptex 4.0 and polyethylene terephthalate (PET) fabric can be recycled together when using an innovative formulation and recycling technical pathway. This makes the reuse of the materials feasible.

The R&D teams of BASF and Prohero joined forces and co-created the frame of floating sunglasses containing 30% bio-content. The bio-based Ultramid® has been instrumental in advancing the development of Prohero's next-generation consumer product, and maintaining its leading position in environmental, social, and corporate governance.

BASF also launched Emulgade® Verde, a series of innovative and green emulsifiers to support cosmetic manufacturers in creating high-performing, sustainable personal care products. The first two products are Emulgade® Verde 10 MS and Emulgade® Verde 10 OL. Both are based on 100% renewable feedstocks and are readily biodegradable. Furthermore, they are manufactured through a solvent-free and environmentally friendly process.

Driving open innovation with academia and industry

- **The Network for Asian Open Research (NAO) promotes collaboration between BASF and researchers in Asia**
- **2024 marks the 10th anniversary of NAO**
- **BASF's commitment to open innovation has been acknowledged by stakeholders, including academic institutions, industry experts, and local authorities**

BASF places great value on open innovation through close collaboration with academic and industry partners around the world. It has a global network of around 260 partners from universities, institutes, and companies.

In the Asia-Pacific region, the Network for Asian Open Research (NAO) serves as a joint platform with BASF working alongside leading universities and institutes, such as the Chinese Academy of Sciences, Institute of Science Tokyo, Zhejiang University, and the Indian Institute of Technology Bombay. 2024 marked the 10th anniversary of NAO. The projects driven by NAO encompass a wide range of research areas, including material recycling and upcycling, renewable raw materials, digitalization, sustainable processes and e-mobility.

In 2024, BASF was honored as one of the "Blue Whale 50 – Top 50 Global Large Enterprises in Open Innovation" by the Technology Innovation Research Centre of Tsinghua University (TIRC) and Plug and Play China, recognizing its commitment to scientific and technological innovation. Additionally, the Shanghai Pudong New District acknowledged the successful establishment of BASF's Open Innovation Center, which became part of the Group Open Innovation (GOI) program in 2022. This partnership aims to foster collaborations with small and medium-sized technology enterprises and drive the effective transformation of scientific research outcomes, enhancing BASF's innovation efficiency and contributing to the overall innovation ecosystem.