

Market News

ACHEMA 2024: Shaping the Future of the Process Industries

Edited by on 5. Jul. 2023

Frankfurt am Main, Germany -

From 10 to 14 June 2024, ACHEMA will once again be the place to go for the entire range of technologies and services for the process industries. With five innovation themes and the Special Show Hydrogen, the world's leading trade show for process technology will focus on the key challenges facing the industry in 2024.



CHEMA 2022 was attended by over 70,000 participants from 127 nations. (Pictures: © DECHEMA e.V. / Hannibal)

The process industries are a driver of innovation and growth in the global economy – and simultaneously undergoing a transformation themselves. The "green" transformation is by far the most challenging project in the history of the

process industry, with hydrogen potentially becoming a game changer. In many places, digitalisation is seen as the key to innovation across the industry – from plant engineering to the laboratory sector. In addition, fluctuations in supply chains and geopolitical divisions are driving the need for flexible and regional plant projects. That is why ACHEMA 2024 will present concrete solutions with five Innovation Themes, the associated Innovation Stages and the Special Show Hydrogen.

"The ACHEMA Innovation Stages are located in the immediate vicinity of the exhibition and directly in the halls, according to the respective topics covered," says Dr Björn Mathes, CEO of DECHEMA Ausstellungs-GmbH, explaining the concept. "Each Innovation Stage will feature keynotes, expert panel discussions and case study presentations from both users and solution providers."

Process Innovation: Making plants future-proof

Innovations in process technology are at the heart of ACHEMA. Process technology today is at a crossroads: While new investments in "green technologies" are growing at an unprecedented pace, it is becoming increasingly complex to maintain operations and keep existing plants in the market. This is where the Process Innovation Stage comes in, with topics such as electrification, making chemical processes more flexible and efficient, and contributions on smart technology, equipment, analytics and operations.

Pharma Innovation: Experience the latest in pharmaceutical technology

Pharma technology is the fastest-growing community at ACHEMA, and the pharmaceutical industry has never been more exciting. As new research and production methods are developed and new sites are established around the world, existing processes must meet increasingly stringent requirements and standards. In addition to numerous other Pharma Innovation topics, biopharmaceutical production will be a particular focus of discussion in 2024.

Green Innovation: On the path to sustainable transformation

Production-integrated environmental protection, efficient industrial water management and the integration of molecular and industrial biotechnology have already become hallmarks of ACHEMA. But Green Innovation by now also means solving the challenge of carbon-neutral production in the process industry, as well as addressing issues around the circular economy, ESG and sustainable investment. As the biggest transformation challenge the chemical industry has

ever faced, carbon-neutral production requires a technological leap forward in apparatus and plant engineering.

Lab Innovation: Where value creation begins

The laboratory is the birthplace of world-changing innovations and the traditional guardian of product quality. Success in the lab is determined more than ever by the technologies used there and the interfaces with engineering and production. In addition to lab design, planning, construction and management, advanced bioanalytics and pharmaceutical applications

will be examined in depth. At ACHEMA 2024, the Lab Innovation Stage will be coupled with an Action Area dedicated to the digitalised, miniaturised and automated laboratory of the future.

Digital Innovation: Advancing the digital transformation

Digitalisation and the resulting innovations such as advanced analytics or Industry 4.0 technologies continue to be a perennial topic. The complexity of the issues is increasing rather than decreasing: IT vs. OT, connectivity vs. security or smart vs. smart enough – the challenge for operators is to find exactly the right configuration for their business. With this in mind, the Digital Innovation Stage will cover numerous topics around key enablers of innovation today.

Hydrogen Innovation and Special Show Hydrogen

Hyperscaling hydrogen production and infrastructure is one of the key enablers for a clean energy transition and achieving climate goals. Only ACHEMA offers so many solutions for producing, handling, transporting and storing hydrogen. The Hydrogen Innovation Stage covers all aspects relevant to the process industry: rapid scaling of production and infrastructure, power-to-X, industrial applications and sector coupling and many more.

The special show hydrogen presents the previous milestones and future challenges of the hydrogen economy. Experience the latest technologies and innovations for global and regional hydrogen projects in one place and gain insights into pre-competitive collaboration to solve hydrogen challenges.

"ACHEMA is the showcase for process technology worldwide. It is precisely in the field of hydrogen that the central role of the ACHEMA community becomes evident, with its many technologically mature innovations paving the way to the hydrogen economy," says Björn Mathes. "With its technological diversity,

ACHEMA will once again be the central hub in the global innovation network in 2024 and thus the basis for setting the course for the future in the process industries and far beyond."