

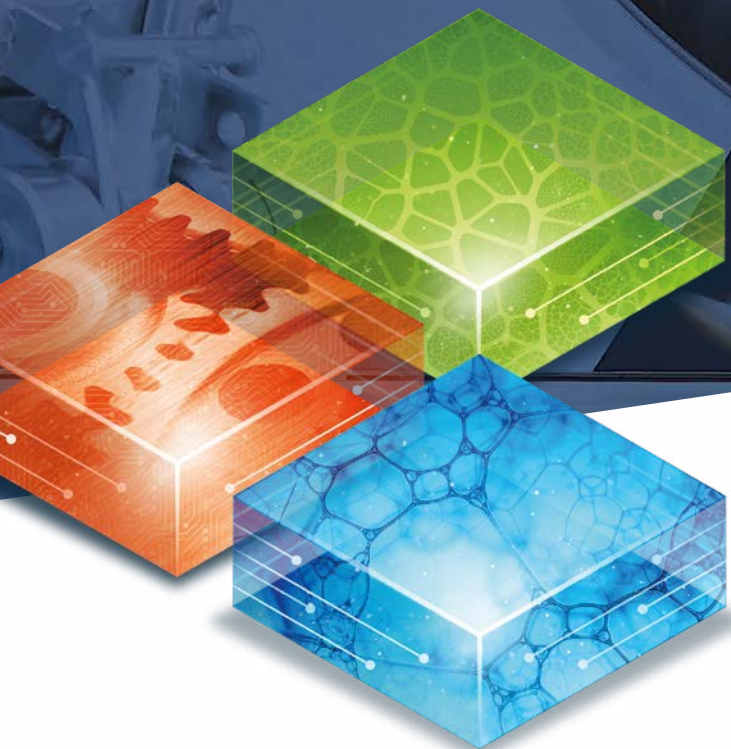
ACHEMA2024

Programme

World Forum and
Leading Show for the
Process Industries

10 – 14 June 2024
Frankfurt am Main,
Germany

www.achema.de





**GREEN
INNOVATION**



**HYDROGEN
INNOVATION**



**PROCESS
INNOVATION**



**LAB
INNOVATION**



**DIGITAL
INNOVATION**



**PHARMA
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ACHEMA 2024

World Forum and 34th Leading Show for the Process Industries
Frankfurt am Main, Germany

10 – 14 June 2024

As the world faces the urgent need for sustainable solutions, the process industries are leading the way in innovation and transformation. ACHEMA has always been the center of this dynamic sector, showcasing the latest advancements and serving as a hub for collaboration and growth.

In June, Frankfurt once again becomes the nexus of chemical and pharma engineering, biotech, and environmental technologies.

This year, our focus is on six innovation themes: digital, green, lab, pharma, process and hydrogen. These themes shape the future of the process industries by driving innovation towards sustainability, efficiency, and flexibility. They encourage the industry to adopt new technologies and approaches that reduce environmental impact, optimize resource use, and enhance product quality and safety.

ACHEMA 2024 comes at a crucial time. While it seems, we are living in an unpredictable environment, the challenges facing our industries require bold, innovative solutions, and ACHEMA is where these solutions come to life. With a diverse array of 2,700 exhibitors from all over the world, over 900 thought-provoking lectures and panel discussions, and endless networking opportunities, it is not just a trade show. It is a platform for change, where ideas are born, and partnerships are forged. ACHEMA 2024 promises to inspire, educate, and empower.

Join us as we explore cutting-edge technologies, groundbreaking research, and collaborative efforts shaping the future of the process industries. Together, we can build a more sustainable, resilient world.

We are excited to welcome you to the 34th ACHEMA in Frankfurt, where innovation meets sustainability, and the future is ours to shape.



Dr. Klaus Schäfer
Chairman of
DECHEMA e.V.



Jürgen Nowicki
Chairman of the
ACHEMA Committee



Dr. Andreas Förster
Executive Director of
DECHEMA e.V.



Dr. Björn Mathes
CEO of DECHEMA
Ausstellungs-GmbH

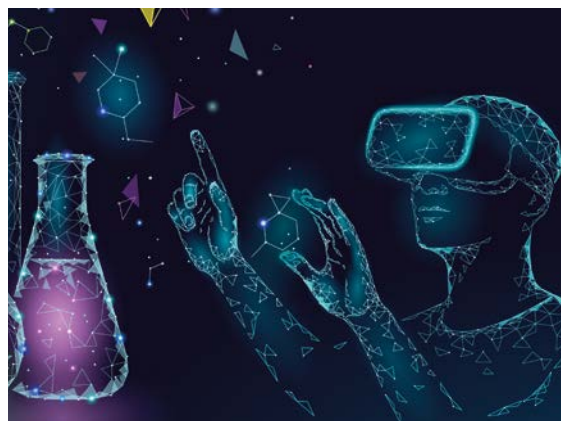


Innovation Themes

Get a comprehensive overview of innovations in the most exciting topics of our time: process innovation, pharma innovation, green innovation, lab innovation, digital innovation and hydrogen innovation.

The ACHEMA innovation themes offer a solid insight into the most important innovation drivers in the process industries. Each topic will be highlighted on a dedicated live stage, as part of the comprehensive congress programme and in visionary highlight sessions.

» Page 12



AIRA Robotics Challenge

The AIRA Robotics Challenge will push the boundaries of robotics technology and promote innovation. The focus this time is on tele-operation. Five finalist teams will demonstrate live how they remotely control their robots to perform their tasks in mock scenarios of a chemical plant and laboratory. They will demonstrate to the ACHEMA community the full spectrum of what is technically feasible.

» Page 32

Action Area Digital Lab

The “Digital Lab” action area presents real solutions used in laboratories to perform processes more efficiently and with higher quality. The spectrum ranges from sterile work with automated documentation of environmental parameters and consumption to the intelligent control of complex large HPLC facilities that interact with software for chemical storage and safety. Even tiny, pea-sized sensors transmit their measured values from liquids to process control systems. Two use cases based on stationary and mobile robots will also be presented.

» Page 17





Congress

More than 1,000 presentations will showcase the latest developments and research results in engineering, biotechnology, chemical and pharmaceutical science and technology. ACHEMA is once again focussing on an approach that is fully integrated into the exhibition: all presentations will take place on stages directly in the exhibition halls or in the immediate vicinity of the exhibition groups – short distances guaranteed! The six Innovation Stages are a particular highlight.

» Page 13

Special Show Hydrogen

Hydrogen plays a central role in the energy transition and carbon neutrality. It is a key element for the process industry: it serves as a raw material, reducing agent, fuel and energy storage medium. However, the industrial transformation towards a hydrogen economy still raises many questions. The challenges associated with the production, transport and logistics sectors, handling in process plants, and suitable solutions will be highlighted at the ACHEMA special show.

» Page 19

H₂



Start-up Area

ACHEMA is the meeting place for all players in the process industry, including young companies and business founders. In addition to the already established start-ups, which you will find in all exhibition groups at ACHEMA, we present the ten finalists of the ACHEMA Start-up Award as well as young start-ups from all over the world.

» Page 25



Career Opportunities

On the lookout for a new challenge? At ACHEMA you will gain access to more potential employers than at any other platform: the majority of the exhibitors are also represented by HR managers. With the Career Day, we also offer a networking event all about successful applications, career paths and job prospects. Furthermore, we support students in the framework of the ACHEMA study cycle.

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Everything at a glance with the AICHEMA mobile app

Whether you want to find suitable suppliers and make contacts or plan and organise your AICHEMA visit in the best possible way, with the AICHEMA app, you have all the important information and tools at your fingertips, even when you're out and about. It includes the complete list of exhibitors along with contact functions, interactive site and hall plans, the current congress programme with the “What's next?” function and many practical search and filter options. Use the integrated matchmaking function to get in touch with experts from the international AICHEMA community. Simply present your digital ticket at the entrance to the Exhibition Centre, which you can now easily transfer to the app via QR code for AICHEMA 2024. You will be optimally prepared for your visit with the favourites option for your preferred exhibitors and events from the extensive congress programme, all of which you can synchronise with the web-

site via your myACHEMA account and export to your contacts or calendar as required. If you wish, the integrated Innovation Guide can then lead you on-site to noteworthy innovations within the respective exhibition hall. Daily updates ensure you always stay on top of the latest developments.

The new **ACHEMA app** will be available free of charge from mid-May 2024 via the official app stores for Apple iPhones (from iOS 9.0) and Android phones (from version 5.0).

All information can also be found at www.achema.de/mobile-app





Step into the vibrant world of AICHEMA, where the boundaries between manufacturers, users, developers, and scientists blur, fostering an electrifying exchange of ideas! With an awe-inspiring sprawl across 14 hall levels and two outdoor exhibition areas, AICHEMA is not merely an event – it's an immersion into the forefront of innovation. Experience the pulse of 2,700 exhibitors unveiling cutting-edge developments, revolutionary products, and ingenious system solutions. Here, under one roof, in one electric atmosphere, you'll encounter a convergence of process technology unlike anywhere else on Earth. Each hall level is a portal into a distinct realm of process technology, meticulously organized to ensure you navigate effortlessly through the vast landscape of possibilities.



Engineering

Hall 9.o, Galleria.o

Development, planning and construction of production facilities for all areas of chemical and pharmaceutical engineering and biotechnology, flow chemistry, CAE – Computer-Aided Engineering, facilities for water and wastewater treatment, exhaust gas cleaning, waste disposal and recycling, chemical parks.



Research and Innovation

Hall 6.o

Areas of activity and latest research results from university institutes and research facilities, Start-up Area and Green Innovation Zone.



Laboratory and Analytical Techniques

Hall 12.o

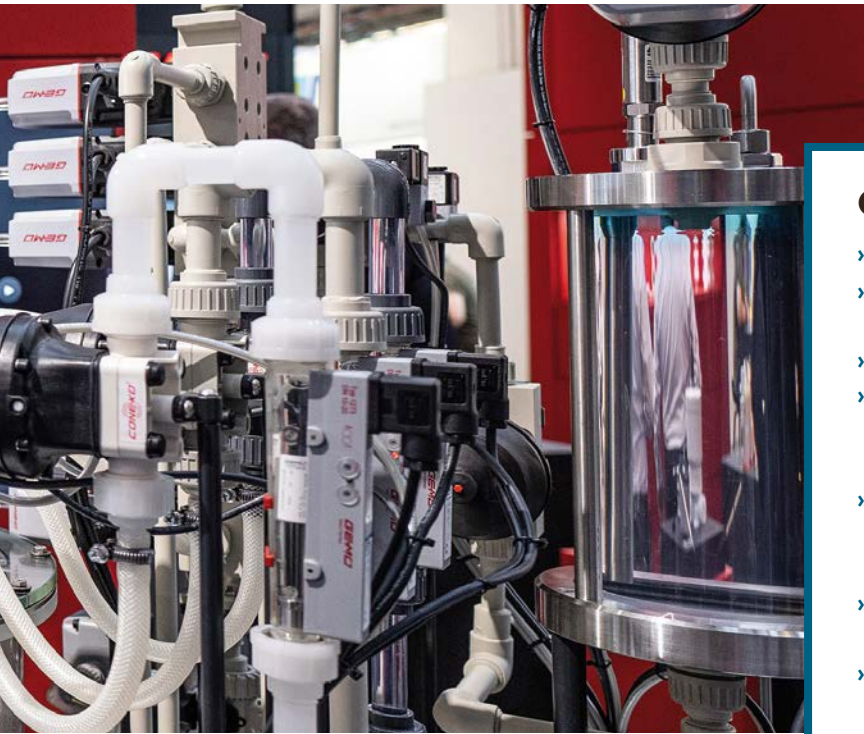
Equipment, facilities, chemicals and services for research and industrial laboratories, laboratory planning and set-up as well as equipment for physical and chemical analysis, including sample preparation: weighing and dosing techniques, spectroscopy, chromatography and all related areas, surface analysis, environmental analysis, laboratory diagnostics and laboratory automation; services and contract analysis; biotechnological analysis and diagnostics, test kits, reagents, biosensors, bioinformatics, bio-chips; service providers for the biotechnology sector.



Digital Hub

Hall 11.o

Digital solutions for production, maintenance and plant design/construction, research and innovation, logistics and supply chain management, cyber security, augmented reality (AR), virtual reality (VR), artificial intelligence (AI), blockchain, data virtualization platforms, edge computing, big data, machine learning, smart analytics, 5G.



Group Stands

- » ACHEMA Start-up Award – Hall 6.0 (Start-up Area)
- » Cefic – the European Chemical Industry Council – Hall 6.0
- » Excellence United – Hall 3.0
- » FLUIDEX – Spanish Association for Fluid Handling Solutions & Process Technologies, Spain – Halls 8.0, 9.0
- » GAMBICA – UK Trade Association for Instrumentation, Control, Automation and Laboratory Technology, Great Britain – Hall 12.0
- » Innovation made in Hessen – powered by Technologieland Hessen – Hall 6.0
- » International Trade Press Stand – Halls 4.1, 11.0
- » LABMAS – Laboratory Manufacturers Association of Spain, Spain – Hall 12.0
- » Process Plant & Machinery Association of India – Hall 9.0
- » Star Pump Alliance – Hall 8.0



Literature, Information, Learning and Teaching Aids

Foyer 4.1

International media from all areas of the technology and service spectrum for ACHEMA, manufacturers of learning and teaching aids for higher education, vocational training and continuing education.



Instrumentation, Control and Automation Techniques

Halls 11.0, 11.1

System solutions and components such as sensors or processors for the automation, control and monitoring of procedures, processes and plants.



Mechanical Processes

Halls 5.0, 6.0

Plant, apparatus and equipment for mixing, kneading, stirring, sieving, filtering including filter media, centrifuging, comminuting, grinding, agglomerating, homogenizing, conveying, weighing, drive technology and cleaning technology.



Pharmaceutical, Packaging and Storage Techniques

Halls 3.0, 3.1, 4.1

Apparatus, machinery and materials for dosing, filling, capping, packaging and labeling, machinery for manufacturing and packaging pharmaceuticals and foodstuffs, transport and storage technology, logistics and supply chain management.



Pumps, Compressors, Valves and Fittings

Halls 8.0, 9.0, 11.0

Pumps and compressors for all media and a wide range of operating conditions, valves, piping, seals and packings, high-pressure applications.



Industrial and Labour Safety

Hall 11.0

Safety concepts for chemical plants, equipment, aids and measures for protecting people and the environment.



Thermal Processes

Halls 4.0, 6.1

Plants, apparatus and equipment for distilling, rectifying, extracting, absorbing, crystallizing, drying, heating and cooling, electrochemical processes, membrane processes, bioreactors, energy generation and conservation processes.



Materials Technology and Testing

Hall 11.0

Metallic, non-metallic and composite materials for chemical engineering, surface protection such as enameling, plating, plasma spraying, coating, bonding technology, testing materials and components, materials for energy generation, conversion and storage.



Special Show Hydrogen

Hall 6.0

Products, services and solutions for the production, transport, storage, provision and processing/use of hydrogen

Theme Stands

Flow Chemistry Pavilion

Hall 9.0, E64

Everything here revolves around continuous process technology and its industrial applications. Market leaders from the flow chemistry sector will present their latest solutions for continuous production, covering all aspects of process technology from upstream and downstream treatments to fluid handling. In addition to the exhibition, there will also be a two-day symposium with top speakers from the flow chemistry community (see Events).

Modular production and NOA

Hall 11.0, C43

The special show "Modular Production and NOA" is a joint project of manufacturers, module builders and users from the process industry. Under the umbrella of the associations NAMUR and ZVEI, the participating companies are driving current topics in process automation. The focus is on the Module Type Package (MTP) as the core technology of modular automation and the NAMUR Open Architecture (NOA), which, among other things, opens up a secure second channel for monitoring and optimising process plants.



South-East Asia's first dedicated process industry trade event

Inspiring Sustainable Growth in **Pharma**, **Biotech** and **Chemical** Industries

19 - 21 November 2024 | Singapore EXPO



Scan here to find out more

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processinnovationapac.com



Participation in the opening and reception is open to all ACHEMA participants.

Pre-register now at www.achema.de/side-events

INSPIRING SUSTAINABLE CO



OPENING

New global framework conditions: how is the process industry positioning itself?

Monday, 10 June 2024, 17:00 – 18:30 h

Hall 4.0, Room Europa

The process industry is facing many challenges. The decades-long trend towards greater globalisation is currently being replaced by increasing instability and, in some cases, protectionist tendencies in trade policy. Meanwhile, the shift towards greater sustainability, the development of the hydrogen economy and the endeavour to secure raw materials require new global networks.

How do companies in the process industry position themselves in this environment? What technologies are needed to respond to the new challenges? And what political framework conditions need to be created to enable an economic transformation that

meets the global challenge of climate change in particular? These questions are the focus of this year's ACHEMA kick-off.

Robert Habeck, the German Federal Minister for Economic Affairs and Climate Action, will open ACHEMA 2024 by video. Following the welcome address by Klaus Schäfer, Chairman of DECHEMA e.V., Julia Schlenz, President of Dow Germany, Austria and Switzerland, Friederike Köhler-Geib, Chief Economist of the KfW Group, and Markus Miertz, Member of the Executive Board of SAMSON AG, will share their views on the situation, critically examine exemplary challenges and discuss possible solutions.



Dr. Robert Habeck
German Federal Minister for Economic Affairs and Climate Protection



Markus Miertz
Member of the Executive Board of SAMSON AG



Julia Schlenz
President Dow Germany, Austria and Switzerland



Dr. Friederike Köhler-Geib
Chief Economist of the KfW Group

Innovation Themes and Congress

ACHEMA fully integrates the congress into the exhibition programme.

All lecture sessions will take place on the Innovation Stages directly in the exhibition halls or close to the exhibition groups. The six ACHEMA innovation themes form the thematic framework: #process, #pharma, #green, #lab, #digital and #hydrogen.

The ACHEMA innovation themes offer solid insights into the most important innovation drivers in the process industries. Each topic will be highlighted on a dedicated live stage, as part of the comprehensive congress programme and in visionary highlight sessions.

Get a comprehensive overview of our industry's innovations and most exciting topics!

More information and the detailed lecture programme can be found at: www.achema.de/congress

The ACHEMA ticket includes the exhibition and all lectures.
Presentation language: English

1,000+

speakers

900+

lectures, discussions, workshops ...

200+

sessions

6

Innovation Stages



Highlight Sessions

Next-generation pharmaceutical production, resource efficiency and fossil-free production, artificial intelligence and autonomous systems as well as hyperscaling hydrogen production – the challenges in the process industry are complex, as are the opportunities.

That's why thought leaders, users and technology providers will discuss in five highlight sessions where we stand now and what the global process industry can expect in the future. Join us and be part of this exciting discussion!



Innovation Stages



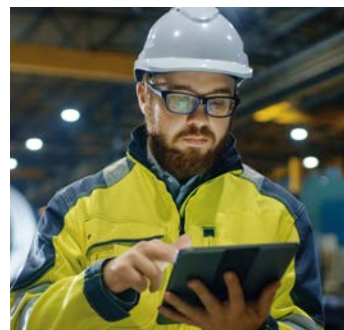
GEA Process Innovation Stage, Hall 9.0



Lab Innovation Stage, Hall 12.0



ZETA Pharma Innovation Stage, Hall 4.1



Siemens Digital Innovation Stage, Hall 11.0



EY Green Innovation Stage, Hall 6.0



Siemens Hydrogen Innovation Stage, Hall 6.0

Process Innovation

Discover the latest developments in process engineering and equipment

ACHEMA stands for process innovations par excellence: they have always been the centrepiece of the exhibition and congress. The transformation of the process industry takes place in the industry's reactors, fermenters and facilities. New developments are in demand. That's why ACHEMA 2024 is again looking deep into chemical reaction technology. Anyone talking about scaling up processes, electrification or the use of hydrogen must automatically consider reaction technology: it determines the reaction conditions, regulates what takes place when and where, ensures energy efficiency and influences product properties.

In view of the numerous new developments, much can be expected in the coming years. ACHEMA will show where the journey is heading. In some areas, process technology is at a crossroads: while investment in "green" technologies is increasing at an unprecedented rate, the (regional) requirements to keep installed facilities competitive and on the market are more dynamic than ever.

Whether direct electricity utilisation, power-to-X or the combination of electricity-based processes with secondary raw materials – the technology portfolio is constantly growing and still has great potential. Approaches for the electrification of the chemical industry also play a role in the exhibition and congress as an important building block for a climate-neutral chemical industry in the future.

Process Innovation at ACHEMA also means experiencing the latest technologies in food processing.

The **GEA Process Innovation Stage** in Hall 9.0 will highlight the topics that are currently affecting the process industries and will continue to do so in the coming years:

- » Electrification, flexibilisation and increased efficiency of chemical processes
- » New food processing and technologies
- » Smart engineering, equipment, analytics and operations
- » Advanced and sustainable production and reaction systems



» Highlight session

Nature as a role model – maximum resource efficiency in the chemical industry

Friday, 14 June 2024, 12:00 – 13:00 h,
Hall 4.0, Room Europa

» Keynote speeches

Material change – The relation between energy and feedstock transition

Nico van Dooren, Director New Business Development,
Port of Rotterdam

Mimicking natural ecosystem for effective carbon capture and storage

Dr. Uwe Boltersdorf, Division President Chemtech, Sulzer

» Panel discussion

- » Nico van Dooren, Director New Business Development, Port of Rotterdam
- » Dr. Uwe Boltersdorf, Division President Chemtech, Sulzer
- » N.N., Endress+Hauser
- » Guido König, Head of Focus Industries Management, Segment Manager Chemicals and Sustainable Industries, Samson

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People for Process Automation

Silver partner



Pharma Innovation

Get the world's most comprehensive update on pharma technology

Pharmaceutical technology is the fastest growing community at ACHEMA and the pharmaceutical industry has never been as exciting as it is today! As innovative research and production methods are developed and new products and sites emerge around the world, established processes must meet ever higher requirements and standards.

The rapid development of pharmaceutical technology is driven by the need for more efficient, flexible, and sustainable processes. The most important trends include advanced manufacturing technologies such as continuous manufacturing and modular production systems as well as automation and robotics. Drug production processes are also changing: the increased production of biosimilars or personalised medicines is leading to a growing demand for equipment that can most efficiently meet the new production methods.

At ACHEMA, you will experience the world's most comprehensive updates on pharmaceutical technology – from early drug discovery to the latest packaging line.

In addition to the exhibition, a number of congress sessions on the topic of #pharma will ensure the best possible communication of topics. The **ZETA Pharma Innovation Stage** in Hall 4.1 is the central point of contact for the pharmaceutical community and will focus on the following topics, among many others:

- » Trends in biopharmaceutical manufacturing
- » Equipment and processes for advanced therapy medicinal products (ATMPs)
- » Sustainability in pharmaceutical production and packaging
- » Next-level pharma: on the road to 5.0?

» Highlight session

Next generation pharma manufacturing – current advances in cell and gene therapy

Monday, 10 June 2024, 13:00 – 14:00 h,
Hall 4.0, Room Europa

» Keynote speeches

Centralised and decentralised academic manufacturing of CAR effector cells as living drugs

Prof. Dr. Dr. Ulrike Köhl, Director of Fraunhofer Institute for Cell Therapy and Immunology, Leipzig and Director of the Institute of Clinical Immunology, University of Leipzig

Advancing the next generation of cell and gene therapies

Sadik H. Kassim, Chief Technology Officer,
Genomic Medicines, Danaher

» Panel discussion

» Prof. Dr. Dr. Ulrike Köhl, Director of Fraunhofer Institute for Cell Therapy and Immunology, Leipzig and Director of the Institute of Clinical Immunology, University of Leipzig

» Sadik H. Kassim, Chief Technology Officer,
Genomic Medicines, Danaher

» Dr. Beate Müller-Tiemann, Chief Technology Officer,
Cytiva

» Dr. Andrea Traube, CEO, Kyoobe Tech

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LABELLING SYSTEMS SCANDINAVIA

STERIS

SYSTECH
connected solutions by Markem-Imaje

Green Innovation

Shaping the biggest transformation in the history of the process industry together

It's a mammoth undertaking: most countries aim to become climate-neutral by 2050 – and with them, the companies in the process industry. Because it produces energy-intensively on the one hand and cannot do without carbon on the other, the chemical industry is finding it particularly difficult to defossilise. But this only spurs researchers and engineers in the industry on even more: fossil-free, bio-based and, where possible, circular – green innovations are changing the industry worldwide. Now is the time to shift the focus to industrial scaling and the redesign of sustainable ecosystems.

The use of alternative carbon sources such as CO₂ or biomass and the implementation of a circular economy pose significant challenges for the process industry.

Although the idea of fossil-free production sounds simple, the implementation harbours many unanswered questions. Questions that we will discuss together at ACHEMA.

At ACHEMA 2024, you will find the perfect partners and the best possible equipment for a successful “green” future – in the exhibition and congress.

In addition to numerous congress sessions on topics related to green innovation, the **EY Green Innovation Stage** in Hall 6.0 will focus on the topic. Highlights and interactive presentations on the most important trends and challenges will be presented there:

- » Achieving carbon-neutrality in process industries
- » Closing material cycles: design, (re)use and recover
- » Challenges in industrial water management
- » Accelerating the industrial biotechnology (r)evolution



» Highlight session

Beyond fossil fuels – exploring alternative carbon sources for a sustainable chemical industry

Thursday, 13 June 2024, 13:00 – 14:00 h,
Hall 4.0, Room Europa

» Keynote speeches

Towards a circular chemical industry within the planetary boundaries

Prof. Dr.-Ing. André Bardow, ETH Zürich

Innovating for a new carbon economy

Dr. Michael Köpke, Chief Innovation Officer, LanzaTech

» Panel discussion

- » Prof. Dr.-Ing. André Bardow, ETH Zürich
- » Dr. Michael Köpke, Chief Innovation Officer, LanzaTech
- » Matthias Brey, Decarbonization and Circular Economy Expert, EY
- » Dr. Daniel Witthaut, Executive Director Innovation, Cefic

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Lab Innovation

Discover the latest developments for your laboratory

The laboratory is the birthplace of innovations that change the world and guarantees product quality. More than ever, success in the laboratory is determined by the technologies used there and at the interfaces to technology, production and quality control.

Two high-calibre stages offer first-class keynote speeches and expert discussions from and with solution providers and users. There will also be ample case studies from the global process industry. **The SEFA Theatre** (Hall 12.0, E70) focuses on laboratory design, planning and equipment (more information on page 30). The **Lab Innovation Stage** is also located in Hall 12.0 and will take a closer look at current topics in laboratory and analytical technology in the process and bioprocess industries:

- » The age of discovery: advanced bioanalytics and pharmaceutical applications
- » Connect and collaborate: linking the lab with production and quality
- » Operational and reliable: sustainable lab facilities and operations
- » The laboratory of the future: digitalised, miniaturised, automated

» Action area Digital Lab

Hall 12.0, Stand A33

The laboratory of the future is connected: in it, the seamless integration of products and treatments from different manufacturers creates added value for the user that goes beyond individual solutions. The “Digital Lab” action area in Hall 12.0 presents real solutions used in laboratories to perform processes more efficiently and with higher quality.

The spectrum ranges from sterile work with automated documentation of environmental parameters and consumption to the intelligent control of complex large HPLC facilities that interact with software for chemical storage and safety. Even tiny, pea-sized sensors transmit their measured values from liquids to process control systems.

Demographic change is also becoming increasingly noticeable in the laboratory. Skilled workers could be supported here by robots. Two solutions – one stationary and one mobile – have been optimised for laboratory use and work hand in hand with manual processes.

Visit the “Digital Lab” action area to experience these innovations up close and find out how the future of the laboratory is already taking shape today. Immerse yourself in a world full of possibilities and be inspired by the latest technologies and solutions for your laboratory.



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Digital Innovation

Find the optimal solutions for your digital transformation

Digital innovations such as artificial intelligence or Industry 4.0 technologies are becoming increasingly important to remain competitive and achieve the ambitious goals of net zero emissions and the circular economy. IT vs. OT, connectivity vs. security or “smart” vs. “smart enough” – the challenge for companies is to find exactly the right solution for their operations.

Process automation and the digital twin are central building blocks of digitalisation, and their implementation must go far beyond pure plant automation to map the entire value chain. Current process automation initiatives and technologies such as APL, NOA, MTP and OPA-S offer promising implementation approaches.

To fully exploit the benefits of digitalisation, data must be shared and used fluidly, consistently and in the right context. Only then will the digital twin really come of age. And then the visions of autonomous and uncrewed systems will also come within reach.

The **Siemens Digital Innovation Stage** in Hall 11.0 is dedicated to current topics that are currently shaping the process industry:

- » Data analytics meets quantum computing and AI
- » Ends smart plant processes: integrating digital tools in business, engineering and operations
- » Modular and connected production: how to plan, build and run the plant of the future
- » Autonomous systems in site and plant operations



» Highlight session

Artificial intelligence and autonomous systems in process industry

Wednesday, 12 June 2024, 13:00 – 14:00 h
Hall 4.0, Room Europa

» Keynote speeches

Uncrewed and autonomous systems – the future of automation in process and energy industries

Dr. Mehmet Mercangöz, ABB Reader in Autonomous Industrial Systems, Imperial College London

Artificial intelligence for the process industry

Fabien Mangeant, R&D Digital Program Director, Air Liquide

» Panel discussion

- » Dr. Mehmet Mercangöz, ABB Reader in Autonomous Industrial Systems, Imperial College London
- » Fabien Mangeant, R&D Digital Program Director, Air Liquide
- » Dr. Jürgen Spitzer, Process Automation Head of Strategy & Technology, Siemens
- » May Mohamed, Sr. Manager, Solutions Architecture, Amazon Web Services (AWS)

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GEA





On the path to a climate-neutral future, great hopes are pinned on hydrogen as an important building block of the energy transition. To date, more than 20 of the world's 56 strongest economies have published national hydrogen strategies. If you add up the quantities of hydrogen planned in the strategies, it results in a global hydrogen potential in the high four-digit terawatt hour range per year – and thus correspondingly great opportunities.

The quantities mentioned indicate that: the term “up-scaling” doesn't do justice to the task that lies ahead; “hyperscaling” is required to achieve an upscaling of capacities and structures by a factor of 100; the rapid expansion of hydrogen production and infrastructure is therefore one of the most important prerequisites for a successful energy transition.

In over 30 congress sessions on hydrogen, content will be communicated, and solutions presented. The **Siemens Hydrogen Innovation Stage** in Hall 6.o will cover all aspects relevant to the process industry and beyond:

- » Hyperscaling production and infrastructure
- » Innovations for the handling, transport and storage of hydrogen
- » Power-to-X, industrial applications and sector coupling
- » Designing the hydrogen ecosystem

H₂

Special show Hydrogen

Hall 6.o

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

Hydrogen Innovation

Don't miss the special show Hydrogen

» Highlight session

Hyperscaling hydrogen – turning strategy into reality

Tuesday, 11 June 2024, 13:00 – 14:00 h

Hall 4.o, Room Europa

» Keynote speeches

Implementing green hydrogen production in the chemical industry

Manuel Kuehn, Vice President Sustainable Energy Systems (Global Sales), Siemens Energy

Decarbonization of the industry – how to make it a success

Gilles Le Van, Vice-President Large Industries and Energy Transition Central Europe, Air Liquide

» Panel discussion

- » Manuel Kuehn, Vice President Sustainable Energy Systems (Global Sales), Siemens Energy
- » Gilles Le Van, Vice-President Large Industries and Energy Transition Central Europe, Air Liquide
- » Daniel Eisenhuth, Partner EY Sustainability, Strategy and Transactions, Valuation, Modelling & Economics, EY
- » Jürgen Nowicki, Executive Vice President Linde & CEO Linde Engineering, Linde

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People for Process Automation

FESTO







pörner EDU
PÖRNER GRUPPE







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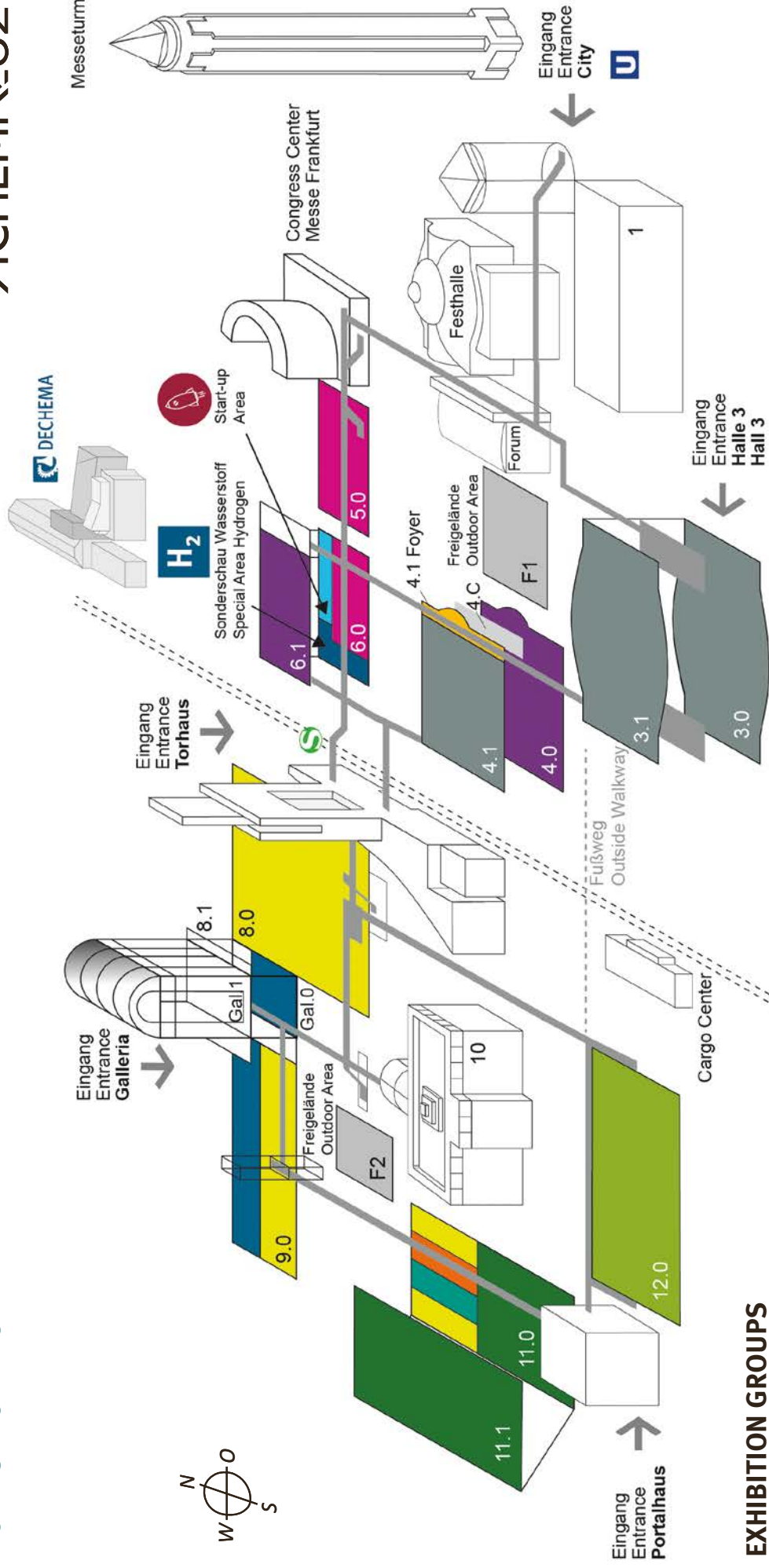
samson

Schneider Electric

Congress Topics

Exhibition Groups	Congress Topics	Dates				
		Mo 10	Tu 11	We 12	Th 13	Fr 14
	#hydrogen: (Global) Ecosystems	■	■	■	■	■
	#hydrogen: Production and hyperscaling	■	■	■	■	■
	#hydrogen: PtX processes and applications	■	■	■	■	■
	#hydrogen: Transport and storage	■	■	■	■	■
	#hydrogen: Water-for-X	■	■	■	■	■
	#process: Electrified and flexible	■	■	■	■	■
	#process: Process engineering	■	■	■	■	■
	#process: Smart engineering and operations	■	■	■	■	■
	#process: Sustainable production systems	■	■	■	■	■
	#digital: Modular production	■	■	■	■	■
	#green: Circular economy	■	■	■	■	■
	#green: Climate-neutral production	■	■	■	■	■
	#green: Industrial biotech	■	■	■	■	■
	#green: Industrial water	■	■	■	■	■
	#green: Sustainability in production	■	■	■	■	■
	#hydrogen: Production and hyperscaling	■	■	■	■	■
	#hydrogen: PtX processes and applications	■	■	■	■	■
	#pharma: Biopharma production	■	■	■	■	■
	#digital: Process industry transformation	■	■	■	■	■
	#digital: Modular production	■	■	■	■	■
	#digital: Autonomous systems	■	■	■	■	■
	#digital: AI and data analytics	■	■	■	■	■
	#green: Sustainability in production	■	■	■	■	■
	#lab: Digitalised, minituarised, automated	■	■	■	■	■
	#process: Smart engineering and operations	■	■	■	■	■
	#pharma: On the road to pharma 5.0?	■	■	■	■	■
	#green: Circular economy	■	■	■	■	■
	#green: Climate-neutral production	■	■	■	■	■
	#green: Industrial biotech	■	■	■	■	■
	#hydrogen: Production and hyperscaling	■	■	■	■	■
	#hydrogen: PtX processes and applications	■	■	■	■	■
	#hydrogen: Transport and storage	■	■	■	■	■
	#lab: Advanced bioanalytics and pharma	■	■	■	■	■
	#lab: Digitalised, minituarised, automated	■	■	■	■	■
	#lab: Link with production and quality	■	■	■	■	■
	#lab: Imaging and sensing	■	■	■	■	■
	#lab: Sustainable facilities and operations	■	■	■	■	■
	#pharma: Biopharma production	■	■	■	■	■
	#pharma: International Powder and Nanotechnology Forum	■	■	■	■	■
	#process: International Powder and Nanotechnology Forum	■	■	■	■	■
	#process: Mixing and separation	■	■	■	■	■
	#green: Circular economy	■	■	■	■	■

Exhibition Groups	Congress Topics	Dates				
		Mo 10	Tu 11	We 12	Th 13	Fr 14
	#digital: Process industry transformation	■	■	■	■	■
	#digital: Modular production	■	■	■	■	■
	#process: Smart engineering and operations	■	■	■	■	■
	#green: Industrial water	■	■	■	■	■
	#pharma: Supply chain and logistics	■	■	■	■	■
	#pharma: Biopharma production	■	■	■	■	■
	#pharma: ATMP equipment and processes	■	■	■	■	■
	#pharma: On the road to pharma 5.0?	■	■	■	■	■
	#pharma: Sustainable production & packaging	■	■	■	■	■
	#lab: Advanced bioanalytics and pharma	■	■	■	■	■
	#process: Process Engineering	■	■	■	■	■
	#green: Industrial water	■	■	■	■	■
	#green: Climate-neutral production	■	■	■	■	■
	#process: Food processing and technology	■	■	■	■	■
	#process: Plant design and maintenance	■	■	■	■	■
	#process: Process engineering	■	■	■	■	■
	#process: Safety and security	■	■	■	■	■
	#process: Smart engineering and operations	■	■	■	■	■
	#process: Sustainable production systems	■	■	■	■	■
	#pharma: Biopharma production	■	■	■	■	■
	#hydrogen: Production and hyperscaling	■	■	■	■	■
	#hydrogen: Transport and storage	■	■	■	■	■
	#process: Safety and security	■	■	■	■	■
	#pharma: Biopharma production	■	■	■	■	■
	#hydrogen: Transport and storage	■	■	■	■	■
		#process: Mixing and separation	■	■	■	■
#process: Food processing and technology		■	■	■	■	■
#process: International Powder and Nanotechnology Forum		■	■	■	■	■
#process: Plant design and maintenance		■	■	■	■	■
#green: Circular economy		■	■	■	■	■
#green: Climate-neutral production		■	■	■	■	■
#green: Industrial biotech		■	■	■	■	■
#green: New materials for sustainability		■	■	■	■	■
#pharma: Biopharma production		■	■	■	■	■
#pharma: International Powder and Nanotechnology Forum		■	■	■	■	■
	#pharma: Supply chain and logistics	■	■	■	■	■
	#green: Circular economy	■	■	■	■	■
	#green: New materials for sustainability	■	■	■	■	■
	#hydrogen: Transport and storage	■	■	■	■	■
	#process: Materials and material processing	■	■	■	■	■



EXHIBITION GROUPS



Engineering
9.0, Galleria.0



Digital Hub
11.0



Research and Innovation
6.0



Laboratory and Analytical Techniques
12.0



Literature, Information, Learning and
Teaching Aids
4.1 Foyer



Mechanical Processes
5.0, 6.0



Instrumentation, Control and
Automation Techniques
11.0, 11.1



Pharmaceutical, Packaging and Storage
Techniques
3.0, 3.1, 4.1



Pumps, Compressors, Valves
and Fittings
8.0, 9.0, 11.0



Industrial and Labour Safety
11.0



Thermal Processes
4.0, 6.1



Materials Technology and Testing
11.0

Morning Session: usually 10:00 – 12:00 h, Afternoon Session: usually 14:30 – 17:00 h

You can find the detailed lecture programme and timing at www.achema.de/congress and in the **ACHEMA app**.

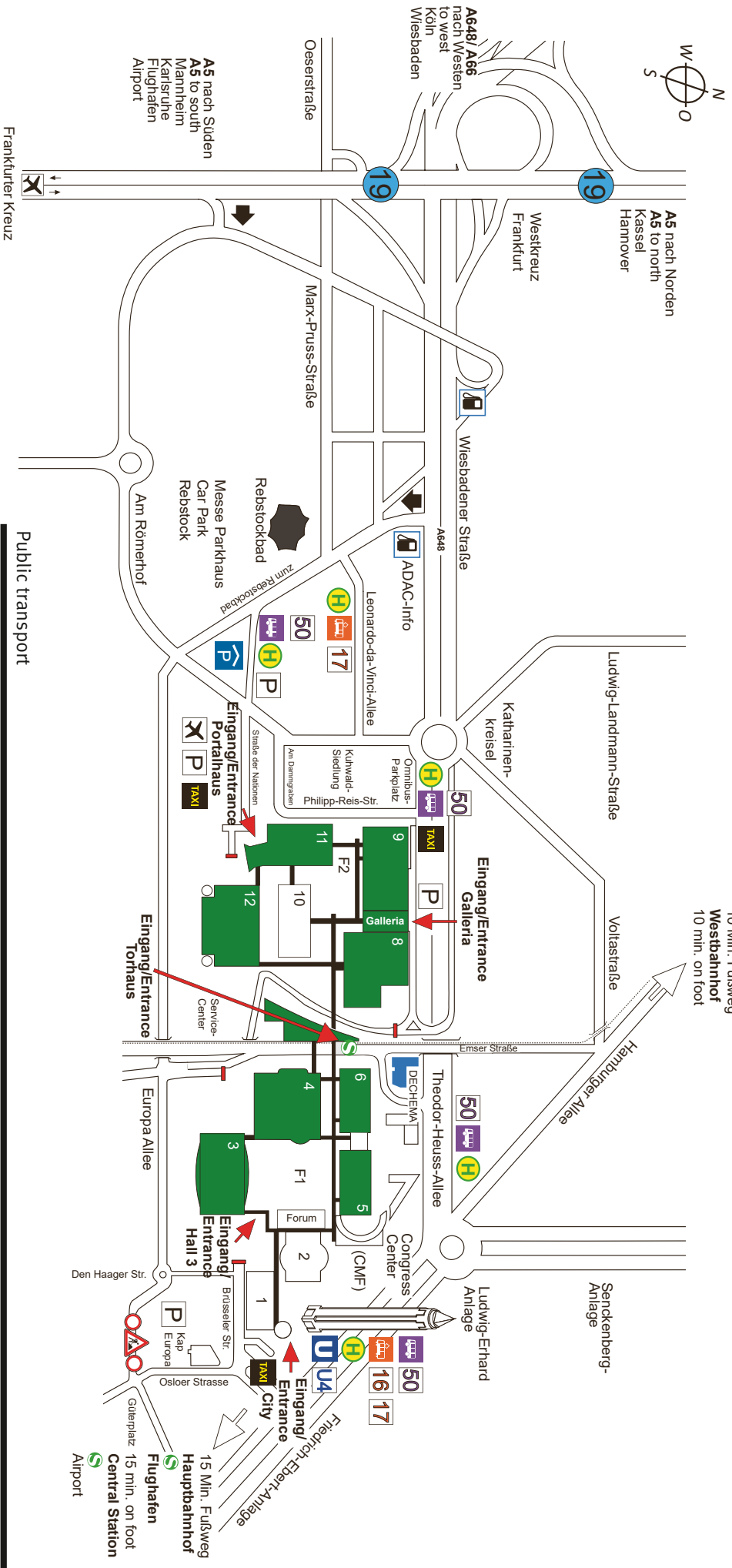
	Room	Frequenz 1	Frequenz 2	Granat	Korall	Karmesin	Symmetrie 2	Symmetrie 3	Encounter	Europa	Consens	Entente	
	Hall	Portalhaus Via	Portalhaus Via	11.0	11.0	11.0	8.1	8.1	5.0	4.0	4.C	4.C	
Monday, 10 June 2024	Morning	Topic			#hydrogen: Transport and storage	#process: Safety and security	#process: Process engineering	#process: Process engineering	#green: Circular economy		#process: Process engineering	#green: Industrial biotech	
	Session title				Properties of materials for hydrogen applications	New options in preventing incidents in the process industry	Enhancing plant productivity by intelligent detail engineering	Smart multiphase processes	Towards a circular economy of plastics I		Standardized method for equipment performance assessment in fouling-prone applications	Industrial biotechnology – Producing food and processing side streams	
	13:00 – 14:00 h	Hall 4.0, Room Europa: #pharma: Highlight Session “Next generation pharma manufacturing – Current advances in cell and gene therapy”											
Afternoon	Topic	#lab: Imaging and sensing		#digital: Process industry transformation	#hydrogen: Transport and storage	#process: Materials and material processing	#process: Process engineering	#green: Circular economy	#green: Circular economy		#process: Process engineering	#green: Industrial biotech	
	Session title	New measurement techniques of nanoparticles and online process control		Interoperability of plants and processes	Safety for hydrogen applications	Analytics and optimization in materials and material processing	New advances in sensor technology	The contribution of Carbon Capture and Utilisation (CCU) in the chemical sector	Towards a circular economy of plastics II		Heat integration in process industry through mechanical vapour recompression – WindaB	Industrial biotechnology – Establishing and scaling-up production	
17:00 h	Hall 4.0, Room Europa: ACHEMA Opening “New global framework conditions: How is the process industry positioning itself?”												
Tuesday, 11 June 2024	Morning	Topic		#digital: AI and data analytics	#digital: Process industry transformation	#digital: Process industry transformation	#digital: Modular production	#process: Process engineering	#process: VDI-Informations-plattform	#green: Climate-neutral production	#hydrogen: (Global) Ecosystem	#green: Sustainability in production	#hydrogen: Water-for-X
	Session title			AI-based sensing and control	Emerging (digital) technologies in process industries	PIDMIC 3.0 – Process Industry Data Management Integration Congress 3.0 I	Flow chemistry and modular production	New developments for chemical processes	Informations-plattform für Ingenieure in der Produktion (in German only)	Climate neutral production – CCU strategies and plasma applications	Operation of hydrogen production plants	Best practise and challenges of corporate sustainability reporting in the process industry	Water-for-X: Key for sustainable PtX
	13:00 – 14:00 h	Hall 4.0, Room Europa: #hydrogen: Highlight Session “Hyperscaling hydrogen – Turning strategy into reality”											
Afternoon	Topic	#lab: Digitalised, miniaturised, automated	#digital: AI and data analytics	#digital: Process industry transformation	#digital: Process industry transformation	#process: Materials and material processing	#process: Process engineering	#digital: Modular production	#green: Climate-neutral production	#hydrogen: Production and hyperscaling	#process: Electrified and flexible	#process: Sustainable production systems	
	Session title	Future-oriented technologies – Automation, augmented reality and sustainability in the laboratory sector	AI-based modelling and engineering	After 10+ years of digitalization in the chemical industry – Achievements, challenges and outlook	PIDMIC 3.0 – Process Industry Data Management Integration Congress 3.0 II	Surfaces and corrosion in materials and material processing	New advances in process engineering	Modularisation in chemical, pharma and bio production	Carbon management strategies for the industry	Optimizing electrolyzer operation	Electrifying chemical processes	GeCats – Variety of catalysis research	
Wednesday, 12 June 2024	Morning	Topic	#lab: Digitalised, miniaturised, automated	#digital: AI and data analytics	#digital: Process industry transformation	#digital: Process industry transformation	#process: Materials and material processing	#process: Smart engineering and operations	#process: Process engineering	#green: Climate-neutral production	#green: New materials for sustainability	#process: Mixing and separation	#green: Industrial water
	Session title	Innovations in automated process control and optimization in laboratory and biotechnology	AI to foster the potential of process data	Digitalization and manufacturing execution systems	PIDMIC 3.0 – Process Industry Data Management Integration Congress 3.0 III	Innovative applications of porous materials	PAT for energy efficiency	Flow Chemistry Symposium I	Reaching emission targets – Industrial examples of GHG reduction I	Sustainable materials from lignocellulose derived feedstocks	Membranes and membrane processes – Important contribution to energy efficiency and environmental protection I	Challenges in industrial water management	
	13:00 – 14:00 h	Hall 4.0, Room Europa: #digital: Highlight Session “Artificial intelligence and autonomous systems in process industry”											
Afternoon	Topic	#digital: AI and data analytics		#digital: Process industry transformation	#digital: Process industry transformation	#process: Safety and security	#process: Smart engineering and operations	#process: Process engineering	#green: Climate-neutral production	#green: Industrial biotech	#process: Mixing and separation	#process: Electrified and flexible	
	Session title	AI-assisted operation support		(Digital) Standards and trends in process industries	PIDMIC 3.0 – Process Industry Data Management Integration Congress 3.0 IV	Development of improved devices and components enabling highest safety levels	Harvesting PAT data	Flow Chemistry Symposium II	Reaching emission targets – Industrial examples of GHG reduction II	Novel biological production systems and products – Sustainable solutions from biological engineering	Membranes and membrane processes – Important contribution to energy efficiency and environmental protection II	GeCats – Electrifying catalysis	
Thursday, 13 June 2024	Morning	Topic	#lab: Imaging and sensing	#digital: Process industry transformation	#digital: Autonomous systems	#process: Safety and security	#process: Plant design and maintenance	#process: Process engineering	#process: Mixing and separation	#green: Climate-neutral production	#green: Circular economy	#green: Climate-neutral production	
	Session title	Sensing for circular economy		Advancing process excellence in PAT and autonomous operations	Autonomous systems in site and plant operations	Insights for safety – Challenges today and tomorrow	Equipment design – Mixers, seals, valves and heat exchangers	Flow Chemistry Symposium III	Innovative mixing and separation solutions	Climate neutral production – Carbon Capture	Circular economy solutions for inorganic materials	Greenhouse gas reduction in the basic materials industry (KlimPro Industry)	
	13:00 – 14:00 h	Hall 4.0, Room Europa: #green: Highlight Session “Beyond fossil fuels – Exploring alternative carbon sources for a sustainable chemical industry”											
Afternoon	Topic	#lab: Imaging and sensing	#digital: Process industry transformation	#digital: Modular production	#process: Safety and security	#process: Plant design and maintenance	#process: Process engineering	#green: Circular economy	#green: Climate-neutral production	#green: Sustainability in production	#process: Process engineering		
	Session title	Concepts and challenges for instrumental odor monitoring systems	Design and use of a Digital twin	Modular process automation	Latest developments in using resources adequately for safety – Performing efficient and effective safety studies and safety design	Digital tools for predictive maintenance and environmental targets	Flow Chemistry Symposium IV	Extraction processes for metals recovery	Climate neutral production – Enabling CCU pathways	Concepts and examples of carbon footprint assessment in the process industry	GeCats – From catalysis to process		
Friday, 14 June 2024	Morning	Topic	#lab: Link with production and quality	#digital: Process industry transformation		#process: Safety and security			#green: Circular economy		#green: Circular economy		
	Session title	From research to production with intelligent experiment design and automation	Advanced process optimization and control		Best practice, classifications and models to increase process safety				Sourcing and recycling of battery raw materials and acids		Critical raw materials from alternative sources for industrial application – By EU funded project Sea4Value		
12:00 – 13:00 h	Hall 4.0, Room Europa: #process: Highlight Session “Nature as a role model – Maximum resource efficiency in the chemical industry”												

■ process innovation
 ■ pharma innovation
 ■ green innovation
 ■ digital innovation
 ■ lab innovation
 ■ hydrogen innovation











Opening hours for visitors: Monday – Thursday: 9:00 – 18:00 h, Friday 9:00 – 16:00 h

Alliance	Concorde	Facette	Kontrast	Max-Buchner-Auditorium
4.C	4.C	3.Via	3.Via	DECHEMA-Haus
#hydrogen: Production and hyperscaling Analysis and controlling for hydrogen technologies	#hydrogen: PtX processes and applications Chances and challenges of Power-to-X in Argentina, Morocco and South Africa	#pharma: ATMP equipment and processes Manufacturing advanced (bio) pharmaceuticals I		
#hydrogen: Production and hyperscaling Alternative feedstocks and hydrogen carriers	#hydrogen: PtX processes and applications Kopernikus P2X – Exploration, validation and implementation of Power-to-X concepts	#pharma: ATMP equipment and processes Manufacturing advanced (bio) pharmaceuticals II		
#process: International Powder and Nanotechnology Forum 2024	#hydrogen: Transport and storage Hydrogen flagship project TransHyDE – Implementing hydrogen	#pharma: Biopharma production PAT in (bio) pharmaceutical production	#green: Climate-neutral production Electrochemical Synthesis of Biogenic Platform Chemicals – ElectroSyn	#process: Safety and security ISSA Symposium – Hazardous substances in maintenance works: risks and prevention I
#process: International Powder and Nanotechnology Forum 2024	#hydrogen: Transport and storage Hydrogen flagship project TransHyDE – Aspects of using hydrogen	#green: Industrial water Water management in the pharmaceutical industry	#green: Circular economy Monomer Recycling of PET and polyester textiles	#process: Safety and security ISSA Symposium – Hazardous substances in maintenance works: risks and prevention II
#pharma: International Powder and Nanotechnology Forum 2024	#hydrogen: Production and hyperscaling H2Mare – Decentral offshore hydrogen and its derivatives	#pharma: Biopharma production Single-use technologies for biopharmaceutical production		#process: Safety and security ISSA Symposium – Hazardous substances in maintenance works: risks and prevention III
#pharma: International Powder and Nanotechnology Forum 2024	#green: Climate-neutral production Engaging industrial transformation in NW Europe – 3C-Vacs	#pharma: Biopharma production Sterile (bio) pharmaceutical manufacturing		
#green: Circular economy Bridging ecologic solutions with economic science and chemistry – Biotechnology in a circular economy	#hydrogen: PtX processes and applications Overarching PtX-Concepts – Models, economic analysis and cost optimization	#pharma: Supply chain and logistics Tracing, tracking, and packaging in biopharmaceutical production		
#green: Circular economy Bridging ecologic solutions with economic science and chemistry – End of life solutions to close the loop	#hydrogen: PtX processes and applications Advancements in material optimization for various Power-to-X-processes	#pharma: Supply chain and logistics Cooling and freezing in biopharmaceutical production		#green: Climate-neutral production Innovative solutions for the defossilisation of chemical process industry – A bioeconomy workshop
	#hydrogen: PtX processes and applications Innovations in bio-based Power-to-X and renewable refinery processes	#pharma: Supply chain and logistics Integrity of connections and containers for biopharmaceutical production		

Stage	Lab Innovation Stage	Siemens Digital Innovation Stage	GEA Process Innovation Stage	EY Green Innovation Stage	Siemens Hydrogen Innovation Stage	Zeta Pharma Innovation Stage	Side Events
Hall	12.0, B35	11.0, E43	9.0, F77	6.0, D20	6.0, D76	4.1, B61	
Topic 1	#lab: Sustainable facilities and operations	#digital: Process industry transformation	#process: Safety and security	#green: Climate-neutral production	#hydrogen: Transport and storage	#pharma: Supply chain and logistics	9:00 h AIRA Robotics Challenge Hall 11.1, Stand A5 (all day) 10:00 h The SEFA Theatre Hall 12.0, Stand E70 11:00 h Automation in Dialogue Hall 11.0, Stand A43
Topic 2	#lab: Sustainable facilities and operations	#digital: Process industry transformation	#process: Electrified and flexible	#green: Climate-neutral production	#hydrogen: (Global) Ecosystem	#pharma: Supply chain and logistics	17:30 h ACHEMA Happy Hour Agora & Freigelände 2
Topic 1	#lab: Sustainable facilities and operations	#digital: Process industry transformation	#process: Mixing and separation	#green: Climate-neutral production	#hydrogen: (Global) Ecosystem	#pharma: On the road to pharma 5.0?	
Topic 2	#lab: Advanced bioanalytics and pharma	#digital: Modular production	#process: Process engineering	#green: Climate-neutral production	#hydrogen: PtX processes and applications	#pharma: Biopharma production	
Topic 1	#lab: Digitalised, miniaturised, automated	#digital: Modular production	#process: Sustainable production systems	#green: Sustainability in production	#hydrogen: Production and hyperscaling	#pharma: On the road to pharma 5.0?	9:00 h , AIRA Robotics Challenge Hall 11.1, Stand A5 (all day) 10:00 h The SEFA Theatre Hall 12.0, Stand E70 11:00 h Automation in Dialogue Hall 11.0, Stand A43
Topic 2	#lab: Digitalised, miniaturised, automated	#digital: AI and data analytics	#process: Sustainable production systems	#green: Sustainability in production	#hydrogen: Production and hyperscaling	#pharma: On the road to pharma 5.0?	16:00 h , India Day Portalhaus, Ebene 1, Transparenz 1 17:15 h Japanese Reception Hall 4. C, Alliance 17:30 h ACHEMA Happy Hour, Agora & Freigelände 2 19:00 h Frankfurt Evening in the Römer (special invitation)
Topic 1	#lab: Digitalised, miniaturised, automated	#digital: AI and data analytics	#process: Sustainable production systems	#green: Sustainability in production	#hydrogen: Production and hyperscaling	#pharma: On the road to pharma 5.0?	
Topic 2	#lab: Link with production and quality	#digital: AI and data analytics	#process: Smart engineering and operations	#green: Circular economy	#hydrogen: (Global) Ecosystem	#pharma: Biopharma production	
Topic 1	#lab: Digitalised, miniaturised, automated	#digital: Modular production	#process: Process engineering	#green: Circular economy	#hydrogen: (Global) Ecosystem	#pharma: On the road to pharma 5.0?	9:00 h AIRA Robotics Challenge Hall 11.1, Stand A5 (all day) 10:00 h The SEFA Theatre Hall 12.0, Stand E70 11:00 h Automation in Dialogue Hall 11.0, Stand A43
Topic 2	#lab: Digitalised, miniaturised, automated	#digital: Modular production	#process: Food processing and technology	#start-up: Start-up slam	#hydrogen: Transport and Storage	#pharma: Biopharma production	11:00 h/15:00 h Events for pupils, Portalhaus, Ebene 1, Transparenz 1 17:00 h Ceremony ACHEMA Start-up Award Hall 6.0, EY Green Innovation Stage 17:30 h ACHEMA Happy Hour Agora & Freigelände 2
Topic 1	#lab: Link with production and quality	#digital: Process industry transformation	#process: Sustainable production systems	#start-up: Start-up Award	#hydrogen: Production and hyperscaling	#pharma: ATMP equipment & processes	
Topic 2	#lab: Sustainable facilities and operations	#digital: Modular production	#process: Safety and security	#start-up: Start-up Award	#hydrogen: Transport and storage	#pharma: Sustainable production & packaging	
Topic 1	#lab: Digitalised, miniaturised, automated	#digital: Process industry transformation	#process: Electrified and flexible	#green: Climate-neutral production	#hydrogen: (Global) Ecosystem	#pharma: On the road to pharma 5.0?	9:00 h AIRA Robotics Challenge Hall 11.1, Stand A5 (all day) 10:00 h The SEFA Theatre Hall 12.0, Stand E70 10:00 h Career Day Foyer 5.1/6.1
Topic 2	#lab: Digitalised, miniaturised, automated	#digital: Process industry transformation	#process: Smart engineering and operations	#green: Industrial biotech	#hydrogen: Production and hyperscaling	#pharma: Sustainable production & packaging	11:00 h Automation in Dialogue Hall 11.0, Stand A43
Topic 1	#lab: Advanced bioanalytics and pharma	#digital: Process industry transformation	#process: Safety and security	#green: Industrial biotech	#hydrogen: Production and hyperscaling	#pharma: Biopharma production	18:00 h ACHEMA Party Forum (for exhibitors and press)
Topic 2	#lab: Link with production and quality	#digital: Process industry transformation	#process: Food processing and technology	#green: Industrial biotech	#hydrogen: Transport and storage	#pharma: Biopharma production	
Topic 1	#lab: Sustainable facilities and operations	#digital: Process industry transformation	#process: Food processing and technology	#green: Climate-neutral production	#hydrogen: Production and hyperscaling	#pharma: On the road to pharma 5.0?	9:00 h AIRA Robotics Challenge Hall 11.1, Stand A5 (all day) 11:00 h Automation in Dialogue Hall 11.0, Stand A43
Topic 2	#lab: Sustainable facilities and operations	#digital: Process industry transformation	#process: Process engineering	#green: Industrial water	#hydrogen: PtX processes and applications	#pharma: On the road to pharma 5.0?	11:00 h Event for pupils, Portalhaus, Ebene 1, Transparenz 1



Public transport

-  Line S3, S4, S5, S6
-  Underground Line U4
-  Line 16 Offenbach – Ginnheim
-  Line 17 Rebstockbad – Neu-Isenburg
-  Line 50
-  Express bus airport – Entrance Galleria
-  Shuttle bus Car Park Rebstock
-  Taxi
-  Tram stop/Bus stop public transport
-  Access to car park

Achema Start-up Award

Hall 6.o, EY Green Innovation Stage

» Wednesday, 12 June 2024, 14:30 h

Innovations from and for the process industry – that's what the founders who are presenting themselves to an international audience for the fourth time at the ACHEMA Start-up Award stand for. Almost 40 ideas, concepts and business plans entered the race this year. At ACHEMA, the ten teams that most impressed the jury of experts will present their technologies and solutions in the Start-up Area (Hall 6.o, Stand C74) and at the Start-up Award pitches on 12 June 2024. And at the end of the session, you'll see who gets to take home the prize money of 15,000 euros.



These start-ups are bringing innovations to the process industry

- » Biosimo
- » ChemInnovation
- » co₂ol catalyst
- » eco:fibr
- » Graph-Co
- » Inline Process Solutions
- » LABMaiTE
- » Nanolope
- » PHABIOC
- » re.solution

Initiators



Start-up Area

Hall 6.o

Young, innovative, different: the companies of tomorrow present their innovations in the Start-up Area and welcome the global process industry to their booths. As one of the central anchor points in the "Research and Innovation" exhibition group, the start-ups here show how science and technology, coupled with ambition and perseverance, can be turned into new services, profitable products and the latest processes. The Start-up Area is thus the central meeting point for young companies and innovation leaders in search of synergies and cooperation, as well as for all participants interested in new trends.

Career Day

Foyer 5.1/6.1

» Thursday, 13 June 2024, from 10:00 h

Do you realise how highly sought-after you are?

The baby boomer generation is leaving the labour market, skilled workers are becoming increasingly scarce, and companies are competing internationally in the search for qualified employees. That much is well known. But are you also aware that most recruitment worldwide – namely 57% – is planned in the engineering sector? So the prospects for professionals looking to change jobs are excellent. However, a career change naturally also raises questions: Which position is perfectly tailored to my profile? Does a company really suit me? How can I act proactively instead of relying solely on headhunters?



Thursday, 13 June 2024, is Career Day at ACHEMA: take this opportunity to get in touch with top recruiters who will give you individual advice on your career. Thanks to the on-site presence of exciting potential employers, you will come into direct contact with company representatives and HR managers – and can find out first-hand about vacancies, job profiles and career opportunities as well as the company itself. Regardless of whether you want to start your career or are planning your next professional move: your attendance at the ACHEMA Career Day is sure to help you progress.

Ideal for your career prospects

At Career Day, ACHEMA companies showcase themselves in their entirety – as a combination of products, brands, personal interaction and an abundance of captivating moments. As well

as experiencing the most innovative technology and extensive networking, you will gain profound insights into the companies themselves. What makes Career Day truly exceptional is its ability to offer a diverse spectrum of opportunities, allowing attendees to engage with potential employers in an environment where focus and openness converge. Experience shows that an informal technical discussion can surprisingly quickly turn into a successful job interview.

Who belongs here?

If you're on the lookout for the ideal job, want direct contact with companies and would like to find out more about careers, then the ACHEMA Career Day is ideal for you. It targets engineers, technical specialists and managers. The offer is aimed primarily at young professionals (up to 3 years of experience) and professionals (>3 years of experience) but is also suitable for graduates and career starters.

What is the Job Board?

The Job Board is a specially designed wall in the Career Day activity area in Foyer 5.1/6.1, where the job offers of all participating companies at ACHEMA are displayed. You can of course also find these job offers at www.achema.de.

How does the individual career counselling work?

In consultations lasting around 20 minutes with an HR expert, you have the opportunity to ask your own personal career questions and get advice. If you wish, you can bring your application portfolio with you to gain a better insight into your career and make any improvements to your documents. Please note: it is



Presented by: VDI Verlag – your strong partner

A leading media company, strong brand and trustworthy advocate for engineers, technical specialists and managers: VDI Verlag supports its target group competently in their professional activities and career development and draws on over 20 years of experience in successfully organising recruiting events.

essential to register for the career counselling session. There will probably not be sufficient guaranteed appointments for a free consultation for all those interested. Registration will therefore be on a first-come, first-served basis. Appointments will be allocated on site on 13 June 2024 from 10:00 h.

What does the lecture forum offer?

An all-day supporting programme kicks off at 10:00 h in the Foyer 5.1/6.1, which you should definitely plan in for your visit. As well as diverse employer pitches, it offers informative keynote speeches on jobs and careers, such as engineer salaries or the impact of AI on the recruiting/application process.

ACHEMA Study Courses

Students from technical colleges, higher education institutions and universities (including PhD students) can experience the full range of process technology at ACHEMA, supported by DECHEMA. They can visit ACHEMA free of charge and apply for a travel allowance if they register as a group in advance and are accompanied by a lecturer from their university who will provide technical support for the group at ACHEMA.

For the latest information and to register for the study course, visit: www.achema.de/study-courses.

Registration is open until 3 May 2024.

A Science Rally is being held throughout ACHEMA in Hall 6.0 for students and pupils! You can find more information at the hydrogen flagship projects stand (D75).

Events for School Pupils

Portalhaus, Level 1,
Room Transparenz 1

» Wednesday, 12 June 2024, 11:00 – 12:30/15:00 – 16:30 h

Young people ask – industry and research answer: What can we do about resource scarcity and climate change?

Join us as we ask the most pressing questions on resource scarcity and climate change, with leading experts from industry and research providing first-hand insights. Find out how innovation and collaboration can overcome the challenges of our future. Feel free to submit your questions in advance to dechemax@dechema.de, join the discussion and become part of the solution-finding process.

Portalhaus, Level 1,
Room Transparenz 1

» Friday, 14 June 2024, 11:00 h

Something to do with the process industry? – Meet and ask young experts about study and career opportunities in the process industry

What exactly is “the process industry”? Who works there, how does everyday working life look, and what qualifications do you need to get started? In a one-hour information session, students of process engineering, chemistry and biotechnology will talk about their day-to-day studies and answer questions from the audience. In addition, young professionals will describe their experiences of starting out in working life and give tips on how to kick off a career successfully.



School groups from secondary schools (recommended from year 10) can visit ACHEMA free of charge as a registered group accompanied by a subject teacher. Registration can be made at www.achema.de/study-courses

Symposium "Hazardous substances in maintenance work: risks and prevention"

DECHEMA-Haus, Max Buchner Auditorium
(Access from the exhibition grounds, rear of Hall 6)

» Tuesday, 11 – Wednesday, 12 June 2024

The symposium is hosted by the International Section of the ISSA for Prevention in the Chemical Industry. You can look forward to two days full of presentations and discussions by and with experts on the topic of maintenance and hazardous substance management.

The event aims to raise awareness of the dangers of everyone involved in maintenance work – especially when hazardous substances may be present in a system, used by maintenance personnel or created or released during the activities.

Registration and information

Participation in the event is free of charge. Tickets for the event, which are also valid for visiting ACHEMA, will be sent to you as a voucher by email shortly before the event. The number of participants is limited, and places will be allocated in the order in which registrations are received.

Up-to-date information, as well as the full programme and on-line registration, can be found at www.ivss-chemie.de



The stand of the Berufsgenossenschaft Rohstoffe und chemische Industrie (BG RCI – German Employers' Liability Insurance Association of the Chemical Industry) focuses this time on "carcinogenic hazardous substances". Risks in the context of in-house transport will be illustrated using a forklift simulation with a corresponding obstacle course. The ventilation model impressively illustrates the principles of industrial extraction in two scenarios. The limit value cycling exhibit illustrates the measures and effort required to comply with threshold values when using hazardous materials.

Hall 11.0, Stand A71

If you have any questions about the symposium, please contact issa.chemistry@bgrci.de

All presentations and discussions will be simultaneously interpreted into English and German.

Automation in Dialogue

Hall 11.0, A43

» Monday, 10 – Friday, 14 June 2024

ARC Advisory Group, NAMUR and ZVEI are once again organizing a joint forum at ACHEMA under the name "Automation in Dialogue". On all five days of the exhibition there will be varied lectures and discussions on the important topics of automation technology in the process industry.

On Tuesday topics such as Flexibility & Interoperability are the focus. Wednesday will be all about Advanced Physical Layer (APL). On Thursday, the topic will be Data Spaces & Sustainability. The Monday of the trade show and the conclusion on Friday will offer important cross-sectional topics such as Safety & Digitalisation.



In addition to the contributions in German, there will also be sessions in English, which are marked accordingly in the programme.

Further information can be found at: www.achema.de/side-events

Strategies for a sustainable green chemical industry

Linking ecological solutions with economics and chemistry

Hall 4.C, Room Alliance

» Thursday, 13 June 2024, 10:00 – 17:00 h



This event on the circular economy is organised by the German Association for Chemistry and Economic (VCW). VCW serves as a forum that provides a comprehensive platform for industry and academia to come together, discuss relevant topics, share ideas, and showcase state-of-the-art technologies, including success stories from both industry and science.

» **Session 1: 13 June 2024, 10:00 – 12:30 h**

Biotechnology in the circular economy

The morning will focus on the impact of the bioeconomy on the climate goals of companies and countries, as well as the associated costs of achieving a climate-neutral transformation. It will explore the role that end consumers and industry can play in financing this transformation and examine the necessary political framework conditions for promoting social acceptance. Distinguished industry and finance experts are invited to engage in a comprehensive discussion on the opportunities and challenges presented by a bioeconomic transformation.

» **Session 2: 13 June 2024, 14:00 – 17:00 h**

End-of-life solutions for the circular economy

The phasing out of fossil fuels and the transition to circular solutions for food, fuels and chemicals are key part of the transformation towards resource and climate-friendly solutions that are widely discussed in politics, companies and non-governmental organisations. The second part of the symposium is dedicated to the prerequisites for chemical recycling, its effects and the timetables for implementation. The session will focus on the WEEE markets and the recycling challenges of highly functional and complex material compositions in consumer electronics.

Further information can be found at:
www.achema.de/side-events

PIDMIC 3.0 – Process Industry Data Model Integration Congress 3.0

Hall 11.0, Room Korall

» Tuesday, 11 – Wednesday, 12 June 2024



A first step towards improved harmonisation, the Process Industry Data Model Integration Congress (PIDMIC), organised by DEXPI, contributes to the overarching goal of improving the integration of data models in the process industry. PIDMIC serves as a collaborative platform for industry experts, researchers and software providers to come together to drive innovation and standardisation in data management.

The two-day congress, held as part of the ACHEMA congress, will address the latest developments in data integration and focus on practical applications, standardisation efforts and technological breakthroughs.

Join the community in shaping the future of data-driven processes in the sector and immerse yourself in specific challenges and solutions for our industry.

Attendees can look forward to interesting presentations, panel discussions and networking opportunities, all aimed at advancing the discussion on standardised data exchange and its critical role in shaping the future of the process industry. Whether you're a seasoned industry veteran or a newcomer interested in the latest trends and technologies, PIDMIC offers valuable insights and perspectives to help your organisation advance in today's digital landscape.

All ACHEMA attendees are also invited to visit the **DEXPI stand** in **Hall 11.0, Stand E73**, where the latest developments in data exchange standards and solutions will be presented. Further information can be found at:
www.achema.de/side-events

Flow Chemistry Symposium

Hall 8.1, Symmetrie 3

FLOW CHEMISTRY
PAVILION

» Wednesday, 12 – Thursday, 13 June 2024

During this exciting symposium, participants will immerse themselves in the field of Flow Chemistry under the guidance of renowned scientists and industry experts. Sessions will feature compelling case studies and best practices focusing on the breakthrough capabilities of continuous manufacturing technology.

- 1. Control over product quality:** discover how continuous manufacturing ensures unprecedented control over product quality. Discover real-life examples that show how a seamless flow of chemical processes minimises variation and results in consistent and high-quality pharmaceuticals.
- 2. Cost efficiency:** gain insights into the economic benefits of continuous manufacturing. Discover how streamlined processes and reduced downtime lead to significant cost savings and make a compelling case for adopting this production approach.
- 3. Sustainability:** examine the role of continuous manufacturing in the pharmaceutical industry's sustainability goals. Learn how flow chemistry minimises waste, reduces energy consumption and contributes to a greener production process.
- 4. Accelerated timelines:** learn how continuous flow manufacturing impacts drug production times. See how the continuous flow model significantly shortens the time from development to market, promoting a more agile and responsive pharmaceutical industry.

This instructive symposium promises not only to inform but also to inspire. Participants will leave the event with a comprehensive understanding of how Flow Chemistry and continuous manufacturing are reshaping the pharmaceutical landscape and how they can leverage these innovations for their professional growth and success. This year, you will find the Flow Chemistry Pavilion – the hotspot of the [#flowcommunity – in Hall 9.0, Stand E64](#).

Further information can be found at:
www.achema.de/side-events

The SEFA Theatre

Hall 12.0, E70



» Monday, 10 – Friday, 14 June 2024

The Scientific Equipment and Furniture Association (SEFA) is organising “The SEFA Theatre” in Hall 12.0 at ACHEMA 2024. SEFA is an international trade association with more than 160 members from almost 30 countries. Its members are the leading manufacturers, architects and laboratory planners with the expertise to design, furnish and equip the safest laboratory buildings in the world. SEFA's main task is to create “Laboratory Grade” standards for the laboratory furniture and equipment manufactured by its members. The SEFA standards can be found at www.sefalabs.com.

SEFA and its members will share their expertise and industry knowledge with ACHEMA 2024 participants and encourage discussion. Among others, the SEFA Theatre will cover the following topics:

- » Global insights in laboratory design: different countries, different mindsets, different priorities, one goal – to design high-calibre, sustainable and flexible laboratories
- » Sustainability in the laboratory
- » Further digitisation of the laboratory infrastructure

Would you like to exchange ideas with SEFA members and the SEFA office in addition to the presentations? Then visit the SEFA Networking Lounge right next door.



Monday 10 June 2024		
10:00 – 10:30	SEFA Year in Review – A look back at the year’s highlights and plans for the future	David Sutton, SEFA
10:30 – 11:00	DURCON Epoxy & Phenolic Work Surface Solutions	Keelan Jackson, DURCON
11:00 – 11:30	Bring on the Right Coal – The Invisible Power in Modern Laboratories Discover the hidden facets of activated carbon in a lecture that illuminates the Significance and versatility of this remarkable material in the world of science.	Florian Köhler, SCAT Europe
14:30 – 16:00	Different countries, different thinking, different priorities for the same goals in laboratory design – SEFA Advisory Board Panel Discussion	David Sutton (Moderator), SEFA Leslie Ashor, HOK Brian Richard, Kirksey Architecture Dario Tonelli, Tonelli Maximillian Englisch, Waldner Laboreinrichtungen
Tuesday 11 June 2024		
10:00 – 10:30	Define Your Standard – Performances of Technical Ceramic Material This Seminar will review the main characteristics of MONOLITE IPERGRES®, mechanical & chemical features and benefits. Selection of the best solution based on working condition and material performances.	Alberto Falasconi, LP
10:30 – 11:00	New Generation Chemical Storage Cabinets – Minimal Footprint, Maximum Versatility	Sascha Kunkel, Asecos
11:00 – 11:30	Materials Matter: The Crucial Role of Choosing the Right Worktop Surfaces	Hubertus Burger-Scheidlin, Fundermax
14:30 – 15:00	Elevating Sustainability to a Non-negotiable Priority: Insights from TRESPA A Leading Manufacturer of High Performing Surfaces	Valentina Di Giacomo, TRESPA Ingo Sternitzke, TRESPA
15:00 – 15:30	Seating Solution for the Lab Environment – Ergonomics, Requirements and Design	Karin Buob, BIMOS
15:30 – 16:00	Digitising laboratory infrastructure	Moriz Walter, Waldner Laboreinrichtungen
Wednesday 12 June 2024		
10:00 – 10:30	SEFA Lab of the Year Competition This seminar will present a look back at the history of this Global Awards Program, celebrating its honourees and providing an overview of the 2024 Competition	David Sutton, SEFA
10:30 – 11:30	Global Lab Design Trends – Without Borders The seminar will bring together lab planners and building owners to discuss how lab design varies from country to country, yet all have a common goal – To create a world class, sustainable flexible lab. The presentation will focus on countries with very different specification requirements – highlighting how those needs were met	Dawn Jacobs (Moderator), BICASA
14:30 – 16:00	Current Trends in Sustainable Lab Design – Davos Style Panel Discussion featuring SEFA Advisory Board Members	David Sutton (Moderator), SEFA Leslie Ashor, HOK Brian Richard, Kirksey Architecture Dario Tonelli, Tonelli Alexander Biller, Waldner Concepts + Innovations
Thursday 13 June 2024		
10:00 – 10:30	SEFA Lab Grade Standards – SEFA spells Safe This seminar will explore all of the “Lab Grade” Standards developed by SEFA to ensure safe laboratory environments	David Sutton (Moderator), SEFA
10:30 – 11:00	Battery Powered Lab Devices – Safety Precautions & Solutions	Marius Zürn, Asecos
11:00 – 11:30	Materials Matter: The Crucial Role of Choosing the Right Worktop Surfaces	Carlos Ferreira, Fundermax
14:30 – 14:00	Improving Laboratory Safety with the Right Safety Shower Solution This seminar will present a decision model for selecting the right safety shower for the modern lab, including practical take-aways regarding regarding safety optimisation in your laboratory.	Søren Mundt Sørensen, BROEN-LAB
15:00 – 15:30	Modern laboratory solutions for projects throughout the world How a prominent South Korean based lab furniture manufacturer supplies the world.	Jorge Santos, CHC Lab International
15:30 – 16:00	The Value of SEFA Membership	David Sutton, SEFA
Friday 14 June 2024		
10:00 – 14:00	Lab Tour (location tba) for SEFA members and invited guest	

AIRA Robotics Challenge

Hall 11.1, Stand A5



» Monday, 10 – Friday, 14 June 2024



This year, the final of the AIRA Robotics Challenge will once again be part of ACHEMA, pushing the boundaries of robotics and promoting innovation. The focus this time shifts to teleoperation, i. e. the use of systems that enable remote control and herald a new era where machines effortlessly perform tasks to assist people in their everyday tasks.

The integration of teleoperation offers the opportunity to remotely investigate unknown and, in the worst case, dangerous scenarios in the chemical and pharmaceutical industries. With the advent of teleoperated technology, the use of mobile robotics continues to evolve, offering a dynamic solution for virtually any situation imaginable.

The five finalist teams will demonstrate live at ACHEMA how they remotely control their robots to perform their tasks in mock scenarios of a chemical plant or laboratory. In doing so, they will demonstrate to the ACHEMA community the full spectrum of what is technically feasible.

This AIRA Challenge is part of an ambitious initiative driven by a consortium of BASF, Bayer, Boehringer Ingelheim and Wacker Chemie under the auspices of NAMUR. The expectation behind this challenge is simple: teleoperation will multiply the added value of mobile robotics.

Further information on the competition and the participating teams can be found at www.aira-challenge.com.

Information Platform for Plant Engineers

Hall 8.1, Symmetrie 3

» Tuesday, 11 June 2024, 10:30 – 12:30 h



The “VDI Information Platform for Plant Engineers” is an initiative of the VDI Society for Process and Chemical Engineering (VDI-GVC), which deals with practice-oriented problems of production engineers relating to manufacturing plants.

Plant engineers are systemically relevant – not least in strengthening Germany as a production location in times of economic challenges in the chemical industry. They guarantee smooth work processes and bear great responsibility for their plant and safe and clean production with the best possible plant availability. They also guarantee the production of important products in the chemical industry with a wide range of

applications, e. g. to combat the pandemic or implement the energy transition. After all, manufacturing substances and components for renewable energies would not work without plant engineers – true to the motto “Nothing works without us”.

The concept, which is established at the major chemical sites in Germany and facilitates a practice-orientated exchange of experience within the region, will be presented and moderated by experts. Short presentations will discuss current tasks facing production engineers, and exciting exhibits will invite participants to try them out. The event will be held in German and is free of charge for ACHEMA ticket holders.

International Powder and Nanotechnology Forum (IPNF) 2024

Hall 4.C, Room Alliance

» Tuesday, 11 – Wednesday, 12 June 2024



IPNF has been promoting technology exchanges between Germany and Japan in a variety of industries, including the chemical and pharmaceutical industries, since 1998. The event is a joint initiative of the Society of Chemical Engineers, Japan (SCEJ) and DECHEMA and will also be held at INCHEM 2025 in Tokyo.

This forum consists of four sessions in the following subject areas:

- » Nanotechnology (11 June 2024, 9:45 – 12:00 h),
- » Simulation (11 June 2024, 13:45 – 16:15 h),
- » Pharmaceutical process engineering and materials (12 June 2024, 9:45 – 12:00 h),
- » Drug delivery systems with nanotechnology (12 June 2024, 13:45 – 16:20 h).

Highlights of this year's IPNF include the following plenary lectures:

- » **Tuesday, 11 June 2024, 9:50 – 10:20 h**
Aggregation and adhesion behavior characterization and control of fine and nano particles
Prof. Hidehiro Kamiya,
Tokyo University of Agriculture and Technology, Japan
- » **Tuesday, 11 June 2024, 10:20 – 10:50 h**
Trends and Future of Zeolites and Metal Organic Framework (MOF)
Dr. Ulrich Müller, BASF
- » **Wednesday, 12 June 2024, 9:50 – 10:20 h**
Powder- and Nano-Technology for Patient Centric Drug Therapy
Prof. Hirofumi Takeuchi, Gifu Pharmaceutical University, Japan

Participation in the IPNF is free for allACHEMA visitors with a valid day or season ticket. Additional registration is not required. The conference language is English.

Further information can be found at:
www.achema.de/side-events

Moderation:

Christian Poppe, Covestro, Leverkusen
Alba Mena Subiranas, BASF, Ludwigshafen
Ljuba Woppowa, VDI, Düsseldorf

Programme:

Intelligent maintenance and energy optimisation for industrial plants

- » Digital twin and digital data chain
- » Smart glasses: use of video support as an expert tool
- » Robots and drones in maintenance
- » Job description and presentation of the VDI production engineer certificate course

Further information can be found at:
www.achema.de/side-events

Poster exhibition

- » **Tuesday, 11 June 2024 and Wednesday, 12 June 2024, each at 12:00 – 13:45 h**

Hall 4.C, Room Alliance

The IPNF poster exhibition offers points of contact for international exchange between science and applied research in a compact form and thus business opportunities for a whole range of industries. On 12 June 2024 at 16:05 h, a German-Japanese jury will present the Best Poster Award.

Visitor Services

Opening Hours, Entrance Fees

Opening hours	Admission tickets	EUR
» Monday, 10 June to Thursday, 13 June 2024 9:00 – 18:00 h for visitors 8:00 – 19:00 h for exhibitors	Season tickets (non-transferable)	
	for employees in industry, trade and commerce	90.00
» Friday, 14 June 2024 9:00 – 16:00 h for visitors 8:00 – 19:00 h for exhibitors	for employees in universities, public authorities, and associations	60.00
	reduced season ticket for students and trainees, pupils, pensioners, unemployed and severely disabled persons	35.00
	Day tickets	
	Day ticket	40.00
	reduced day ticket for students and trainees, pupils, pensioners, unemployed and severely disabled persons	9.00
	All tickets entitle the holder to visit the exhibition and the lecture program. Lost tickets cannot be replaced.	
	Please order permanent and day tickets at www.achema.de/visitors	

ORDERING SEASON AND DAY TICKETS

You can conveniently order a season or day ticket online (www.achema.de/visitors).

Holders of reduced-price day tickets for students, pupils, trainees, the unemployed, the severely disabled and pensioners are requested to present the corresponding ID or proof of eligibility without being asked to do so upon entry.

Advance orders for season and day tickets are only possible for quantities of at least 20 tickets (orders to: tageskarten@achema.de).

To register “Study Course” participants, please see p. 27.

Payment for season and day tickets ordered online can be made by credit card (American Express, MasterCard, VISA) or PayPal. After completing your order, you will receive your personal print@home ticket and mobile ticket for ACHEMA.

CANCELLATIONS

Season and day tickets cannot be returned or refunded.

ENTRANCES

- » City (tram/streetcar and subway stop “Festhalle/Messe”)
- » Hall 3 (multi-storey car park and Rebstock large parking lot)
- » Torhaus (S-Bahn urban rail stop “Frankfurt/Main Messe”)
- » Galleria (multi-storey car park and Rebstock large parking lot)
- » Portalhaus (multi-storey car park and Rebstock large parking lot)

VISITOR INFORMATION

Tel.: +49 69 7564-750

Email: visitor@dechema.de

Internet: www.achema.de/visitors (incl. FAQ)

LECTURE PROGRAM

Tel.: +49 69 7564-125

Email: lecture@dechema.de

Internet: www.achema.de/congress

Congress office until 7 June 2024

DECHEMA e.V., Conferences

Theodor-Heuss-Allee 25, 60486 Frankfurt am Main

Business hours:

Mon – Thu: 8:30 – 17:00 h

Fri: 8:30 – 15:00 h

Congress office and lecture management from 10 June 2024

Hall 4.0

Tel.: +49 69 7564-125

Business hours:

Mon – Thu: 8:00 – 18:00 h

Fri: 8:00 – 14:00 h

HOTEL RESERVATION

Hotel reservations for visitors to ACHEMA 2024 are organised by Tourismus+Congress GmbH Frankfurt am Main (TCF).

Online reservation:

www.frankfurt-tourismus.de/hotels

Contact for room inquiries

Tel.: +49 69 24 74 55-400

Email: info@infofrankfurt.de

Tourist Information Frankfurt am Main (Central Station), Reception Hall

Opening hours:

Mon – Fri: 8:00 – 16:00 h

Sat + Sun: 9:00 – 16:00 h

Travel agencies and contact addresses of international tour operators can be found at www.achema.de/travel-offers.

SERVICE FACILITIES

Hall plans and maps showing the service facilities are available at the entrances. These are also available in the app.

ATMs

- » Hall 4.1, foyer
- » Torhaus entrance, S-Bahn terminal
- » Torhaus, Service Center, Level 3 (next to DHL service)
- » Galleria entrance, Hall 9.T
- » Portalhaus entrance, Hall 11

Interpreting service

BBK-Gesellschaft für moderne Sprachen mbH

Tel.: +49 7274 702770

Email: info@bbklanguages.com

Lufthansa

Lufthansa check-in and baggage service

in the City entrance, level 0

Tel.: +49 69 86 799 799

Opening hours:

12 – 13 June : 8:00 – 17:00 h

14 June : 8:00 – 16:00 h

Shopping facilities

- » City entrance, trade fair shop
- » Hall 4.0
- » Hall 4.1 foyer, trade fair shop
- » Torhaus, Service Center, Level 3
- » Hall 9.0, foyer

CATALOGUE

The printed catalogue will be published at the start of the event and will be available free of charge at the entrance areas of the exhibition grounds. Available only as long as stocks last. The contents are summarised in one volume and include:

- » Hall overview and site plan
- » Alphabetical list of exhibitors
- » Product brand directory

VISA

Visitors from abroad requiring a visa to enter the Federal Republic of Germany can request a personal letter of invitation on the Internet at www.achema.de/visa-invitation. However, DECHEMA is generally unable to assume travel or accommodation costs.

Due to the high demand for visa appointments, a longer waiting time is expected at all German embassies.

When planning your trip, please take this into account and make an appointment with your embassy as early as possible!

Email: visa@achema.de



Transport Connections

By car:

The multi-storey parking lot and the parking lots on the Rebstock grounds are easily accessible from the motorway (day ticket for multi-storey parking lot/parking lots: € 21.–/€ 17.–). During AACHEMA, a free shuttle bus runs from there to the exhibition grounds (Galleria, Portalhaus Hall 11 and Hall 3 entrances) approximately every 5 – 10 minutes.

SHUTTLE BUS OPERATING HOURS

9 June: 7:00 – 22:00 h to the West Gate/South Gate
 10 – 13 June: 7:30 – 23:00 h
 14 June: 7:30 – 2:00 h
 (last departure in the direction of Rebstock)

Satnav entry: “Messeparkhaus Rebstock”
 (Rebstock multi-storey car park)

» Site map on page 24

FRANKFURT AM MAIN ENVIRONMENTAL ZONE

Since 1 January 2012, only vehicles displaying a green sticker have been allowed to enter the environmental zone. Vehicles from Germany and abroad with the corresponding emissions groups can obtain the required environmental badge at www.umwelt-plakette.de.

Access to the exhibition grounds is possible for vehicles without an emissions sticker via the West Gate and the North Gate. These can be reached via the A5 and the A648, exit Rebstock or via the Katharinenkreisel (roundabout). The Rebstock multi-storey parking lot can also be reached without an emissions sticker via the Rebstock exit.

CHARGING STATIONS

We can reserve a parking space with a power outlet for you on request. The availability of charging stations is still limited and the network is under construction, so please register early: emobil@messefrankfurt.com

By air:

There are direct flights to Frankfurt am Main daily from many cities and industrial centres. The fastest connections from the airport to the Frankfurt exhibition grounds are as follows:

- » S-Bahn urban rail lines S8 and S9 from the regional train station to the main train station.
- » By airport express bus from the airport Terminal 1 (arrivals level, charter bus lane stop) via Terminal 2 (bus stop in Exit E area) to the exhibition grounds (entrance Portalhaus Hall 11) and back.

The single fare is € 7.50

Operating times airport » trade fair grounds:

10 – 14 June: 8:00 – 12:00 h at 10-minute intervals

Operating times airport » trade fair grounds:

10 – 14 June: 14:00 – 19:00 h at 10-minute intervals

SPECIAL RATES OFFERED BY LUFTHANSA GROUP AIRLINES

The Lufthansa Group Airlines connect people – every day, throughout the world. The global route network of Austrian Airlines, Lufthansa, SWISS, Brussels Airlines and Eurowings offers optimal connection and combination options. So you benefit from fast and direct flight connections to Frankfurt am Main for AACHEMA 2024.

With the event code **DEAUEAC**, you can access the booking platform via the link www.lufthansa.com/de/en/meetings-and-events-delegates. Concessions are displayed automatically.

Please note: Pop-ups need to be enabled in your browser during the booking process, otherwise the window in the booking platform will not open.

Of course, you can also book through your IATA travel agency. By quoting the event code **DEAUEAC**, the travel agency can request the ticketing instructions by email to lufthansa.mobility@dlh.de.

Lufthansa check-in and baggage service at the trade fair centre (see page 35).



By train:

Frankfurt Main Station is easy to reach by train. Information is available from all DB sales offices, from your travel agent or on the Internet at www.bahn.de.

FROM THE MAIN STATION TO THE FRANKFURT EXHIBITION GROUNDS

- » S-Bahn (lines S3-S6, depart from Frankfurt Hauptbahnhof underground platform 104) to the Messe stop (entrance Torhaus)
- » Tram/streetcar lines 16 and 17 to Festhalle/Messe stop (City entrance)
- » U4 subway line in the direction of Bockenheimer Warte to Festhalle/Messe stop (City entrance)
- » By foot approx. 15 minutes via Düsseldorf Straße and Platz der Republik (Square) to Friedrich-Ebert-Anlage (City entrance)

DEUTSCHE BAHN – BEST PRICE



With the Deutsche Bahn event ticket, you can travel on long-distance trains using 100% eco-electricity and thus sustainably reduce the CO₂ emissions of AICHEMA 2024.

The nationwide standardised fixed prices for one-way travel are as follows:

- » with fixed train connection in the 2nd class € 55.90 and in the 1st class € 89.90
- » without fixed train connection in the 2nd class € 77.90 and in the 1st class € 112.90

The prices are valid regardless of the DB station you travel from. The event ticket is valid on all ICE, EC/IC, local and S-Bahn trains operated by Deutsche Bahn.

The tickets are valid for a single round trip between 8 – 16 June 2024. The Flex event ticket is valid for two days in each direction of travel.

Event tickets can be booked online:

www.achema.de/travel-information

If you have any questions about the booking process, please call the service number +49 30 58 60 20 901.

All visitors under 27 can take advantage of Deutsche Bahn's Super Sparpreis Young. This enables you to travel cheaply and spontaneously within Germany from just € 12.90 on selected routes.

Deutsche Bahn will happily provide you with the ticket price for international connections on request.



Frankfurt am Main – more than just a financial centre and trade show metropolis

Experience Frankfurt from its recreational side! Discover the city's historical and contemporary sights. Or just escape the hustle and bustle of the trade show for the summery flair of the River Main's banks. All this is hardly more than a stone's throw away from Frankfurt's exhibition grounds!

Details at www.frankfurt-tourismus.de



New Old Town, Goldene Waage (golden scales) coffee house

City tour: Frankfurt's new Old Town and other highlights

» Daily at 14:00 h as a guided tour by #visitfrankfurt.

Explore sights like the new Old Town, the Römerberg historic square, the Cathedral or St. Paul's Church and enjoy the view of the Frankfurt skyline from the banks of the Main River!

Meeting point: in front of the Römer Tourist Information

Boat tour

The daily Primus Line boat trips pass through Frankfurt upstream towards Gerbermühle and back downstream. The journey time is 50 minutes one way; both trips combined: 100 minutes.

The classic round trip.

Meeting point: Primus-Line pier, Eiserner Steg

14 June – 14 July 2024

European Football Championship 2024

The next major event is on the horizon in Frankfurt when ACHEMA closes its doors: from 14 June, the international trade show metropolis on the Main celebrates a huge open-air soccer festival with guests from all over the world. Frankfurt is one of the ten German host cities of the UEFA EURO 2024 and, with its 1.4-kilometer-long fan zone on the banks of the Main, will offer 30,000 soccer fans an extraordinary atmosphere for the European Men's Football Championship every day.

Before the EURO kicks off, expected on the evening of June 13, an exciting audiovisual opening ceremony will take place on the Flößerbrücke (Flößer Bridge) in Frankfurt. The east side of the bridge will be wrapped in the colours of the EURO and set in scene by a light and sound choreography with the skyline as a striking backdrop.

Venue: North bank of the Main (between Friedensbrücke (Peace Bridge) and Eiserner Steg (Iron Footbridge))

www.uefa.com/euro2024/event-guide/frankfurt/festival



Sights in Brief

Römerberg, Ostzeile and Old Nikolai Church

Historic city center, Gerechtigkeitsbrunnen (Fountain of Justice) in the center, reconstructed Ostzeile (eastern row), court and council chapel. For centuries, the square served as a place for markets, fairs, tournaments, festivals and as a place of execution.

Römer (City Hall)

Patrician house with three stepped gables, site of negotiations for the election of the emperor. City hall since 1405.

New Old Town

Reconstruction of the Old Town based on the historical town layout, Coronation Way from the Römer to the Cathedral.

Imperial Cathedral

Gothic cathedral, dedicated to St. Bartholomew. Due to the Golden Bull, place of election of Roman kings since 1356.

Paulskirche (St. Paul's Church)

Consecrated as a Protestant church in 1833. The first German National Assembly was held there in 1848. Now used as an event venue for the city.

Carmelite Monastery

Monastery complex from the 13th century, today Institute for City History and Archaeological Museum. Noteworthy frescoes (in the cloister) from the 16th century.

Eiserner Steg (Iron Footbridge)

Built in 1868, the bridge connects the old town with the Sachsenhausen quarter. The pedestrian bridge offers a great view of the skyline and the museum embankment. Jetty for boat tours.

Hauptwache (Main Guardroom)

Originally the guard building of the Frankfurt police, where notorious bandit chief "Schinderhannes" was also imprisoned. A café since 1904 and a good place to start a shopping tour of the Zeil, Goethestraße or Freßgass'.

Stock Exchange

Built in the 19th century, second-largest stock exchange in Europe, with "Bull and Bear" sculpture in front.

Alte Oper (Old Opera House)

Significant concert and congress hall, built in the 19th century, destroyed in the 2nd World War, reconstructed in 1981.

Main Tower

with viewing platform at a height of 200 meters.

Palmengarten (Palm Garden)

The Palmengarten is Frankfurt's most popular green retreat. It combines the preservation of biodiversity with the presentation of plants from all over the world. More than 13,000 subtropical and tropical species are displayed in the greenhouses of the sprawling park. The new flower and butterfly house is a particular highlight.

Senckenberg Natural History Museum

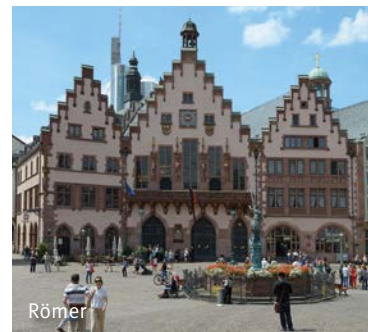
The Senckenberg is one of the largest natural history museums in Germany and presents the development of life and its diversity in a tangible way. In addition to the countless, sometimes unique exhibits from the world of mammals, insects and fish, the free-standing dinosaur skeletons in particular delight visitors young and old.



Alte Oper



Palmengarten



Römer

TOURIST INFORMATION

Tourist Information Main Station
Entrance Hall

- » Monday – Friday 8:00 – 16:00 h
- » Saturday – Sunday 9:00 – 16:00 h

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Römerberg 27

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Opening Press Conference

» **Monday, 10 June 2024, 10:00 h**
Hall 4.0, Room Europa

Facts and figures at ACHEMA's launch: What can exhibitors and visitors expect? Which trends will determine what happens at the stands and on the stages of the exhibition halls?



Press Breakfast

» **Wednesday, 12 June 2024, 10:00 h**
ACHEMA Press Center, Torhaus, Level 4

Organisers and industry representatives discuss moods and trends at the halfway point of ACHEMA.

ACHEMA Media Insights

At the end of February, industry representatives and exhibitors discussed the trends of this year's ACHEMA and presented product innovations at the ACHEMA Media Insights 2024. Impressions can be found in the ACHEMA media library at: www.achema.de/media-library

ACHEMA PRESS CENTRE

Torhaus, Level 4

» **Monday, 10 June – Thursday, 13 June 2024:**
8:30 – 18:30 h
» **Friday, 14 June 2024: 8:30 – 14:00 h**

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-  YouTube: www.achema.de/youtube

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Our official magazine, ACHEMA Inspire, provides background on all aspects of the international process industry and reports on the latest innovations in technology and service, from laboratory equipment, facility, and apparatus engineering to packaging and storage technology, with a special focus on sustainable development and digitisation. The magazine is published twice yearly as an interactive digital publication for the global ACHEMA community.



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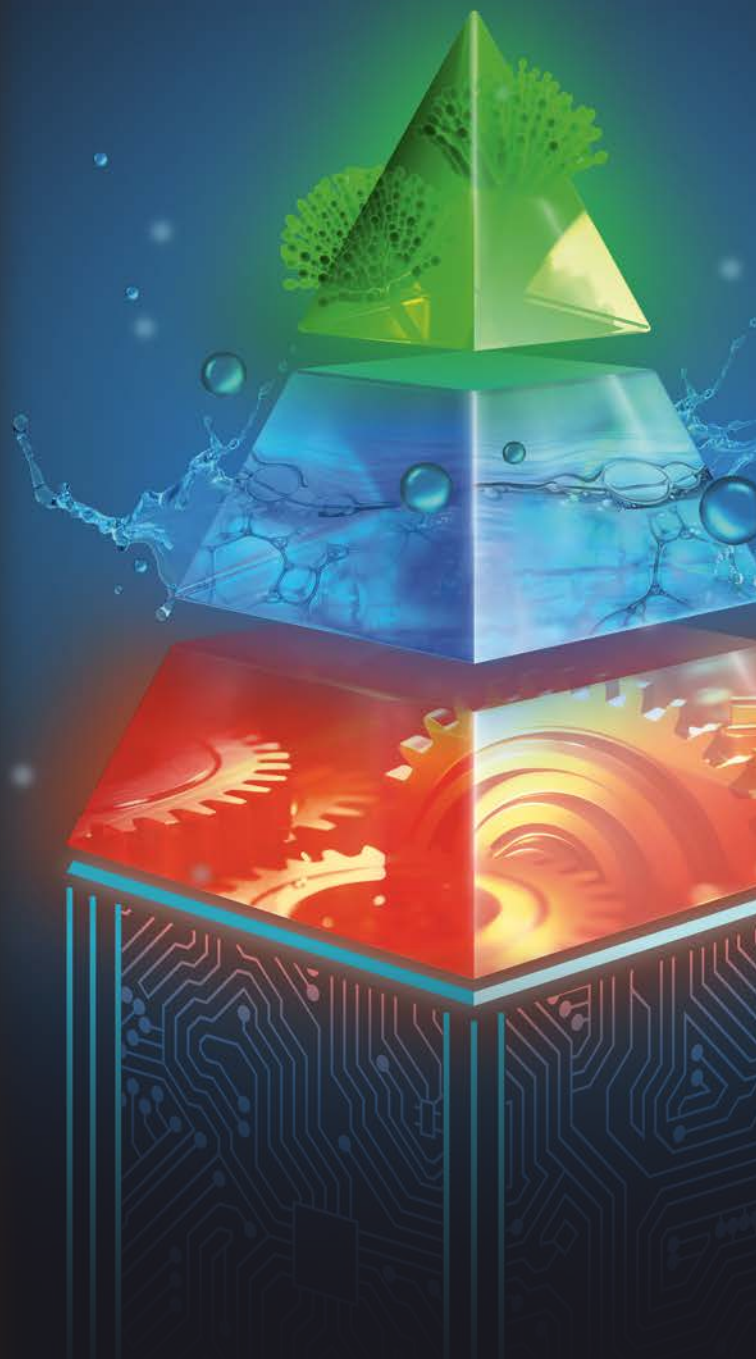


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