

Congress Programme *at a glance*



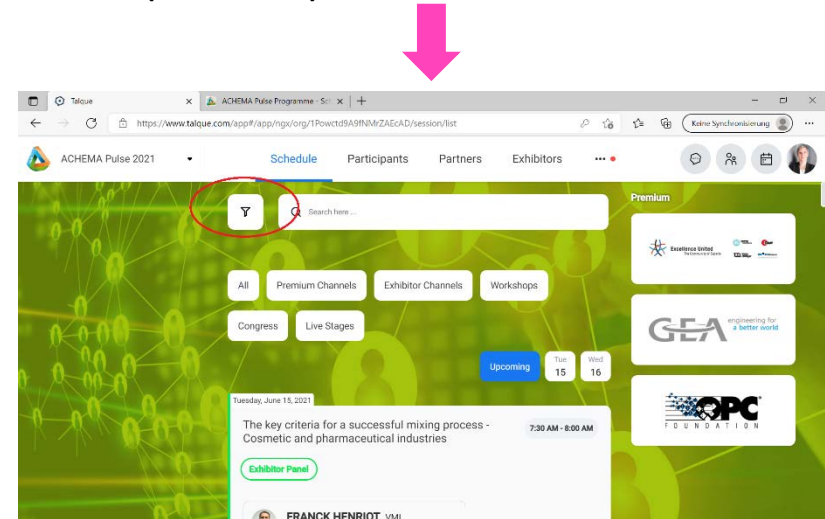
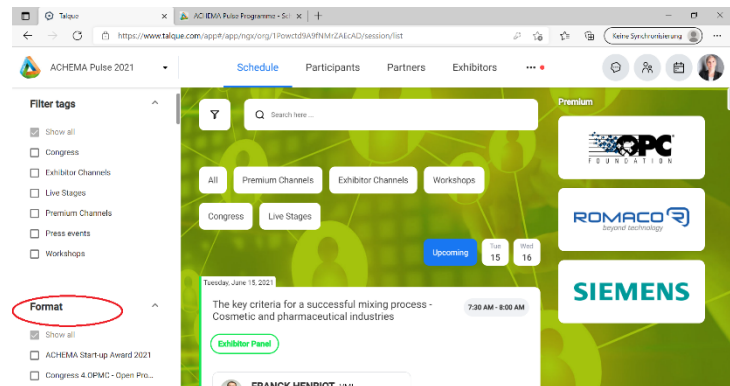
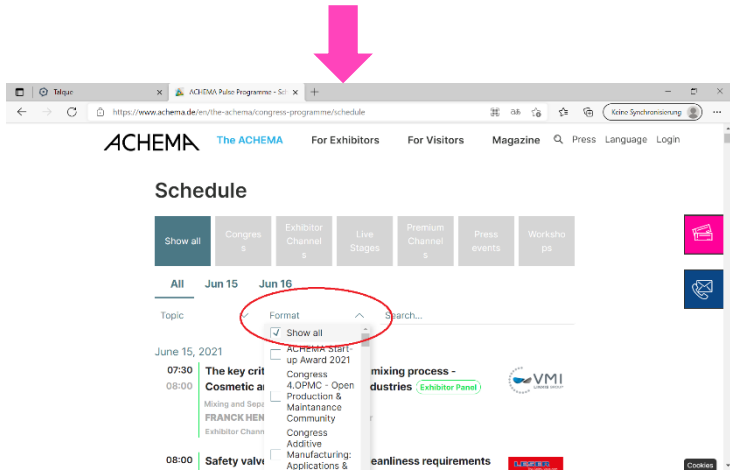
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How to find a Congress Session in the interactive programme

Open the programme on the ACHEMA website [ACHEMA Pulse Programme - Schedule - ACHEMA](https://www.chema.de/en/the-chema/congress-programme/schedule) or – after you logged in – in the ACHEMA Pulse platform

Select the filter option “Format” (website on top of the schedule, App filter symbol next to the “Search” field)

Scroll to the congress session you are looking for in the drop-down menu (website) or on the left side of the App



Tick the box to see a list of all presentations in this congress session

Tuesday, June 15, 2021- morning

	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8
09:00					Flow Chemistry Pavillion			
09:15								
09:30								
09:45								
10:00	Bioreactors & operation Pt. 1	Power-to-X Technologies Pt.1	Process modelling, extraction and formulation	Treatment and Separation of Gases			Membranes for Separation Technology: Opportunities and Application Potential for Germany	CCPS Europe Session: Risk Based Process Safety during COVID-19 & similar disruptive times
10:15								
10:30								
10:45								
11:00					Flow Chemistry			
11:15								
11:30	Bioreactors & operation Pt. 2	Power-to-X Technologies Pt.1	Process intensification and downstream processing	Treatment, Mixing and Separation of Luquids and Solids		Innovative Heat Transfer Equipment I: The InnovA4Mix Project	Innovative Process Analytics	
11:45								
12:00								
12:15								
12:30								
12:45								

Highlight Session Live Stage 1:

11:00 - 12:00 CEST Hydrogen Economy – Gamechanger for the Process Industry

Tuesday, June 15 2021- afternoon

	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8
14:00	Safety First ! Pt.1	Industrial Heat	Facility design and risk management Pt. 1	Process Development Pt. 1	4.OPMC - OPEN PRODUCTION & MAINTENANCE COMMUNITY	Innovative Heat Transfer Equipment II: Enhancement Technologies	Process Analytical Control Solutions	Kopernikus P2X – Exploration, validation and implementation of Power-to-X concepts
14:15								
14:30								
14:45		Monitoring						
15:00								
15:15								
15:30	Safety First! Pt. 2		Facility design and risk management Pt. 2	Process Development Pt. 2		Separation Units 4.0	Industrial Process Safety with EPSC	Kopernikus SynErgie - Energy-flexible factories as an opportunity for industry
15:45								
16:00								
16:15								
16:30								
16:45								
17:00								

Highlight Session Live Stage 2

17:00 - 18:00 CEST Novel biological production systems

ACHEMA Innovation Challenge Live Stage 3

15:00 - 17:00 CEST

Wednesday, June 16, 2021- morning

	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8
09:00					Flow Chemistry	Industrial Security- VDE DKE meets ACHEMA		
09:15								
09:30								
09:45								
10:00	Future Production and Industrial Intelligence Pt. 1	The digital lab and analytical techniques Pt. 1	Additive Manufacturing: Applications and Functionality	Digitizing water management in process industries			CO2-WIN	CCPS Asia Pacific Session: Asia Pacific perspectives: Process safety challenges during and post Covid-19
10:15								
10:30								
10:45								
11:00								
11:15					Flow Chemistry			
11:30	Future Production and Industrial Intelligence Pt. 2	The digital lab and analytical techniques Pt. 2	Circular Economy	Water in a circular economy				
11:45								
12:00								
12:15								
12:30								
12:45								

Highlight Session Live Stage 2:

10:00 - 11:00 CEST Closing the loop with chemical recycling: potentials and challenges

Wednesday, June 16, 2021- afternoon

	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8		
14:00	Future Production and Industrial Intelligence Pt. 3	Product and process security	Corrosion Pt. 1	Managing concentrates in industrial water reuse	EGNATON - pathways to sustainable labs		Risk Governance of Nanomaterials /NANORIGO			
14:15										
14:30										
14:45		Renewing the Chemical and Pharma Supply Chain								
15:00										
15:15										
15:30	Future Production and Industrial Intelligence	Renewing the Chemical and Pharma Supply Chain	Corrosion Pt. 2	Cyber Security		Evolution in Particle Characterisation				
15:45										
16:00										
16:15										
16:30										
16:45										
17:00										

Highlight Session Live Stage 1

13:00 - 14:00 CEST Artificial Intelligence – creating value from data

Highlight Sessions - June 15, 2021

Hydrogen Economy – Gamechanger for the Process Industry

11:00 - 12:00 CEST

Live Stage 1 Hydrogen is a very versatile compound for future use in the process industries. Green steel is unthinkable without hydrogen, PtX-processes to supply new base chemicals require hydrogen and many more uses can be derived. There will also be other players eyeing for their opportunities in their respective sectors, like the transport or the power sector. Are we going to see a gold rush for this lightweight gas? Where are the opportunities and hurdles for implementations? From what source does it come from? Where will the process industry end up in the race? This session gives a glimpse into the future and maps out possible pathways from different perspectives.

Highlight Sessions - June 15, 2021

Novel biological production systems

17:00 - 18:00 CEST

Live Stage 2 Technologies, unimagined a few years ago, are currently opening routes to novel biological production systems. During this session, pioneering companies from the field will yield first-hand insights into current research and the fascinating perspectives for industrial biotechnology. They will showcase how the synergy of quantitative and synthetic biology is providing valuable information for the rational engineering of cells. Robotics, automation, miniaturisation and advanced process control based on big data have made creating designer organisms an industrial manufacturing process – opportunities that are now being explored for practical applications.

Highlight Sessions - June 16, 2021

Closing the loop with chemical recycling: potentials and challenges

10:00 - 11:00 CEST

Live Stage 2 Chemical recycling is seen as an opportunity to broaden the base of recyclable materials, at the same time leaving large parts of the chemical processing chain intact as the material enters at a very early point. But does recycling by means of chemical recycling also make ecological sense? What are the environmental impacts? These are just some of the questions that will be addressed in this session. It will provide insight into current developments and also compare alternative concepts such as the redesign of polymers to make them more recyclable. Chemical recycling is the (thermo-)chemical conversion of waste fractions containing plastics into basic chemical building blocks, which are then used again for the production of plastics in virgin material quality. As a supplement to mechanical recycling, chemical recycling can be used to open up additional waste streams for recycling which, due to their complexity, have so far mainly been used for energy recovery or, in some countries, also landfilled.

Highlight Sessions - June 16, 2021

Artificial Intelligence – creating value from data

13:00 - 14:00 CEST

Live Stage 1 How can we extract profit from the abundance of data already being produced in the process industry? Artificial Intelligence can address the customer demands for traceability, sustainable production, short time-to-market, and lower costs. However, there are still some hurdles to be cleared. Data must be made available in a machine-readable way and data silos must be opened. As with all digitalization projects, scaling of AI in manufacturing is not a trivial task. AI applications will also require new skills within your workforce.

The panellists will talk about the path to broad implementation of AI in the process industry. How can data be made available? What skills does your workforce need and how do you train them? How can AI applications be scaled? Should AI be run on the Edge or in the Cloud?

If done right, the transformation can lead to a new digital culture taking full advantage of this disruptive technology.

ACHEMA Innovation Challenge – June 15, 2021

15:00 - 17:00 CEST

Live Stage 3 AICHEMA Innovation challenge: the hackathon that zooms in on the digitalisation of the process industry. For two months, inventive and creative teams have been developing innovative and unconventional solutions for digitalisation in the process industry. Science and technology students, but also young professionals have either been participating in the KEEN Hackathon focusing on Artificial Intelligence (AI) solutions for the process industry or in the Main-Hack developing concepts for predictive maintenance in water management. Out of more than 25 submissions, expert juries selected the best teams which will pitch their solutions to the virtual audience.

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15 – 16 June 2021,
Frankfurt/Main, Germany