

ACHEMA 2022 Stage Program

Monday, August 22nd

Time	Topic	Speaker	Language	Room/Stage	Hall/Area	Teaser
14:45	Process Analytics for Hydrogen Liquefier and Purity Control	Frederic Thielland	EN	Green Innovation Stage	Hall 6.0, Green Innovation Zone	Hydrogen will play a key role in the mobility sector. To be used in fuel cell, hydrogen must be purified to fulfill the required quality grade, and eventually be liquefied for transportation. This session will review some innovative gas analysis techniques used to operate the purification and liquefaction processes but as well to monitor the hydrogen quality.
14:45	Simulation and parameterized design for optimized functionality	Dr. Christoph Kiener	EN	Granat	Hall 11.0, Congress	Additive Manufacturing of process equipment allows to generate tailor-made designs for each application. The combination of multi-physics simulation and optimization with parameterized CAD design allows to manufacture the perfect equipment geometry for a more sustainable and economic operations in a 3D printer.
15:15	Modular Automation concepts for Clean Hydrogen	Bernd Kalusche, Hubertus Böhm	EN	Green Innovation Stage	Hall 6.0, Green Innovation Zone	E-fuels and clean hydrogen are produced in modular plants. Secure, modular and remote automation concepts lay the foundation for safe and efficient operation.

ACHEMA 2022 Stage Program

Tuesday, August 23rd

Time	Topic	Speaker	Language	Room/Stage	Hall/Area	Teaser
10:30	Fixing Crystallization Issues in Multi-Purpose Plants	Dr. Ansgar Kursawe	EN	Motiv	Hall 9.1, Praxisforum	In this session, we will show shortcut methods to estimate how an existing vessel may be thermally checked for its suitability for a typical cooling crystallization as well as how mixing for any precipitation or antisolvent crystallization can be scaled up. We will provide a short guide for lab chemists to check the robustness of a crystallization, so that common issues in scale-up can be identified as soon as possible.
10:30	Digitalization in the Process Industry – Case Study and Outlook	Thomas Nipkow	EN	Karmesin	Hall 11.0, Praxisforum	Digitization made easy - „start small, think big“ under this motto we present the digitization tool Moby.Check. Whether goods transfers, maintenance tours or security checks, everything can be realized easily, paperless and securely with one tool.
11:30	Digital Design of Carbon Capture, Utilization and Storage Systems	Bart de Groot	EN	Motiv	H9.1	The decarbonization of the chemical process industry requires interim solutions such as carbon capture, utilization and storage (CCUS) to reduce GHG emissions in the immediate future. The tight integration of CCUS facilities into other process systems poses many challenges, in particular how best to minimize capital and operating expenditure. Digital process design techniques provide a rapid and effective way to map system interactions, predict process responses in highly transient scenarios, optimize equipment and system designs, and ultimately provide confidence to stakeholders.

Subject to change.

SIEMENS

ACHEMA 2022 Stage Program

Tuesday, August 23rd

Time	Topic	Speaker	Language	Room/Stage	Hall/Area	Teaser
12:30	Win the race with modular production	Dieter Ziegler (Siemens), Dr. Andreas Bamberg (Merck KGaA)	EN	Pharma Stage	Hall 3.0, Pharma Stage	Standardization is the key to open and flexible automation concepts. This is where MTP comes into play. It provides the common "language" for describing the properties of process modules independent of manufacturer and technology.
13:50	Distillation Column control – Today and Tomorrow	Vijaya Bhaskar R. Gummala	EN	Granat	Hall 11.0, Praxisforum	Are you sure, you have an effective control for your distillation columns? Explore the basic and advanced process control concepts with us.
14:00	Creating and maintaining a digital twin of your process plant	Manuel Keldenich	EN	Siemens Innovation Stage	Hall 11.0	Process industries are a very challenging environment. High investments are required. Your plants are up-and-running for decades and thus it is of highest priority that your investments are secure and future proof! Learn more on how to overcome these challenges and improve your business through dedicated application examples!
15:00	The Digital Automation Twin along the plant lifecycle	Armin Fischer	EN	Siemens Innovation Stage	Hall 11.0	What makes the Digital Twin alive? That's easy: Simulation models, which lead to various applications of digital twins and are also an essential part of the Digital Automation Twin. Along the plant lifecycle, from automation design up to plant and process modernization, several different use cases arise. In this session, let me show you the technical features, use cases in detail and the link between the Digital Process and Plant Twin.

Subject to change.

SIEMENS

ACHEMA 2022 Stage Program

Tuesday, August 23rd

Time	Topic	Speaker	Language	Room/Stage	Hall/Area	Teaser
15:45	Win the race with modular production	Dieter Ziegler (Siemens), Dr. Andreas Bamberg (Merck KGaA)	EN	Stage	Hall 9.1, Congress	Standardization is the key to open and flexible automation concepts. This is where MTP comes into play. It provides the common "language" for describing the properties of process modules independent of manufacturer and technology.
16:00	Digitalization in the Process Industry – Case Study and Outlook	Thomas Nipkow	EN	Siemens Innovation Stage	Hall 11.0	Digitization made easy - „start small, think big“ under this motto we present the digitization tool Moby.Check. Whether goods transfers, maintenance tours or security checks, everything can be realized easily, paperless and securely with one tool.

Subject to change.

SIEMENS

| ACHEMA 2022 Stage Program

Wednesday, August 24th

Time	Topic	Speaker	Language	Room/Stage	Hall/Area	Teaser
10:30	Trends in Process Analytics challenge innovations	Wojciech Trzaskalik	EN	Granat	Hall 11.0, Congress	3 trends (Digitalization, Standardization and Modularization as well as challenging measuring tasks in regards of sensitivity and analytical flexibility) are influencing developments also for process analytical equipment and measurement solutions significantly.
10:30	Computer Aided Process Engineering at Siemens EC-History and Outlook	Matthias Schumacher	EN	Esprit	Hall 9.1, Praxisforum	From punch cards to Digital Twins - development of CAE in the last 40 years.
10:50	Designing reactors for chemical and pharmaceutical applications and „how to make existing vessels work“	Dr. Ansgar Kursawe	EN	Logos	Hall 11.0, Praxisforum	In this session, we will present shortcut methods to estimate how an existing vessel may be checked for its suitability for a new product and provide a short guide for lab chemists to check as early as possible for potential issues during scale-up.
11:30	Cradle for Pharma 4.0 - Transforming Pharmaceutical Processes	Marin Mayer, ZETA GmbH Mahboobeh Bayat, Siemens Industry Software, Wien	EN	Logos	Hall 9.1, Praxisforum	

Subject to change.

SIEMENS

ACHEMA 2022 Stage Program

Wednesday, August 24th

Time	Topic	Speaker	Language	Room/Stage	Hall/Area	Teaser
11:50	Digital enabling of field personnel: Reach the next level of efficiency with the Digital Worker	Tobias Rasbach	EN	Esprit	Hall 9.1, Praxisforum	The Digital Worker merges the virtual and physical worlds. Running on different types of wellknown smart devices, such as smart glasses, tablets or smartphones, the Digital Worker offers intuitive usability and replaces the tedious and time-consuming analog processes that are notorious for slowing down workflows.
15:25	Pitfalls in Heat Exchanger Design – What can go wrong	Ralf Ziegler	EN	Europa 1+2	Hall 4.0, Praxisforum	Why Doesn't My Heat Exchanger Work? And what can I do to fix it?
16:00	Digital enabling of field personnel: Reach the next level of efficiency with the Digital Worker	Tobias Rasbach	EN	Siemens Innovation Stage	Hall 11.0	The Digital Worker merges the virtual and physical worlds. Running on different types of wellknown smart devices, such as smart glasses, tablets or smartphones, the Digital Worker offers intuitive usability and replaces the tedious and time-consuming analog processes that are notorious for slowing down workflows.

Subject to change.

SIEMENS

ACHEMA 2022 Stage Program

Thursday, August 25th

Time	Topic	Speaker	Language	Room/Stage	Hall/Area	Teaser
11:10	Driving Standardization of the CO-MOS engineering platform for the complete process planning	Bernhard Baldaszi, VTU Engineering GmbH, Wien Christoph Pflieger, Siemens Industry Software GmbH Essen	EN	Korall	Hall 11.0, Praxisforum	
12:30	Driving the future of tank farms and terminals	Nick Kiran Bert van Dam	EN	Siemens Innovation Stage	Hall 11.0	Change is inevitable, and the tank terminal industry is heading into a new era. At Siemens, we take a holistic approach to the challenge making use of our multifaceted portfolio – ranging from low code platform up to our leading portfolio of industrial automation hardware and software solutions. The question we put to the industry is simple: Can we think ahead and partner together to embrace this long-term vision? Can our technology support your in-depth industry knowledge?
15:00	Turning Trash into Treasure	Martina Walzer	EN	Green Innovation Stage	Hall 6.0, Green Innovation Zone	Managing processes economically, sustainable and safely in the chemical recycling arena calls for targeted applications. The reliable recording and storage of process values, their evaluation in dedicated applications, for example cloud-based applications, and the feedback of the results into improved control algorithms make it possible to manage process engineering processes economically and sustainably.

Subject to change.

SIEMENS

ACHEMA 2022 Stage Program

Thursday, August 25th

Time	Topic	Speaker	Language	Room/Stage	Hall/Area	Teaser
15:00-15:20	From process simulation to model-based control and optimization	Dr. Ewa Bozek	EN	Siemens Innovation Stage	Hall 11.0	The virtual representation of the production plant, known as the Digital Twin, allows to gain full transparency and simulate the process as exact as in a real world. The models, used for the simulation, can be then reused for the model-based process control and optimization, and realized by connecting the simulator to the Distributed Control System (DCS).
15:15	Optimal control of grade transitions using a digital twin of a polymer plant	Michael Schöler	EN	Granat	Hall 11.0, Congress	By including a rigorous simulation model of a process unit ("digital process twin") directly inside a nonlinear Model Predictive Control algorithm, you can minimize give-away during grade transitions in a polymerization reactor.
15:15	The early bird catches the worm! - The importance of cost engineering in the early phases of plant design	Michael Friedrich	EN	Genius	Hall 9.1, Congress	How to estimate investment costs in early project phases based on few key information? Which accuracy can be expected from that?
16:00-16:20	Asset performance Suite: Knowledge Graphs as Integration Layer for Process Industries	Rahul Sharma	EN	Siemens Innovation Stage	Hall 11.0	Get new insights into your plant and its assets with the Asset Performance Suite. Boost your asset uptime by contextualization and semantic enrichment of all your data sources.

Subject to change.

SIEMENS