

The SiLA Connection



STANDARDIZATION IN LAB AUTOMATION

JULY 2023

Review of Labvolution Hannover, May 9-11

The May Conference marathon started in Hannover with the 2023 Labvolution and the smartLab was once again centrepiece and stage for numerous talks around the lab of the future. Sascha Beutel (ITC Hannover) received special honors for his achievements in founding and evolving the smartLab since 2015, in his talk he highlighted the **central role of SiLA** in the process (Wiley article: [Implementing a digital infrastructure for the lab using a central laboratory server and the SiLA2 communication standard](#)). The smartLab and its iconic iHex system is now hosted and developed further by Felix Lenk and the smartlab solution GmbH.

Further SiLA-based automation was presented by Mark Doerr and Stefan Maak showcasing the KiWi Biolabs and Lara Suite back-to-back.

See us at these events:

[Lab of the Future Europe](#)

Sept 26 - 27, Amsterdam, NL

[BioTechX](#)

Oct 4 - 6, Basel, CH

[Drug Discover 2023](#)

Oct 18-19, Liverpool, UK

[IUTA - SiLA Workshop](#)

Nov 8, Duisburg, Germany



Source: Deutsche Messe

The most prominent and **omnipresent SiLA-speaking laboratory device** was **KEVIN Robot** who is still not wearing a “speak SiLA to me” shirt.

The Labvolution award was given to IUTA for digitizing a formerly paper-based patient-specific cytostatic treatment workflow, stressing the importance not only of automated samples but also of data handling. The exhibition floor was during this first in-person event since 2019 full but not crowded as some larger players chose to not yet display their innovations, we will see what 2025 brings.

Request for Proposal to specify and implement an open source SiLA App Installer

[Click here](#) to find more information on the requests.

Submission deadline: August 15th, 2023

Review of PDA Robotics and Automation Conference, May 3

SiLA Director, Dr. Patrick Courtney spoke at the PDA conference in Amsterdam on “**Advances in Robotics and Open Interoperability Accelerates Innovation in Biopharm Manufacturing**” within the session Digitalization of Drug Manufacturing.

The talk focused on the role of robotics in digitization and digitalization with an update on robotics initiatives, the role of the interoperability in building systems, the role of FAIR data in digitization, collaboration and AI and developments in SiLA and AnIML with special focus on the EU’s TraceBot project on traceable robotics.

It was a great event at the cutting edge of regulated operations in sterile manufacturing where human, robots and technology come together to ensure safety and cost-effective supply, with many new contacts.



Robotics-4-Lab Automation Symposium, May 25

SiLA was present with a booth at the recent BioLAGO "Robotics-4-Lab Automation" Symposium next to the beautiful Lake of Konstanz.



The conference was well attended, and we **learned about many robotic applications in pharma that combine machine vision with robotics and application of the SiLA standard.**

It was also an opportunity to network with other people in the industry and discuss how SiLA could be applied to their applications and technology.

Review SLAS Europe, May 22-26

The SLAS Europe 2023 Conference and Exhibition brought together a broad audience of scientists and solution providers, to exchange on the latest technologies around laboratory automation. SiLA was represented by SiLA Directors, Burkhard Schaefer and Ádám Wolf, who co-hosted the Standards Initiatives special interest group (SIG).

Burkhard presented a four-pillar standards ecosystem, including the physical aspect (the ANSI/SLAS or SBS microplate), the protocol definition (scientific and execution level), the data format (AnIML) and the Instrument control/uplink (SiLA).



Standardization is about cooperation - FutureLabs LIVE

SiLA was present with a booth at the recent BioLAGO "Robotics-4-Lab Automation" Symposium next to the beautiful Lake of Konstanz.

The month of May saw the return of Future labs LIVE to Basel, this time running over 3 days, from May 31 - June 2nd on lab automation, digitalization and all things in between.

SiLA, its members and friends were present with **"The SiLA Experience"**, a shared booth where they created a compelling showcase of the benefits of standardization in the lab automation domain. The booth brought together renowned industry leaders, including **ABB**, **Opentrons**, **Inheco**, the award-winning **Byonoy**, as well as fresh startups **Splashlake**, **8-BOT** and **UniteLabs**, all aligned with the SiLA standard.

Each vendor contributed their cutting-edge technologies and solutions, demonstrating how adhering to the SiLA standard enables seamless integration and interoperability. ABB's GoFa CRB15000 cobot arm drew attention with its first implementation of the LabwareTransfer feature specified by the SiLA Robotics Working Group, while 8-BOT presented their robotic gripper specifically designed for microtiter plate handling. Opentrons showcased their versatile OT-2 pipetting robot. Inheco presented their innovative SCILA single plate incubator, and Byonoy presented their brand-new Absorbance 96 Automate plate reader. Splashlake impressed attendees with their data transformation and visualization software, while UniteLabs unveiled their integration and automation platform, fully compatible with SiLA, that orchestrated the demo workflow and data exchange between the systems.

"The SiLA Experience" really highlighted the tangible benefits laboratories can enjoy by embracing the SiLA standard, including enhanced interoperability, increased efficiency, and accelerated scientific progress.



The shared booth was a **magnet for event attendees**, visitors queued to engage in stimulating discussions about the SiLA standard and the impact it has on laboratory automation. The live demonstration captured the attention of scientists, researchers, and industry professionals alike. The **easy integration of these diverse technologies** showcased the significant time and cost-saving potential of adopting the SiLA standard.

Visitors gained deeper insights into the advantages of adopting the SiLA standard and witnessed firsthand the **transformative potential of standardized integration** within their laboratory environments.

Future Labs Live not only reinforced SiLA's position as a leading consortium in the lab automation industry but also inspired viewers to embrace the power of standardization to drive progress in their own organizations. SiLA's continued efforts to develop open standards and foster collaboration will undoubtedly shape the future of lab automation, enabling laboratories worldwide to unlock new levels of efficiency, productivity, and innovation.

In addition to the SiLA experience booth, SiLA delivered a Splash Hackathon (see review), as well as 8 talks and participation in 3 panels and 2 round tables as detailed below.

Presentations at Future Labs LIVE:

- **Experiences with an open, SiLA enabled high-throughput screening platform for semantically controlled machine learning** by Mark Doerr, University of Greifswald, Germany
- **Autonomous scheduling on a robotic screening platform** by Stefan Maak, University of Greifswald, Germany
- **Teaching-free robot integration with LAPP digital twin** by Ádám Wolf, Takeda, Austria
- **Swiss CAT+ project – a new generation of entirely automated and data-driven labs** by Pascal Miéville, EPFL, Switzerland
- **Deploying mobile robotics for laboratory orchestration** by Rob Harkness, Biosero, USA
- **Top tips for successful automation implementation from over 150 years of experience** by Ellen Piercy, Unilever, UK
- **One standard - an all-around perspective** by Patrick Courtney, SiLA Consortium, Switzerland
- **AnIML in a nutshell** by Burkhard Schaefer, AnIML association, Germany (photo)

Panels at Future Labs LIVE:

- **Here is more to data than FAIR – Planning, Execution and Capture**
- **Bringing cobots and mobile robots into our labs—are we safe?**
- **Fast forward to 2050... anticipating and achieving the lab of the future**, Pascal Miéville, EPFL /CAT+

Round tables at Future Labs LIVE:

- **Embracing the new reality of hybrid working in a post-pandemic world** - Burkhard Schaefer
- **Digital transformation bottom-up instead of top-down: bring real value to the lab** - Daniel Juchli

A big thanks goes to all booth participants and especially to UniteLabs, Lukas Bromig and Robert Zechlin for coordinating the booth – a great job done and a fantastic experience and showcase of SiLA working end-to-end today!

We look forward to the next Future Labs LIVE event in Basel on June 25-27, 2024, and welcoming you there!

NEW RELEASED: Artificial Intelligence in Science: Challenges, Opportunities and the Future of Science



The OECD Book on Ai and Science. Includes a chapter by Ross King and SiLA Board Members, Patrick Courtney, Oliver Peter: [Robot scientists: From Adam to Eve to Genesis.](#)

The book can be downloaded for free in PDF or [webbook format](#) – both in its entirety and by chapter.

[Wiley Analytical Science Magazine on SiLA at Future Labs Live](https://analyticalscience.wiley.com/do/10.1002/was.00050438)

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SiLA-AnIML splash at Future Labs LIVE

As a pre-event workshop, SiLA Directors Burkhard Schäfer and Patrick Courtney organized another edition of the “SiLA AnIML Splash!”.

In half a day, the participants were introduced to the value of open standard in the lab, different approaches to introducing standards, as well as the concepts of SiLA as communication standard and AnIML as a data standard and their combination. This was accompanied by a lively exchange and many discussions with participants of a broad range of backgrounds, from laboratory device vendors to medical research organizations and university institutes.

To provide a hands-on demo, SiLA community member Niklas Mertsch demonstrated the implementation of a simple SiLA driver for a (virtual) lab device using the Python reference library.



SiLA at Lab of the Future Europe, Amsterdam

SiLA as an event partner is going to be present with a session on **Septmeber 27th**.

The Meeting of
Innovation, Collaboration & Technology
www.lab-of-the-future.com

Lab OF THE Future Europe
26th & 27th September 2023
Beurs van Berlage, Amsterdam

Robotics, Automation and Inter-operability

Burkhard Schaefer
Head of Partnering
SiLA



Patrick Courtney
Director
SiLA



Andrew Mitchell
Automation Systems Lead
Scientist,
Digital and Automation Team
Unilever



**10%
discount**

Discount will only be applied at the time of booking and cannot be claimed retrospectively.

Register using this link:

<https://bit.ly/3m5IA9l>

BioTechX

4 – 6 October 2023 | Congress Center Basel, Switzerland
6 – 7 September 2023 | Santa Clara Convention Center California, USA

BioDataWORLD congress GenomicsLIVE CheminformaticsLIVE Pharma!

SiLA compatible products: C.WASH and G.PURE

The SiLA team is always delighted to receive success-stories from the community. There are so many SiLA compatible and compliant instruments out there and it is of great importance to us, to get the information out.

Today, we would like to present you CYTENA's C.WASH. The **C.WASH** is an automated, non-contact microplate washer perfect for labs focusing on cell-based assays and immunoassays.

CYTENA has **successfully integrated the SiLA 2 communication protocol** into several instruments in its portfolio, including **C.WASH** and **G.PURE**. This implementation of an industry automation standard **enables seamless integration** into automated workflows across multiple different instruments and data exchange with LIMS and other services.

For more information visit:

<https://www.cytena.com/products/microplate-washers-and-dispensers/c-wash/>



Are you a SiLA member and want to promote your SiLA compatible or compliant product within the community? Contact us at info@silastandard.org

Save the date: SiLA at Drug Discovery 2023

SiLA is going to be present with a session chaired by Lorna Suckling (GSK) and Burkhard Schaefer (SiLA/AnIML).



REGISTER NOW

18TH - 19TH OCTOBER
ACC EXHIBITION CENTRE,
LIVERPOOL



"Supporting Collaborative Science –using the right tools enables scientists to discover better drugs faster"

Robotics and Automation remain essential technologies to accelerate science. The multiwell plate format has served us well and recent advances enable scientists to take automation to new levels. At the same time data has only become more important to organisations as well as to scientists, calling for an infrastructure and tools we can rely upon.

This session, organised by ELRIG and SiLA, aims to be both inspiring and applicable by bringing together some of the **latest thinking and practice in the automation of chemistry and biology**. The format will be 3 short talks followed by a moderated panel with time given over to audience exchange for each of two sessions on robotics, and on data

Join us on the 18th October in Liverpool!

FOR MORE INFORMATION

Visit us at www.sila-standard.org

Email us at info@silastandard.org

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