

The SiLA Connection



STANDARDIZATION IN LAB AUTOMATION

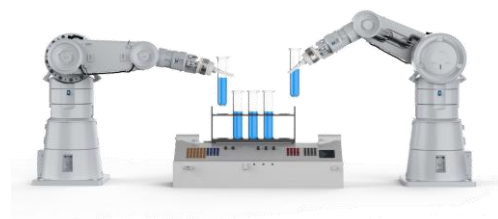
OCTOBER 2021

Join the next BioSASH SiLA / AniML hackathon #2 October 14th, 10am – 6pm (CEST)

Continuing the successful series started in June with over 30 participants, we are proud to announcement the next event. This time there will be a focus on coding, and we have four challenges identified:

- Laboratory Automation Plug & Play with SiLA / AniML for Mobile Robotics (with Takeda and Technical Uni. Konstanz)
- Processes that require complex information in execution while the hands are busy e.g. microbiology (with Vetter pharma)
- Devices in the local lab and LIMS in the cloud – how to build a smart data integration (with 1LIMS)
- Dexterous Robot Hand for critical lab tasks (with Shadow robot)

This hackathon is a great opportunity to interact with stakeholders and to maintain a lively exchange so that the digitization of laboratories can be developed further. **We invite laboratory users, SMEs, interested students, universities, laboratory automation experts and clinics to join our events.** For more information and free registration click [here](#).



Meet us at these events:

- [Lab of the Future LIVE](#)
October 26-27, virtual
- [Academic User Meeting](#)
November 11, 2021
- [User Conference #13](#)
November, tbd, 2021
- [SLAS2022](#)
February 5-9, Boston, USA
- [Future Labs LIVE US](#)
(postponed to 2022)

What participants said:

“The afternoon sessions were constructive and lively with great ideas and like-minded people”

“I particularly liked the networking of the different disciplines at the BioSASH event”



SLAS 2022 Boston 5-9 February “get hyped for Science”

We're all looking forwards to further safe opportunities to meet and exchange, and the next edition of the annual SLAS (society for lab automation and screening) International Conference and Exhibition will be our first for 2022. It will take place this time in Boston, USA at the Boston Convention & Exhibition Center (BCEC).



SiLA will once again have a **booth (#419)** and a **tutorial on Tuesday February 8th at 8.30am to 10am, (room 107)** as well as posters and talks.

Many of our member organizations are also presenting at the show, so there will be plenty of opportunity to meet the community and see how people are using and benefitting from SiLA.

We look forwards to seeing you there!

More details at: <https://www.slas.org/events-calendar/slas2022-international-conference-and-exhibition/>

Cloud connectivity for your SiLA services

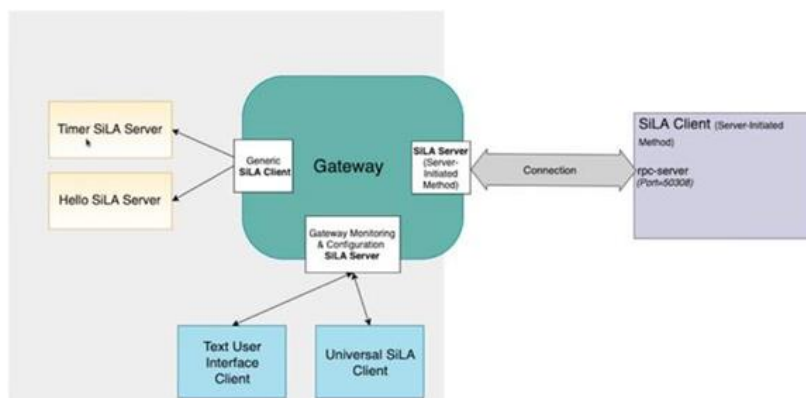
One of the challenges with creating the smart connected lab within a commercial organisation, is how to connect safely to the corporate network. To address this, the SiLA community decided to develop the Edge SiLA Gateway which could be a valuable addition to the SiLA ecosystem. This connects any SiLA 2 compliant server (running in a private environment) to a client running in a cloud environment (i.e., an environment that has no direct access to the private environment) It additionally provides monitoring functionality (e.g., to monitor existing connections, data flow, errors).

More specifically:

- Connect multiple SiLA Servers to one SiLA Client over the same path
- Cloud-enable SiLA2 1.0 Servers without change of code
- Server-initiated connection establishment of the gateway with a connection (avoids firewall problems)
- Configuration: define which servers are connected to the client side
- Message monitoring: trace all messages going through gateway

The SiLA Edge Gateway 1.0 is a free, standalone open-source tool as part of the SiLA foundation. It demonstrates basic connectivity and allows control between the networks.

The SiLA Edge Gateway has been developed by Siobra for SiLA. The code is available on gitlab at https://gitlab.com/SiLA2/sila_edge_gateway



Join the first SiLA Academic User Conference

We are delighted to invite you to the 1st online SiLA Academic User Conference on Nov. 11th from 4 - 5.30pm CET.

While SiLA originally grew out of the interoperability needs in commercial labs, academic groups are finding that SiLA / AniML addresses an “unmet” need in research and have been active members of the developer community. Some of the leading groups will be coming together to present their use cases across screening, cell culture and bioprocessing:

- **“Incremental Lab Automation for Tissue-based Drug Screening”** by Niklas Mertsch (University Medical Center of Göttingen)
- **“Multi-Stage Bioprocess Optimization”** by Lukas Bromig (Technical University of Munich)
- **“LARAsuite & Machine learning guided robotic high-throughput protein/enzyme screening”** by Dr. Mark Dörr (University of Greifswald)
- **Open discussion:** Lab automation in academic environments: Special needs and challenges

These projects act as a proving ground for new ideas and make a valuable contribution to innovation and skills development. So please join us for what will be a fascinating session.

[Register now for the free event via google form](#) or by [e-mail](#).

Welcome with us SiLA member Takeda

Takeda Pharmaceutical Company Limited is a global, values-based, R&D-driven biopharmaceutical leader headquartered in Japan, committed to discover and deliver life-transforming treatments, guided by our commitment to patients, our people and the planet. Takeda focuses its R&D efforts on four therapeutic areas: Oncology, Rare Genetics and Hematology, Neuroscience, and Gastroenterology (GI). We also make targeted R&D investments in Plasma-Derived Therapies and Vaccines. For more information, visit <https://www.takeda.com>.



Why we decided to join the Consortium: At Takeda we consider (laboratory) automation a key enabler to delivering our life-changing therapeutics to patients quicker, more reliably and more cost-effectively. One of the biggest challenges in this context is the integration of high-tech laboratory equipment into end-to-end automation systems. SiLA as an organization provides not only a standard for device communication but also serves as a community platform to network, collaborate and exchange ideas.

SiLA@Lab of the Future LIVE on 26-27 October

Hear what Burkhard Schaefer has to say about **“The Latest Developments with Data Standards”**
The Digital Lab – Start time: 17:30 BST / 18:30 CEST

For more information and registration visit:
<https://www.lab-of-the-future.com/europe/>



Recorded events

For those of you who have missed the **Pistoia webinar on September 9th**, here's the link to the recording of the session: **"The Adoption of Common and Open Data Standards for the Lab of the Future"** with Burkhard Schaefer and Daniel Juchli presenting.

<https://www.pistoiaalliance.org/pistoia-webinars/adoption-of-common-and-open-data-standards-lotf-1/>

Labvolution smartLAB connects on Thursday, September 9th Daniel Juchli has been invited to speak about **"How a Digitalized Lab Should Look & Feel Like – An Inspiration"** at smartLAB connects together with SiLA member Daniel Marquard, Solutions Project Manager at BSSN Software.

<https://player.vimeo.com/video/603868795>

KIWI-biolab Symposium take place virtually on November 11-12, 2021, "The Role of Machine Intelligence in the future of Bioprocess Development"

Date: November 11 – 12, virtual - Time: 2-5pm CET (each day)

Join: [zoom link](#)

The KIWI-biolab is a major Germany project to apply AI technologies to bioprocess and will make good use of SiLA / AnIML. This event is a great opportunity to meet this community and learn from their thinking.

The topics covered will include:

- **"Towards physical AI: from symbolic regression to physics-enabled predictive models"** presented by Prof. Dr. Andrey Ustyuzhanin Head of the Laboratory of Methods for Big Data Analysis, Faculty of Computer Science, HSE University
- **"On the use of mathematical programming to solve sustainability problems across scales"** presented by Prof. Dr. Gonzalo Guillén Gosálbez Head of the Sustainable Process Systems Engineering Lab, Department of Chemistry and Applied Biosciences, ETH Zürich
- **"Thinking About Data: Representations, Transformations, and Applications"** presented by Prof. Dr. Victor Zavala Head of the Scalable Systems Laboratory, Department of Chemical and Biological Engineering, University of Wisconsin-Madison
- **"title TBA"** presented by Prof. Dr. Lars Schmidt-Thieme Head of the Information Systems and Machine Learning Lab, Institute of Computer Science, University of Hildesheim.

[C# SiLA 2 Training Videos](#) available for free on youtube!

We are so delighted to share the first set of 13 [training videos](#) with you! Enjoy 3h of knowledge recorded and shared with you by our SiLA member Georg Hinkel from Tecan. Many thanks to Georg and Tecan for their support! We hope you enjoy the videos and are happy to [receive your feedback!](#)

[Follow SiLA on youtube! ...](#)

and don't forget to like and leave a comment!

FOR MORE INFORMATION

Visit us at www.sila-standard.org

Email us at info@silastandard.org

Spinnereistrasse 38, 8645 Rapperswil-Jona, CH

Call +41 55 210 01 19 (Switzerland)

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