

# The SiLA Connection



STANDARDIZATION IN LAB AUTOMATION

JANUARY 2022

## 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 8<sup>th</sup>, 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!

**Tutorial day Tuesday – come, learn and network!**



INTERNATIONAL  
CONFERENCE &  
EXHIBITION

## Meet us at these events:

- [SLAS2022](#)  
February 5-9, Boston, USA
- [IQPC Smartlab exchange](#)  
February 8-9, Berlin
- [Pharma mobile robotics](#)  
April 23-24, London
- [IQPC Smartlab exchange](#)  
April 26-27, Miami Florida
- [Future Labs LIVE EU](#)  
June 7-8 Basel
- [Future Labs LIVE US](#)  
November 15-16 N.Carolina

SiLA  
Rapid Integration

SiLA Tutorial  
@SLAS2022

## SiLA Consortium Tutorial: the road to laboratory digitization gets easier

Come and hear the latest from the SiLA (Standards in Laboratory Automation) community, and how open interoperability standards support the digitalisation journey. From automation to cloud labs and data sharing. Some of the leading biopharma companies and researchers are already using SiLA, meanwhile engineers and suppliers are benefitting from the work of the SiLA community and the open source resources available.

**Date:** Tuesday, February 8th

**Time:** 08:30-10:00 am

**Location:** room 107

Join the community by signing up for free as a personal member on our website [www.sila-standard.org](http://www.sila-standard.org) or LinkedIn (SiLA: Standardization in Lab Automation) or twitter (SiLStandard).

Contact [info@silastandard.org](mailto:info@silastandard.org) for more information.

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

## SmartLab Exchange EU, February 8th – 9th, Hotel Palace Berlin

The connected smart lab continues to be a topic of interest and importance and we are delighted to continue our partnership with organizer IQPC for the series into 2022. The first event is already planned with a great line up of speakers including **Burkhard Schaefer** from SiLA/AnIML. Organised by IQPC with **SiLA as partner**.

## Review of BioSASH hackathon on Laboratory Robotics and invitation to next one!

On October 14, 2021, BioLAGO in cooperation with SiLA hosted the second lab automation hackathon with great success. Highlights included: the up-and-coming Swiss start-up 1LIMS achieved the ambitious goal of integrating the Edge SiLA Gateway into 1LIMS and was presented to all hackathon participants in a short demo. Britain's longest running robot company Shadow Robot Ltd. presented the dexterous robot hand for critical lab tasks.



Takeda in cooperation with HTWG Konstanz and 8-BOT gave an extensive introduction to mobile robotics. A comprehensive overview of the broad set of technologies was provided that constitute mobile robotics and included motion models, perception, navigation and mapping.

Moreover, a group of automation experts met with lab users to discuss various challenges in the lab and to work on initial approaches to solutions. BioLAGO and SiLA invited pharmaceutical companies as well as high professional hardware and software specialists, experienced programmers, scientists in the field of artificial intelligence and students. More than 45 participants got involved and played an active role in the different working groups of the second bioSASH hackathon.

The next hackathons are scheduled for March 2022. Please [contact us](#) if you are interested in participating.

The bioSASH hackathon series is a partnership between BioLAGO and SiLA and is supported by the European Commission via the DIH-Hero project Digital Innovation Hubs for healthcare robotics. <https://dih-hero.eu/>

### **What participants said:**

*“The event is a great opportunity to create new business contacts in pharmaceutical industry, everything from software, over hardware and service providers to manufacturers and producers. [Moreover], the concept of hackathon means that we all meet to address a given topic”*



## SiLA Academic User Conference – call for presentations for Conference, March 2022

Motivated by the different approaches observed in industry versus academic automation projects we organized a workshop on academic use cases that adopt SiLA for automation. Presentation of projects from Universities of Göttingen, Munich and Greifswald delivered topics for vivid discussions about the availability of specific instrument drivers over preferred programming languages to requirements for open source solutions.

A recording of the workshop can be found here: <https://www.youtube.com/watch?v=SziuATL8KfE>

Contributions of the 25+ highly active participants confirmed our suspicion, that there is an unmet need for easily deployable automation solutions tailored to academic requirements. Due to the great acceptance and positive feedback, we are currently planning a follow-up scheduled for late March '22 with focus on mobile robots for decentralized and mixed automation. This open format highly depends on an active community and we would like to encourage everyone to contribute topics and questions to be addressed or present use cases to be discussed. If you are interested in presenting, please contact [us](#).

## Welcome our new SiLA member Institut für Energie- und Umwelttechnik (IUTA) e.V.

The Institute of Energy and Environmental Technology (IUTA) is a research institute in the field of energy and environmental technology and forms the bridge between basic research and industrial application. The goals of the research are both the acquisition of new scientific knowledge and methods and the transfer of scientific findings into practice. The fields of work can be assigned to the following four main topics:

- Aerosols & Particles
- Air pollution control & gas process technology
- Resources & Energy
- Analytics & Measurement Technology



With "Research Infrastructures NRW", the North Rhine-Westphalian state government launched a plan in 2016 to promote research and innovation potential. One of the funded projects is "FutureLab.NRW", where IUTA will build an infrastructure for a digitalized model laboratory for the miniaturized instrumental and effect-based analytics of the future. The greatest technical challenges here are the definition and establishment of suitable interfaces between a conventional laboratory information and management system (LIMS) and an electronic laboratory notebook (ELN), the connection of all devices, via a laboratory execution system (LES), as well as the integration of inventory data. Many of the devices currently in use do not offer suitable interfaces and act as isolated solutions. To ensure an automated data transfer, integration solutions are needed that allow collection and transfer of metadata.

As part of the transfer strategy of FutureLab.NRW, the aim and objectives of the project are to be made accessible to a broad public. By joining the SiLA Consortium, IUTA wants to make an active contribution to the rapid implementation of non-proprietary standards. With the FutureLab.NRW, IUTA also offers an ideal platform to further develop future-oriented technologies together with the partners of the SiLA Consortium, to present the new solutions and to bring them closer to potential end users in the form of workshops and training courses.

## First international congress on pharmaceutical use of mobile robotics on 21-22 April

Day one will focus on software standards and the development of plug and play robotics - an area where SiLA can play an important role, Day two will focus on innovation in QC labs of the future, pharma logistics and automation. The congress will cover such topics as cost savings and reliability in automation of pharma manufacturing, QA and QC, evaluating the impact of automation of pharma manufacturing and the application of mobile robotics, overcoming challenges in varying software standards and the development of plug and play robotics and creating a business case and competitive advantage. Organized by [OxfordGlobal.co.uk](http://OxfordGlobal.co.uk).



## The SiLA Board of Directors says goodbye to 3 long-time members and welcomes 2 new SiLA Directors in 2022

The SiLA teams says goodbye to our long-time Thomas Frech (Xavo), Bart van der Schoot (Seyonic) and Haike Suering (Perkin Elmer). Thank you for all your contribution and support in the past years and we wish you all the very best for the future.

At the same time, we are delighted to announce our two new Directors, Tim Meyer (University of Göttingen) and Mark Auty (Unilever). We look forward to working with you!

## Recordings and publications- now available

### SiLA Academic User Meeting, November 11th, 2021

Hear presentations on “Incremental Lab Automation for Tissue-based Drug Screening”, “Multi-Stage Bioprocess Optimization” and “LARAsuite & Machine learning guided robotic high-throughput protein/enzyme screening”

<https://www.youtube.com/watch?v=SziuATL8KfE&t=63s>

### Full version WhitePaper: “SiLA for Software Vendors” available for download now!

Visit our website and register for free as a personal member to download the article:

<https://sila-standard.com/downloads/>

We hope you enjoy the information it contains and very welcome feedback.

**Our newest SiLA white paper: "Connectivity and data standards - a precondition for successful digitalization" is going to be published in February 2022.**

## Deft Reactor - from SiLA member Applied Scientific Technologies

Working with partners GPE Scientific and major instrument manufacturer Julabo, the new **Deft Reactor** system brings device integration, digital control and reporting features of Deft to lab reactors.

Common lab instruments such as the Julabo PRESTO thermo-circulator, overhead stirrers and pH meters are integrated with jacketed and unjacketed reactors such as Chemglass, to develop a highly configurable reactor that can be used either as standalone or alongside an existing Deft system. The Deft Reactor system uses the SiLA 2 protocol. The adoption of industry-led SiLA standards helps to future proof lab equipment by enabling end-to-end integration with LIMS or local area networks with a control App for Android or iOS devices and by them to connect to each other are share data more seamlessly.

The connected lab instruments via the **Deft Reactor**, can be fully controlled via the user-friendly, intuitive, dedicated App. Data can be input manually or automatically from a connected LIMS or ERP system putting the user in charge of experimental design and workflow. The user can operate and view the progress of the experiment remotely in real-time via the App. Over-the-Air updates ensure the system is always state of the art & adapted to the latest techniques.



## SiLA 2 Training Videos available for free on youtube!

We are so delighted to share **19 training videos for Python, Java and C#** with you!  
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](http://www.sila-standard.org)

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