

# SSHE Newsletter 2/2021

ETH Zurich, Safety, Security, Health and Environment (SSHE)  
November 2021



# 1 Functional Strategy of the SSHE Department

The Safety, Security, Health and Environment (SSHE) Department is responsible for safety, security and protecting the health of the members of ETH Zurich, along with environmental protection on the ETH campuses. What does this mean in concrete terms? The answer to this question can be found in the functional strategy of the SSHE Department, which was drafted by order of the Vice President for Infrastructure (VPIN) and published in summer 2021.

The functional strategy provides the framework for the operational activities of SSHE for the benefit of ETH Zurich. The document summarily describes the tasks, competencies and responsibilities of SSHE based on the principles laid down by ETH Zurich and depicts developments that will have a decisive influence on both the implementation of safety and security at ETH Zurich as a whole and the work of the SSHE team in particular. The core of this framework paper is constituted by nine principles on which the SSHE staff base their operational activities. Thus, SSHE strives to achieve the vision that it expressed in drafting the functional strategy, namely that “all members of ETH Zurich embody an exemplary culture of health and safety for the purpose of future-oriented development of the university’s leading global position in the fields of research, teaching, technology and knowledge transfer.”

The specific fields of action and measures that have been defined for this objective can also be found in the functional strategy. [The document](#) can be viewed on the SSHE website.

## 2 Procuring Safe Work Equipment – what to Pay Attention to

What should you pay attention to when procuring work equipment? What do you need to do in order to ensure that the machines, tools and devices used at ETH Zurich are compliant with safety regulations? Work equipment includes machinery, systems, apparatus and tools that are used in the course of work. Four important questions must be answered before purchasing:

1. Is the work equipment actually suitable for the intended use?
2. Is it compliant with safety regulations?
3. Are negative effects on the working environment to be expected (e.g., noise)?
4. Is it user-friendly (e.g., ergonomic)?

CE markings and declarations of conformity do not guarantee that the work equipment is in compliance with safety regulations. Nevertheless, it is to your advantage to check CE marking and declaration of conformity before commissioning the work equipment. In addition, you should check the following:

- Are the operating instructions supplied with the equipment, in the required language?
- Are there no obvious defects (e.g., protective guards not attached, non-secured hazard zones, missing labelling)?
- Is there a circuit breaker (e.g., main switch)?
- Have the users been instructed (trained), if required?

If you want to be sure, especially for large or complex work equipment, then use the detailed [SUVA Approval Checklist](#) (not available in English) and document the handover. For professional in-house support, please consult our new [factsheet](#), or contact [cabs@ethz.ch](mailto:cabs@ethz.ch). You can ask [the purchasing coordination team](#) for support for the procurement process.

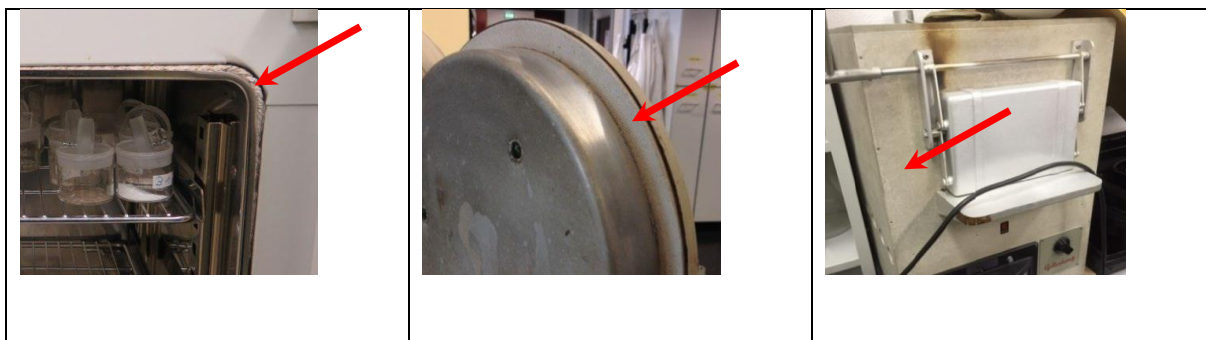
### 3 Asbestos in Devices and Objects

Asbestos can cause fatal lung diseases if asbestos dust is inhaled. Due to their fibrous geometry and bio-persistence, asbestos fibres are very hard to eliminate from the system. Up until it was banned from use in Switzerland in 1989, asbestos was often used in components of buildings due to its properties (heat and chemical resistance, electrical and thermal insulation, elasticity with high tensile strength).

Asbestos was also used in devices and objects in laboratories and workshops if the aforementioned properties were useful, especially for heat insulation and fire safety. Some of these devices are still in use today. This is also true at ETH Zurich. Often, these devices include furnaces, drying chambers, autoclaves, fire-resistant gloves and other similar devices. This list is not complete, and asbestos may also be found in lesser-known devices; a cinematic carbon arc lamp from the 1930s was one such item that turned up recently. It is important to us that these devices are no longer used and are disposed of correctly.

Therefore, you should check working devices which were manufactured before 1990 to see whether they might have parts that contain asbestos. You can find a few typical examples below. The [SSHE](#) Department is available to provide advice and support in this matter. In addition, please comply with the bulletin on [Asbestos in Devices](#). If a device contains asbestos, it must be sanitised and disposed of professionally. The SSHE Department will bear the costs for this. Further information is available [here](#) (not available in English).

#### Parts that contain asbestos



#### Seals that do not contain asbestos



### 4 Storage of Lithium-Ion Batteries

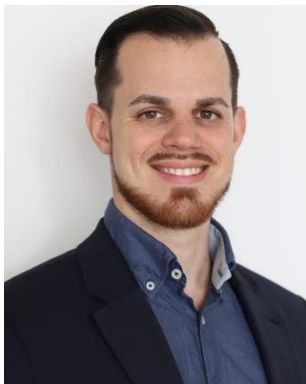
In terms of annual production, transportation, storage and usage of lithium-ion batteries (LIB), we can say that they are relatively safe. However, the development and introduction of ever more powerful LIBs inevitably leads to more complex regulations.

The Association of Cantonal Fire Insurance Bodies (VKF) issued a new information sheet on [lithium-ion batteries](#) (not available in English) in 2021. LIBs are now classified in three hazard levels (HLs). The classification is based on the energy content, as a battery's energy density influences its flammability.

This is important for storage, for example. HL I LIBs present a low risk, and no special measures are required for storage. For a storage room, the energy content of the batteries must be less than 1 kWh per m<sup>3</sup>. Accordingly, LIBs at HL II (1–50 kWh per m<sup>3</sup>) constitute a medium risk, and HL III LIBs (> 50 kWh per m<sup>3</sup>) constitute a high risk. When storing LIBs at HL II and III, measures to limit risk must be applied. This includes, for example, the creation of fire resistance compartments in storage rooms with a fire resistance of at least 60 minutes (EI 60), installing a fire-controlled smoke and heat extraction system and removal openings that lead into the open. Further measures are required if the total energy content exceeds 500 kWh per fire compartment. To store LIBs at HL III, a lightning protection system for the building and pressure release openings are also required.

LIBs at HL III may not be stored in high rise storage systems. LIBs at HL II and HL III may be stored on pallets in their original packaging. Here, the top edge of the palletted goods should be a maximum of two metres above the floor. This enables safe recovery in the event of an incident. Please, consult our new [factsheet](#), or contact [sgu-umwelt@ethz.ch](mailto:sgu-umwelt@ethz.ch) if you have any questions.

## 5 New Team Leader for the Alarm Organisation Section



Dario Gangemi

As successor to the previous co-team leader of the Alarm Organisation Section, Roman Saladin, who unfortunately can no longer perform his function, SSHE was able to recruit a successor from its own ranks: Dario Gangemi took up his new position as team leader on 1 October 2021. Dario Gangemi was educated as an electrical engineer but states that he knew early on that he wanted to work in the safety and security sector one day. He already had many years experience in this sector, before he joined ETH's Uniformed Security Service at the beginning of 2018. In 2017, he successfully passed the examination to become a federal expert in security and guarding (termed FSB).



John Bachelor

During his time at ETH Zurich, he has built up a broad network and has made use of opportunities to progress professionally. SSHE is delighted to welcome Dario Gangemi in his new role. In the future, he will work closely with John Bachelor, who has been Co-Team Leader since 2017. The leadership team will now be organised slightly differently. Previously, the team was co-led, with both leaders heading the Uniformed Security Service staff, Emergency Desk staff and polyvalent staff, but now management responsibility will be split across the divisions. John Bachelor will now be the Team Leader for the Emergency Desk, while Dario Gangemi will take on leadership of the Uniformed Security Service. SSHE wishes both leaders every success in their work together.

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<https://ethz.ch/services/en/service/safety-security-health-environment.html>