

Laboratories at the Department of Geoscience work within the following (inter)national legislations, principles, and standards:

The **Danish Work Environment Act** (Arbejdsmiljøloven) and different Danish polices, and guidelines set by Danish authorities such as *Arbejdstilsynet* and *the Danish Health Authority*. They include (but are not limited to) health and safety risk assessments, training and supervision requirements, relevant certifications of users carrying out specific tasks (e.g., use of epoxy, forklift, etc.), mandatory safety-fail checks (e.g., ventilation, centrifuges, etc.), chemical handling, waste systems, etc.

The regulation on the registration, evaluation, authorization, and restriction of chemicals is known as the **REACH Regulation**; the main European Union law to protect human health and the environment from the risks that can be posed by chemicals. This is done by better and earlier identification of the intrinsic properties of chemical substances and by taking measures, such as phasing out or restricting substances of very high concern.

In the European Union chemical hazard communication is regulated by the **CLP Regulation**: Classification, Labelling and Packaging of chemicals to harmonize handling of substances or mixtures. Particularly, it addresses the most hazardous substances, such as carcinogenic, mutagenic, toxic for reproduction or respiratory sensitizers, biocidal or plant protection products.

Our laboratory technologists are trained to use the **STOP-principle** (Stop, Think, Observe, Plan) to keep all lab users safe in any situation: It is a mindset to control and analyze otherwise hazardous settings, procedures, and materials by elimination or minimizing risks and exposure. This is carried out by promoting safer alternatives, applying proper technical measures, and providing suitable, personal protective equipment when necessary.

The use of **CE-labelled** electrical tools, instruments, and safety equipment is encouraged whenever possible. The label applies to products manufactured anywhere in the world and marketed in the European Union. A CE label proves that a product has been assessed by the manufacturer to meet European Union requirements for safety, health, and environmental protection – the CE label does not consider the quality, efficiency, or lifetime of a product.

Whenever possible, the laboratories carry out work based on international (e.g., ISO, International Standard Organization) or national (e.g., DS, Danish Standard) **standardized methods** and use **standard materials** (certified or in-house standards). Our metal free Cleanlab facility is *ISO 5* or class 100 and ensures fewer than 100 000 particles per cubic meter (size 0.1µm or smaller).

Regular **calibration procedures** are carried out when applicable for analytical instruments as well as sensitive laboratory equipment such as analytical balances to ensure reproducible and high-quality research data that is precise as well as accurate.

The department supports the **United Nations goals for Sustainable Development** by prioritizing procurement for infrastructure and consumables that supports a sustainable workplace, and by reducing energy for electricity, transportation, and heating/cooling purposes during daily operation.

Finally, we are fully committed to the values of Equality, Diversity, and Inclusion (**EDI**).