

About Nanolab Phase 4 B346A

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New building for nanofabrication at DTU Lyngby Campus.

DTU Nanolab, National Center for Nano Fabrication and Characterization, researches micro- and nanotechnology and provides access to advanced equipment and expertise within the field. With its location on DTU's campus in Lyngby, DTU Nanolab plays a central role in the development of micro- and nanotechnology in Denmark.



Nanolab Phase 4 view from Akademivej

Nanotechnology is the key to future technology

Nanotechnology is essential for economic growth and security in Denmark. The use of nanotechnology has allowed researchers and companies to develop new technologies and products such as novel materials and tiny components. These are used in a variety of products including computer chips, optical lenses in mobile phones and for measuring cells.

These are all important components within artificial intelligence, IT and life sciences. DTU Nanolab, the National Centre for Nano Fabrication and Characterization, supports the development of Danish nanotechnology. Today, DTU Nanolab has a cleanroom - i.e. an advanced laboratory facility - for micro- and nanofabrication. This is used by both university researchers and commercial partners who can rent a workspace.

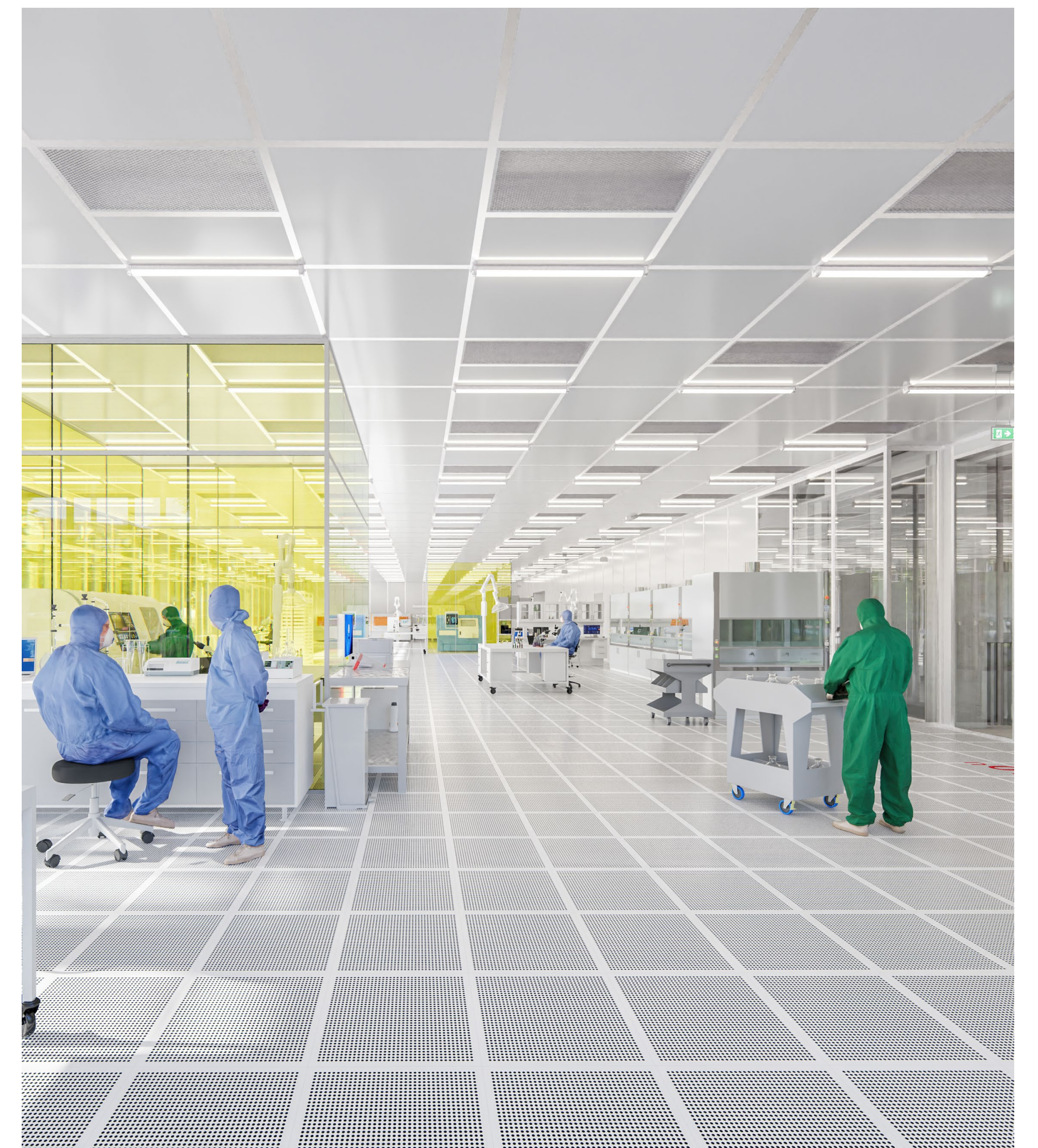
Need for more space

There are approx. 400 researchers, including those from 7 out of DTU's 8 basic research centers, who use DTU Nanolab's facilities. However the maximum capacity of the cleanrooms has been reached. There is a need for new, up-to-date laboratories and tools if DTU Nanolab is to meet demands from collaboration partners or to launch major research activities.

DTU is constructing building B346A with new state-of-the-art research facilities. With B346A, DTU is expanding its facilities with up to 900 m² of ISO 4-6 cleanroom under filter, designed to house the latest generation of nanofabrication equipment. This will give collaboration partners, research projects and new initiatives access to the essential and unique facilities needed in Northern Europe.

Complex laboratory construction

A cleanroom creates a controlled



The building has the capacity for up to 900 m² of cleanroom area under filter

environment where temperature, particle count and humidity are regulated which allows high-tech research in key nano and quantum technologies. DTU Campus Service (CAS), the department constructing the building, aims to design and construct B346A with the latest sustainable solutions. An important focus is to create flexible and future-proof cleanrooms, adaptable to new technologies and facilities, that can be used around the clock, throughout the whole year, with the lowest energy consumption possible.

Meeting place and shop window

DTU has ensured that DTU Nanolab can future-proof DTU's world-leading research infrastructure within micro- and nanofabrication. Most importantly, DTU will contribute to Denmark being able to supply the necessary components for future technologies.

The vision for B346A is to create an inspiring and innovative international research environment that brings researchers, students, and collaboration partners across disciplines together. Simultaneously, B346A will become a showcase where everyone can experience and gain knowledge about the latest nanotechnology.



Nanolab Phase 4 west facade with large open areas to allow for views to the cleanroom