



The NEQST Innovation Building



THE NEQST (NANOSCALE QUANTUM SCIENCE & TECHNOLOGY) INNOVATION BUILDING WILL BRING TOGETHER EXPERTS IN NANO AND QUANTUM SCIENCE AND PROVIDE A STATE-OF-THE-ART SHARED HOME FOR THEIR RESEARCH.

The Hebrew University Nanoscience and Quantum science centers, each world class centers in their own right, are joining together to bridge the gap between what is, and what is needed, in order to create what could be - for the next technological revolution.

Imagine... a futuristic robotic arm that would fully imitate the incredible functionality of the human arm, able to grip complex objects and perform intricate human gestures. Sustainable energy systems affordable enough to be deployed even in the most disadvantaged regions of the world. An atomic clock that could help spacecraft to navigate autonomously in orbit.

Although we have much of the knowledge and software needed to do anything we can conceive of, current hardware—man-made materials and devices - are far from providing the functionalities we envision. What is needed is nanoware: the merging of novel concepts in nanomaterials, quantum engineering, nanophotonics and nano-bio disciplines in order to create the next generation of elements and capabilities. **We are responding to this challenge with NEQST.**

Co-locating the Hebrew University's nanoscience and quantum information researchers in a shared space will make possible, new and unprecedented levels of innovation, by encouraging and enabling scientists from both fields to join forces and leverage each other's knowledge and expertise. Building has begun and is expected to be completed in 2026.

HEBREW UNIVERSITY
Nanoscience in Numbers

#1 IN ISRAEL

AS RANKED BY THE INTL. NANO ADVISORY BOARD

88

RESEARCH GROUPS FROM 5 FACULTIES.

500

RESEARCH STUDENTS AND FELLOWS

30

STARTUP COMPANIES ESTABLISHED

1,100

PATENT APPLICATIONS FILED SINCE 2011; 253 GRANTED

28

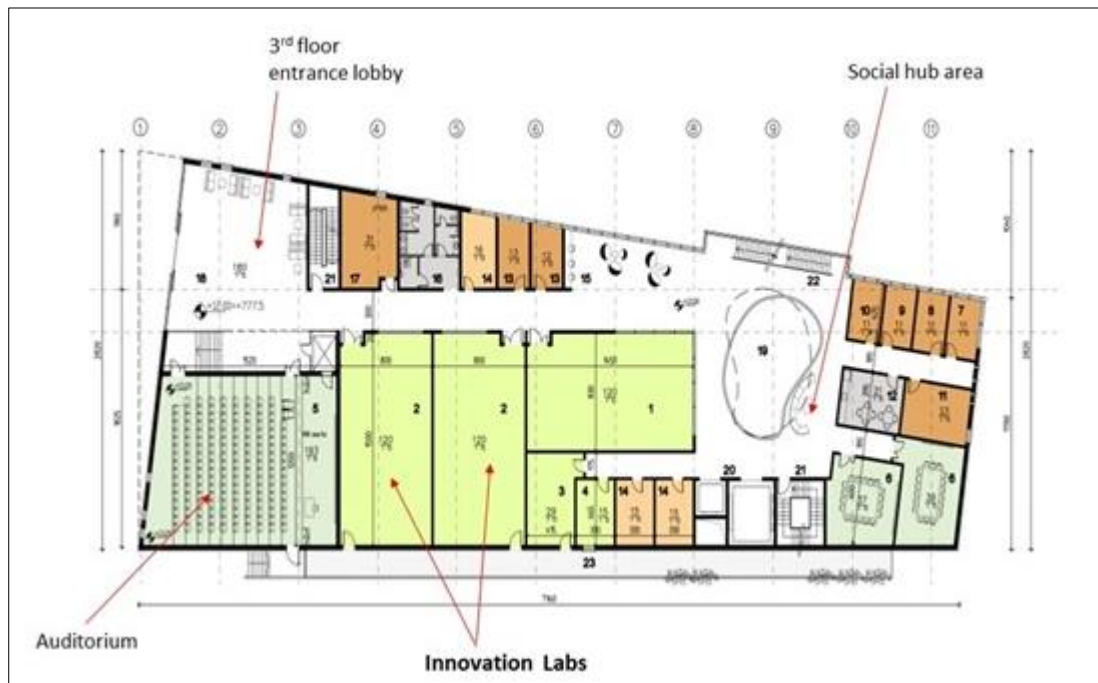
EUROPEAN RESEARCH COUNCIL GRANTS AWARDED

400

PAPERS PER YEAR IN LEADING JOURNALS

The NEQST Innovation Labs

One of the most exciting features of the NEQST Innovation Building will be the NEQST Innovation Labs. In what is a new concept for the Hebrew University, four Innovation Labs will be equipped with general infrastructure (optical tables, electronics, chemical and biological hoods, etc.) and will be available to unique and ad-hoc teams at a short notice, following an expedite selection process by a designated supervising board. An Innovation Lab will be allocated to the selected team for a limited period of time (e.g. 1-2 years) to get the new concept 'off the ground', and then the Lab is cleared and returns to the pool of Innovation Labs managed by NEQST and available for the next promising collaboration – **the NEQST great idea.**



The combination of a streamlined allocation process for these non-designated labs, alongside supporting infrastructure and the Nano-Quantum research ecosystem, will be key to the success of this pioneering enterprise. We envision a plethora of groundbreaking interdisciplinary ideas that will be generated and demonstrated, each within a relatively short time period. Some of these ideas will undoubtedly lead to significant scientific discoveries and potential commercial success stories, in vital fields such as medicine, communications, security and energy. Many ideas will lead to the creation of new jobs within the city of Jerusalem.

Philanthropic Opportunities

There are four NEQST Innovation Labs planned for the new five-story NEQST Innovation Building. Each lab complex will cover 100-120 square meters and will include a small office and a shared student area. A gift of \$1.4 million will cover the construction costs of one lab as well as the purchase of the initial generic equipment.

In recognition of such a generous gift, the Innovation Lab may be named according to the donor's wishes. A plaque with the chosen name will be placed at the entry to the lab, and the Hebrew University will provide bi-annual reports on the activities and research taking place in the Lab.