Feringa Building
Home to Nobel Prize Winners
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Background
Replacement of Nijenborgh 4

This laboratory complex (1969) for research and education in chemistry, physics and engineering is technically outdated and no longer meets today’s high standards.

After thorough research (renovations vs. new building), the University decided to build the Feringa Building to replace Nijenborgh 4.
Named after Ben Feringa

The name of the new building was changed in the design phase from ‘Zernikeborg’ to ‘Feringa Building’. Professor Ben Feringa was awarded his Nobel Prize (2016). After Frits Zernike (1953), he is the second Nobel Prize winner at the Faculty of Science & Engineering, ‘Home to Nobel Prize Winners’.
Use of the Feringa Building

Education and research in chemistry, physics, astronomy and engineering:

- Stratingh Institute for Chemistry
- Engineering and Technology Institute Groningen (ENTEG)
- Zernike Institute for Advanced Materials (ZIAM)
- Groningen Biomolecular Sciences and Biotechnology Institute (GBB)
- Van Swinderen Institute for Particle Physics and Gravity
- Kapteyn Astronomical Institute
- SRON Netherlands Institute for Space Research
Facts & Figures
Project in numbers

- 64,000 m² Gross Floor Area
- 260 metres long, 63 metres wide
- Five stories high, with an extra floor for installations
- Room for 1,400 students and 850 staff members
- A large lecture room with 420 seats, can be divided in 180 and 240 seats
- Restaurant with 250 seats
- 3 km of lab tables and 450 fume hoods (‘zuurkasten’)
- Clean rooms, low vibration laboratories and 30 laser labs
Sustainable design

• Optimal insulation
• HR ++ glass
• 900 m² solar panels (± 120,000 WP)
• LED lights in addition to natural daylight
• Gasless heating
• Geothermal heating and cooling system (‘WKO’) with heat pumps (‘warmtepomp’)
• Energy-saving auto-close fume hoods
Location & Design
Location of Feringa Building

Zernike Campus Groningen

Please note:
This is the definitive location of the Feringa Building. During the design process the building was shifted 80 metres southwards. Most impressions used in this presentation show the old location.
Lay-out of the building

- Installations (roof-top)
- Mid sections (2nd, 3rd & 4th floors)
- Plinth (ground and 1st floors)
- Backbone (logistics corridor)
- Open patios
- Main entrance, atrium & auditorium
- Restaurant
- Passage (front corridor)
Lay-out of the building
Plinth
(ground & 1st floors)
**Plinth (ground & 1st floors)**

The ground and first floors form the ‘Plinth’, which will house:
- the research cluster
- the clean rooms
- the atrium* with access to
- the auditorium (large lecture room)
- a conference room
- social corners
- workspaces for students
- the restaurant with an outdoor terrace

* the lively atrium is a large entrance area, suitable for exhibitions, conferences and as a place to meet, study and take a break.
Passage
Logistics backbone
Lay-out of ground floor
Auditorium

The large lecture room beneath the atrium has seating for 420 people, but can be partitioned into two rooms for 180 and 240 visitors.
Patios

4 courtyards:
Research cluster & clean rooms

The research cluster is located in the core of the building, enabling vibration-proof laboratories with high VC-D, VC-E or VC-F criteria.
Research Cluster
Clean rooms

ground floor
Lay-out of first floor
Theoretical education

first floor
Mid sections
(2\textsuperscript{nd}, 3\textsuperscript{rd} and 4\textsuperscript{th} floors)
Laboratories (facing north) and offices

All the laboratories are built on the north side of each wing, keeping the impact of sunlight to a minimum. The chemical, biochemical and physics laboratories are flexible and interchangeable as each one can be connected separately to the ventilation, power and gas supply networks.
Lay-out of second floor
Practical and physics laboratories

second floor
Practical laboratories

Chemistry

many fume hoods

many benches

16x per 14.4m

second floor
Physics laboratories

many benches

microscopes  laserlabs  second floor
Physics laboratories

second floor
Lay-out of third floor

detailed like 2\textsuperscript{nd} & 4\textsuperscript{th} floor

third floor
Lay-out of fourth floor
Biochemical and chemical laboratories

fourth floor
Biochemical laboratories

point extraction

many wet benches

cold chamber

fourth floor
Biochemical laboratories

fourth floor
Chemical laboratories

many fume hoods

10x per 7,2m

fourth floor
Chemical laboratories
Lay-out of fifth floor (for installations)
Design made possible by:

Ector Hoogstad Architecten

dg mR
ARCADIS
abt Wassenaar

dr. heinekamp
Lab Engineering Benelux

KARRES BRANDS

stevensvandijck
bouwmanagers en adviseurs
Construction made possible by:

- Construction
- Installations: Will follow
- Laboratories: Will follow
- Cleanroom: Will follow
Schedule
Schedule

1) Summer 2019 – Summer 2021
Construction of Phase 1 of the Feringa Building

Before Phase 2
- Staff of buildings 17 and 18 move into Phase 1A of the Feringa Building
- Demolition of buildings 17 and 18 of Nijenborgh 4

2) Early 2022 – Summer 2023
Construction of Phase 2 of the Feringa Building

3) As of 2023
- Staff move into Feringa Building
- Final demolition of Nijenborgh 4
- Landscaping around new Feringa Building
More information

www.rug.nl/fse/feringa-building

www.rug.nl/GroundbreakingWork