

hammeskrause architekten

Projekt

Elegant in the Wind

WindLab at University of Oldenburg

#Education #Science



Projekttafel

Auftraggeber

Federal State Niedersachsen, represented by Staatliches
Baumanagement Lüneburger Heide

Nutzer

ForWind: Centre for wind energy research, operated by the
universities of Oldenburg, Hanover, and Bremen

Nutzfläche 1-7

2300 qm

Bruttogrundfläche

4400 qm

Bruttorauminhalt

21400 cbm

Fertigstellung

2016

hammeskrause architekten

Auszeichnungen

German Design Award 2019, Special Mention

Fotos

Piet Niemann

The new research building for turbulence and wind energy systems, “WindLab“, provides 2,300 square metres of space for the scientific work of 130 researchers from physics, meteorology, oceanography, and engineering sciences. The core of the project is a modern turbulence wind tunnel with an unusually long measuring track, offering national and international researchers a unique site for the exploration of wind energy. The compact, square volume of the new building reflects the idea of a tightly interwoven research landscape. All required functions are clustered around a bright and light-flooded atrium, using a clearly structured envelope made of pale bricks and exposed concrete. On its north side, the complex is completed by an 8 meter high experimental hall with an adjoining 30 m long turbulence wind tunnel. This tunnel is the central large-scale research device.



On its north side, the complex is completed by an 8 m high experimental hall

...

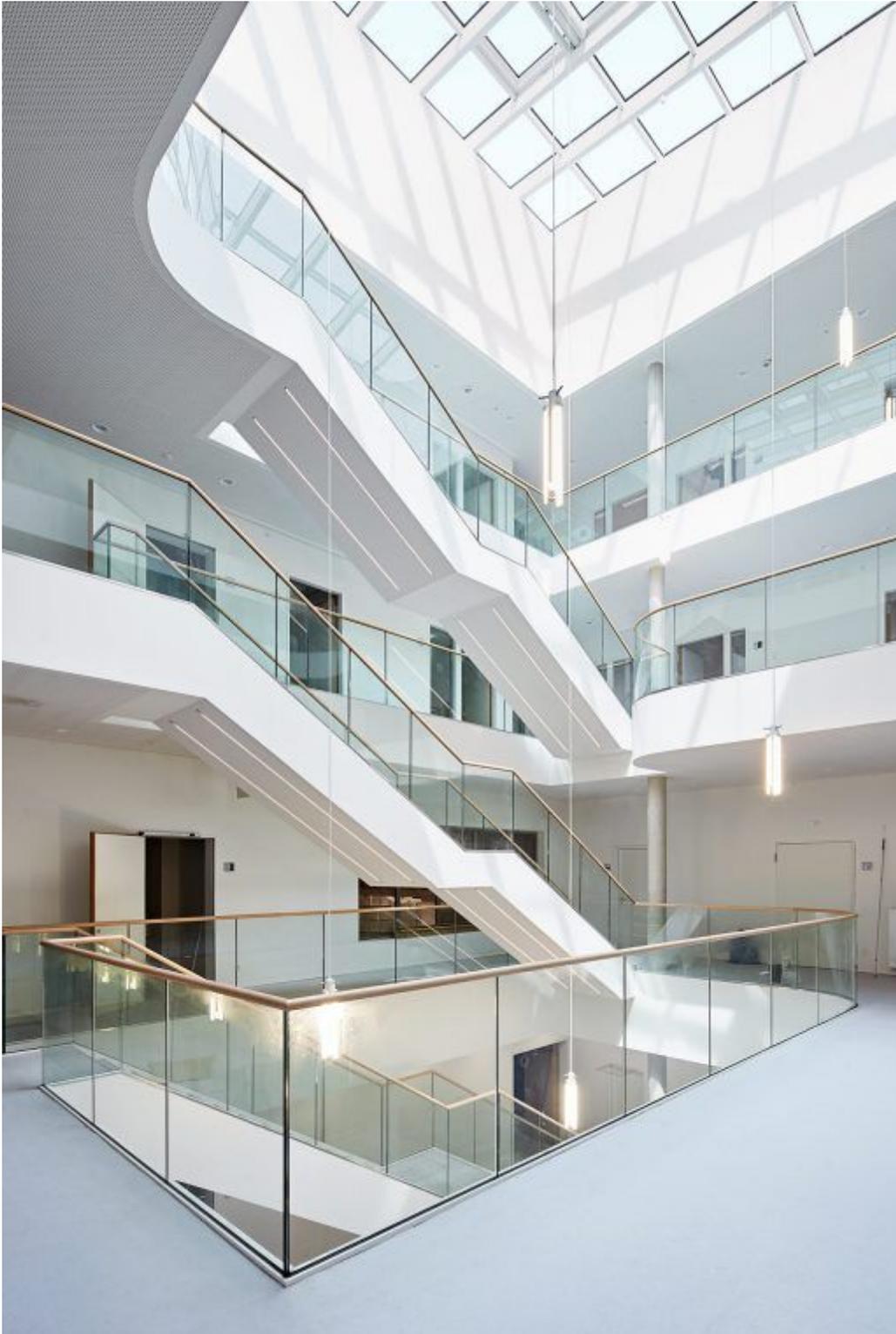
hammeskrause architekten



... with an adjoining 30 m turbulence wind tunnel. This tunnel can be seen as the central large-scale research device. The turbulences inside are generated by a special kind of vent.



Folding and sliding shutters of expanded metal sit in the precisely framed horizontal window bands, which take up the design of the vents, thus establishing a connection to the contents of the research.



The various functions are gathered around the airy interior with its centrally located glass-covered atrium, which is predominantly decorated in white. Apart from office and lab spaces, the scientists can use flexible seminar and conference rooms on the ground floor as well as additional communication spots, like meeting points or tea kitchens. In this way, informal and interdisciplinary encounters among the members of the research groups from

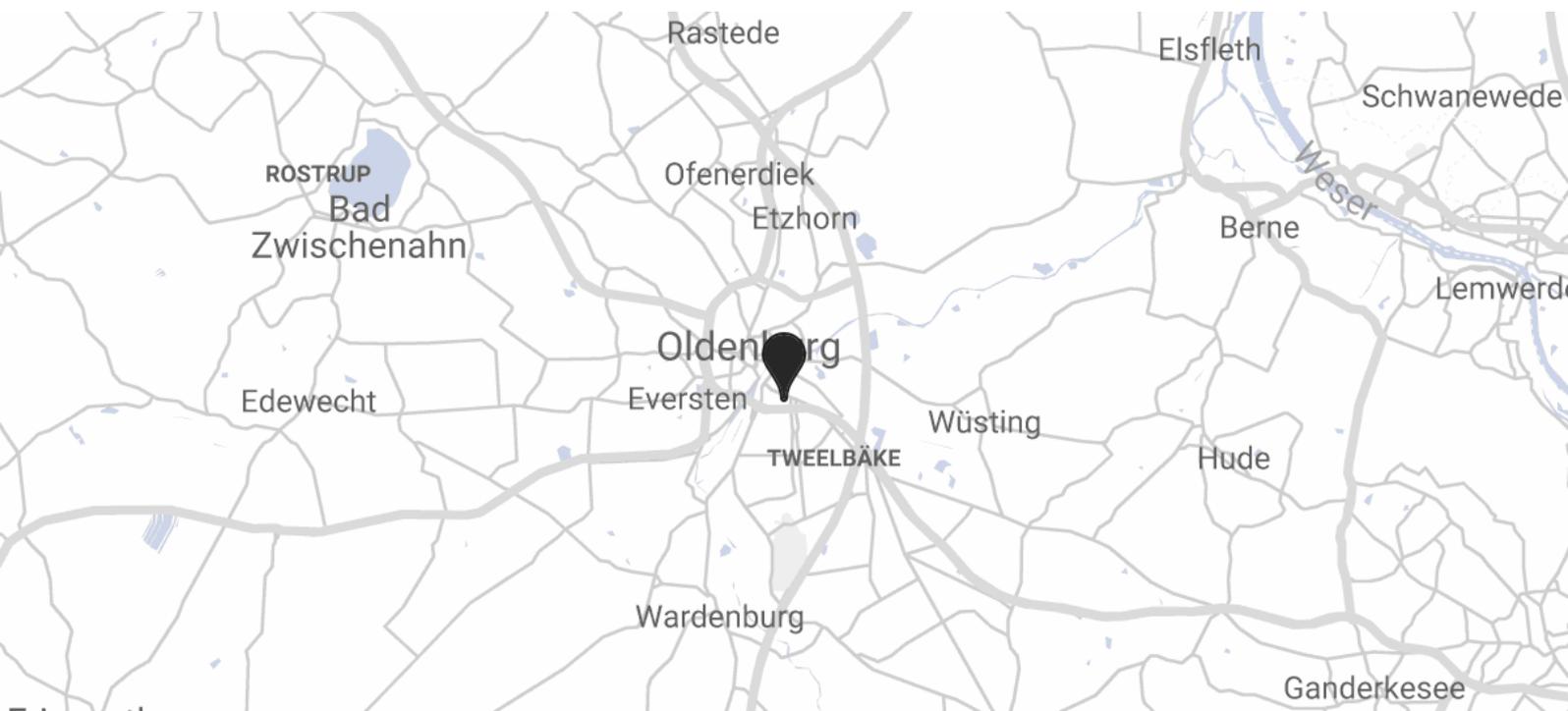
hammeskrause architekten

the different institutes are purposely encouraged.

Our way of working is permeated by an intense discourse with the client and the future users. In collaborative workshops, characterised by great transparency, a prototype of the building was developed, setting standards for the exploration of wind energy, even on an international level.

Markus Hammes

In terms of space and design the wind tunnel was incorporated into the WindLab building and its appearance as a whole. Still its structure and geometry are laid out in such a way that it is possible to respond to changing functional, geometrical, and building-dynamic requirements. This basic central concept of the design has already proved useful in the planning phase, as well as during the later construction phase.



Standort

hammeskrause architekten

WindLab at University of Oldenburg

Küppersweg 70
26129 Oldenburg
Deutschland