

# Bioaster

## BIOASTER Technology Research Institute offices and laboratories (IRT)

### CLIENT

Bioaster IRT (Bioaster Technology Research Institute)

### TEAM

Patriarche (architecture, urbanism, laboratory design process and standards, High Environmental Quality [HEQ] standards, general construction, cost assessment, signage)  
Partners:  
Plantier, Auberger Favre, and Reflex'éco  
Credits:  
Photos: ©Takuji

### KEYPOINTS

Biosafety level 2 and 3 (P2 and P3) laboratories for virology research.  
Nuclear magnetic resonance (NMR) imaging platform.  
Thermal, visual and acoustic comfort.  
Ease of maintenance (management, programming and monitoring of consumption).

### ENVIRONMENTAL PERFORMANCE

Double metal-glass façade.  
Solar production system controlled by a weather station.  
Local and self-sufficient vegetation.  
Bioclimatic design.  
Low environmental impact materials.

The Bioaster Technology Research Institute (TRI) is dedicated to innovation technology in microbiology and infectious diseases. Jointly developed by public entities such as Lyonbiopole, INSERM, the CNRS, and private entities such as the Pasteur Institute and Sanofi, Bioaster is a flagship scheme, in terms of architecture and environmental quality, located in the heart of the Lyon-Gerland Biodistrict.

The 3,800-square-metre innovation centre, which includes 2,200 square metres of biosafety level 2 and 3 (P2 and P3) laboratories, offers collaborative work spaces that can accommodate industrial and academic research teams. The laboratories, some of which are “fit-out ready” (shell-only laboratory spaces ready to be fitted out) are organised to be versatile and flexible. The building's architectural vocabulary is decidedly contemporary, with a glass, prow-like volume marking the entrance facing Tony Garnier avenue. Bioaster is today regarded as a symbol of the biodistrict.

Typology  
**Office, R&D & Laboratories**

Surface area  
**5 830 m²**

Construction cost  
**11.5 M€**

Location  
**Lyon, France**

Status  
**Delivery 2015**

Allocation mode  
**Private project management**

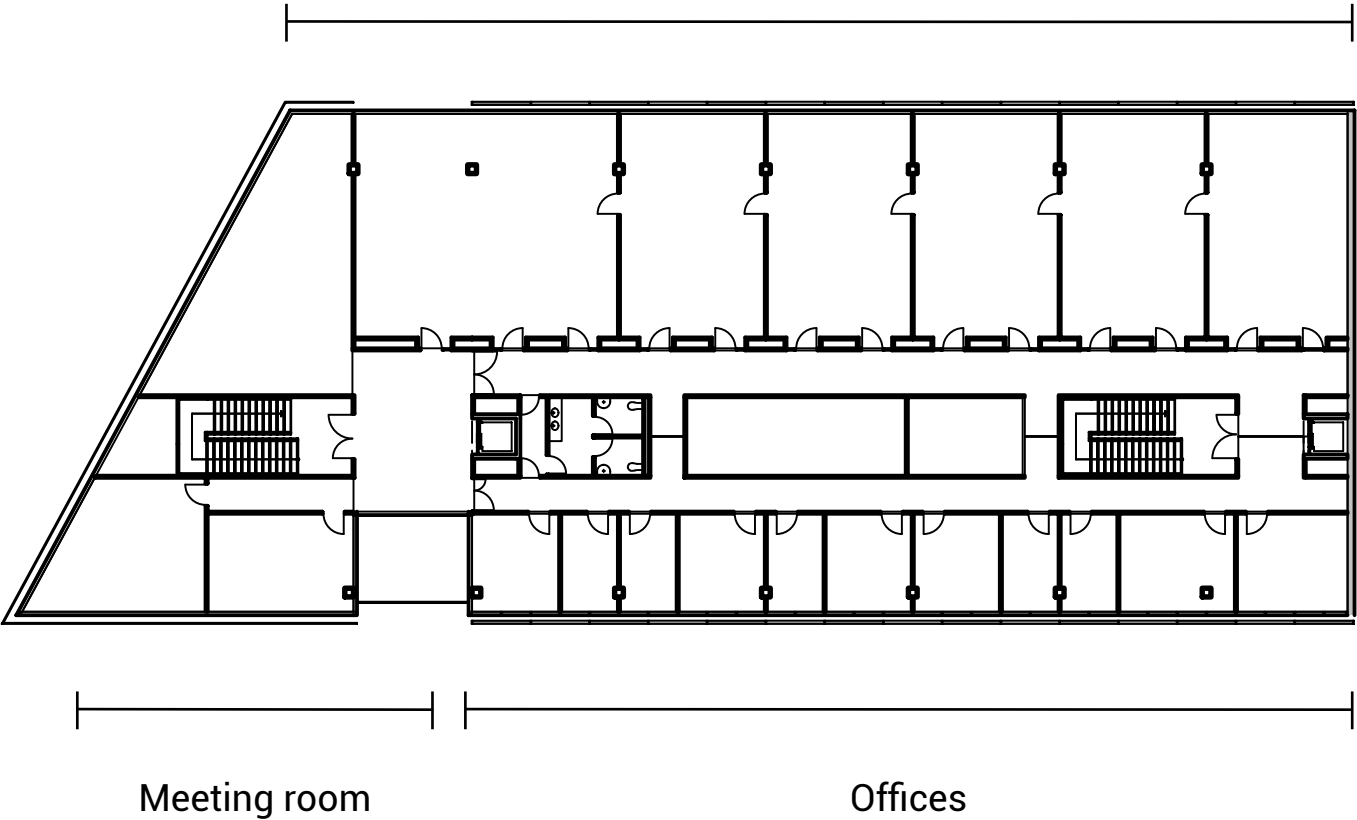




# Design Intent – Guiding Principles

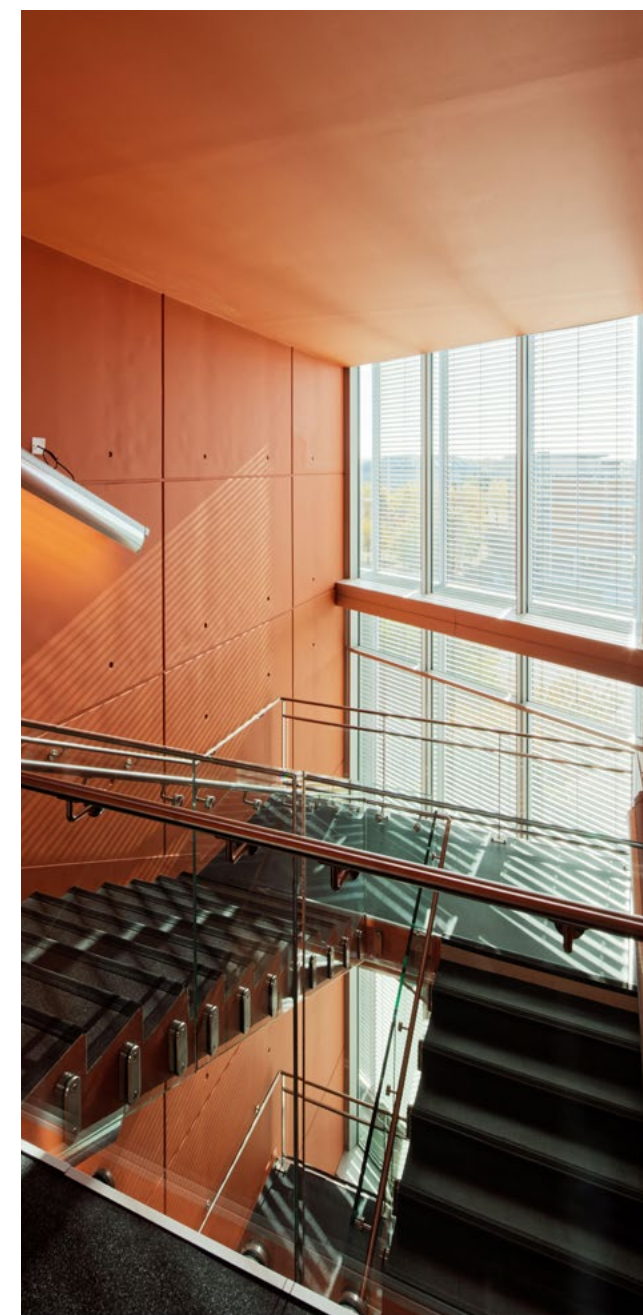
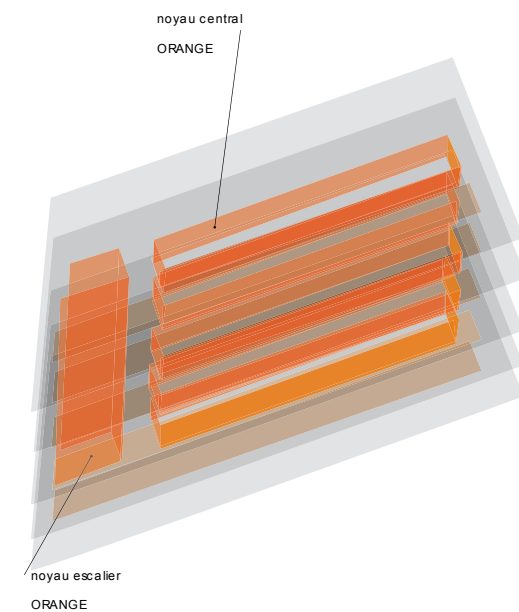
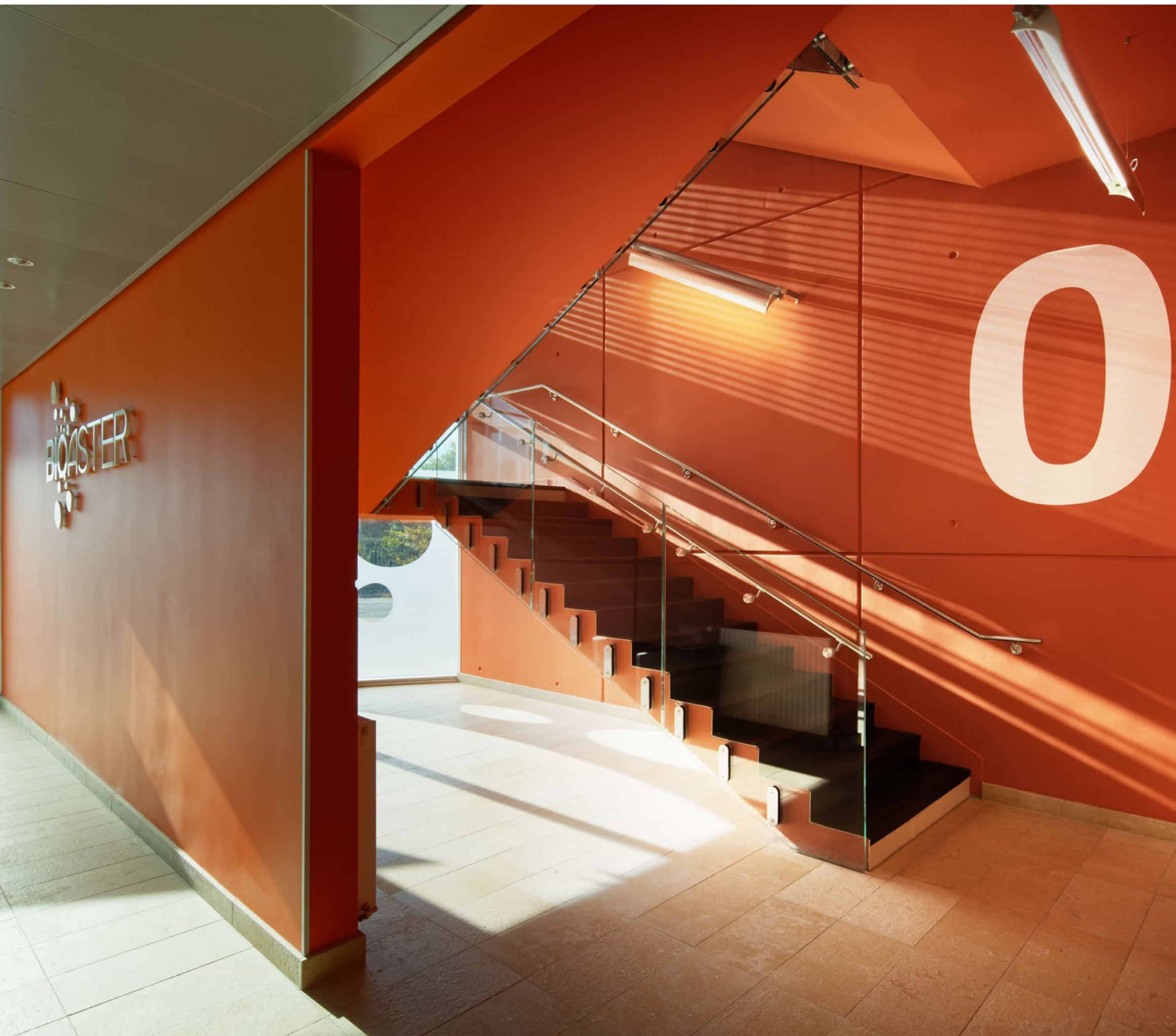
The project is primarily developed in alignment with Avenue Tony Garnier. The North-East façade houses office spaces, while the South-West façade is dedicated to laboratories. The overall orientation of the building on the plot is optimal for functionality, with an efficient layout of office and laboratory spaces. The building's morphology forms a prow that extends to the south. This prow contains shared meeting rooms as well as the main staircase. Both visitors and staff benefit from these prestigious spaces, which open generously onto the Gerland Park.

The glass volume of the Bioaster building creates a break in the avenue's axis, establishing it as a symbol of the biopole.



The North-East façade is composed, on the four upper floors, of a curtain wall with glazed modules measuring 1.35 m in width and 3.2 m in height. A horizontal strip clad with 80 cm-high lacquered aluminum panels marks each floor. Thermal comfort in the offices is ensured by a system of solar protections fixed to maintenance walkways. These protections consist of 200 mm-wide adjustable lacquered aluminum louvers, supported by vertical uprights spaced 2.70 m apart. On the ground floor, the façade includes a spandrel clad in horizontally coursed stone, matching the annexes built around the service courtyard.









# Bioaster

Typology	Construction cost	Status
Office, R&D & Laboratories	11.5 M€	Delivery 2015
Surface area	Location	Allocation mode
5 830 m²	Lyon, France	Private project management