

A black modern chair with a unique, sculptural backrest is positioned in a garden. The chair has a three-legged base and is set on a bed of small, light-colored gravel. To the left of the chair, there are several plants, including a large green leafy plant and a variegated plant with white and green leaves. In the background, a dark grey wall with a pattern of small, square perforations is visible. The scene is lit with warm, golden light, suggesting late afternoon or early morning. A circular logo with the text 'let bloum bloom' is in the top right corner.

let
bloum
bloom

DIFFERENT SCALES OF BIOPHILIC DESIGN

by INNOCAD architecture

What does it mean to bring nature
into the built environment?

Biophilic design does not always mean bringing nature directly into a space. It can also mean translating, abstracting, and mimicking qualities found in the natural world – creating analogues of nature through form, pattern, material, and spatial experience.



This approach comes together in our
Let *bloum* bloom setting at the
XALec in Graz, designed by INNOCAD
architecture. The organic silhouette of
the *bloum* shell chair by
Wiesner-Hager draws on the contours
and flowing shapes of leaves,
transforming a natural form into a
piece of furniture in direct dialogue
with natural plants and computer-
generated fractal patterns.



The large-scale acoustic wall panels perforated with fractal patterns, developed and designed by 13&9 Design in collaboration with Fractals Research, take another route: rather than imitating a specific natural form, they translate one of nature's fundamental visual structures – fractal patterns – into an architectural surface. These patterns are based on the research of Prof. Dr. Richard Taylor (University of Oregon, USA), combining design and science in a unique way. Studies show that those patterns can reduce stress by up to 60 %, support cognitive performance, and promote well-being.



Together, these elements create a continuous dialogue between biophilic design principles, interpreted through space, surfaces, lighting, and furniture – connecting the human scale with its built environment through the thoughtful placement of different functional elements, such as the biophilic form of the chair and the science-based, biophilic acoustic wall panels. Both are designed to support health and well-being in office spaces.





Chair: *bloum* by Wiesner-Hager
Product: FRACTAL CODE developed by
13&9 Design in collaboration with
Fractals Research for XAL Group
Project: XALec by INNOCAD
architecture
Photo Credit: INNOCAD architecture