

Radiolaria #1

Fragments of Nature

Hosted by: Studio Lilian van Daal

Project Information (EN)

Inspiration from nature

What can nature and its smallest life-forms teach us? These small life-forms are the starting point of Lilian van Daal's research. The microorganisms Radiolaria and Bryozoa form the main source of her inspiration. Radiolaria are unicellular organisms that are found as zooplankton throughout the ocean and take their name from the radial symmetry of their skeletal spines. The structure of Radiolaria amplified by 3D printing affords various levels of flexibility and comfort without using different types of foam like in common soft seating. Bryozoa are moss animals that live in tropical waters and freshwater environments. The lattice of connections within Bryozoa skeletons inspired Van Daal to create a system of connection points for assembly of the chair without extra materials such as glue. In general, the leading principle in Radiolaria #1 is formed by symmetry which is also the main characteristic in all unicellular organisms.

Bridging technology and nature through design

Radiolaria #1 is a successor to Van Daal's graduation project Biomimicry Soft Seating presented four years ago. Since the very first soft seating project, production time and energy consumption have both been decreased by 50% due to optimizations in the design that allow all elements of one chair to fit in one production run of the 3D printing machine. Novel material research conducted by Oceanz has allowed Van Daal to use recyclable materials for printing. Radiolaria #1 was produced by Oceanz 3D printing which provides cutting edge machines with which structures can be created that mimic natural solutions for durability, flexibility and connectivity on a microscopic level. The result is a blend of technology, design and nature celebrating the best of all three.

Projectinformatie (NL)

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Image List

Filename	Caption	Credit
radiolaria02-by-lonneke-van-der-palen-ddw_1631176908.jpg	Radiolaria #1 - Fragments of Nature	Lonneke van der Palen
radiolaria06-by-lonneke-van-der-palen-ddw_1631176982.jpg	Radiolaria #1 - Fragments of Nature	Lonneke van der Palen

Filename	Caption	Credit
radiolaria05-by-lonneke-van-der-palen-ddw_1631177031.jpg	Radiolaria #1 - Fragments of Nature	Lonneke van der Palen
radiolaria01-manon-van-daal-klein_1631177127.jpg	Radiolaria #1 - Fragments of Nature	

The images above are included in the ZIP under /images.