

international  
travelling  
exhibition

**responsive!**  
by material sense

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# responsive!

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**Material Sense's international travelling exhibition Responsive focuses on new developments in how materials respond to changes in their environment or interaction with the human body, bringing comfort to life. Meet the materials of the future!**

This exhibition is about how materials can become part of the fabric of our being. It shows how they support us, offering comfort and safety. Many of these materials change according to the varying needs of users. Already well-known phase change materials can keep the human body at the right temperature, or protect against shock. Photoluminous and thermochromatic materials can warn us or attract attention if necessary.

Soil Lamp gets its energy from the metabolism of all the little creatures that live in mud. Also notice the 'Grow' exhibit that generates electricity for buildings via the fluttering of solar panel 'leaves' mounted on their facades.

Don't miss the ambient textile displays, which include a flexible radiator made of textile that can be used as a curtain or a room divider while also heating the space. Other innovative textiles react to touch, movements, or temperature.

Also challenging is how at first glance simple materials like concrete can be turned into inspiring and inviting products like 3D play tiles that can be used to play marbles and turn into an interesting reflective pattern when filled with rainwater.

## **Responsive turns the world of science fiction into science fiction!**

Material Sense thanks International Forum Design (IF) in Hannover and The Dutch Embassy in Berlin for their invitation.

**Participants:** Ann de Gerssem, Daan Roosegaarde, Damian O'Sullivan, Lonneke Gordijn, Marieke Staps, SMIT, Koppert Cress, Création Baumann, Bioracer, d3o Lab, Devan Chemicals, Dorigo-Wierper, EE Labels, Eefje van Gemert, Energlo, Fatsshoe Design Team, Hybrids & Fusion, Lövenstein, Lucas Maassen, Outlast Europe, Simone Maase, The Swedish School of Textiles, Thomas Traxler, TNO Science and Industry, Vitafoam.

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**material sense** is a dynamic platform organisation linking designers, researchers and cutting-edge companies who are constantly searching for innovative materials to fuel their creativity. Material Sense supports companies and organisations on their path to a materials-oriented development and design by; consultancy, projects, exhibitions, research, workshops, seminars, publications and education.

**For more info, have a look on our website: [www.materialsense.com](http://www.materialsense.com)**

Responsive is powered by designstudio Loods 5, [www.loods5.com](http://www.loods5.com)



## Soil Clock



Infinite free and environmentally friendly energy. This clock runs on mud. The metabolism of biological life produces enough electricity to keep the clock working. Just stick the copper and zinc into two plants and it works!

Do not forget to water the plants because if you don't, the clock doesn't work!

Materials: bamboo, zinc, copper.

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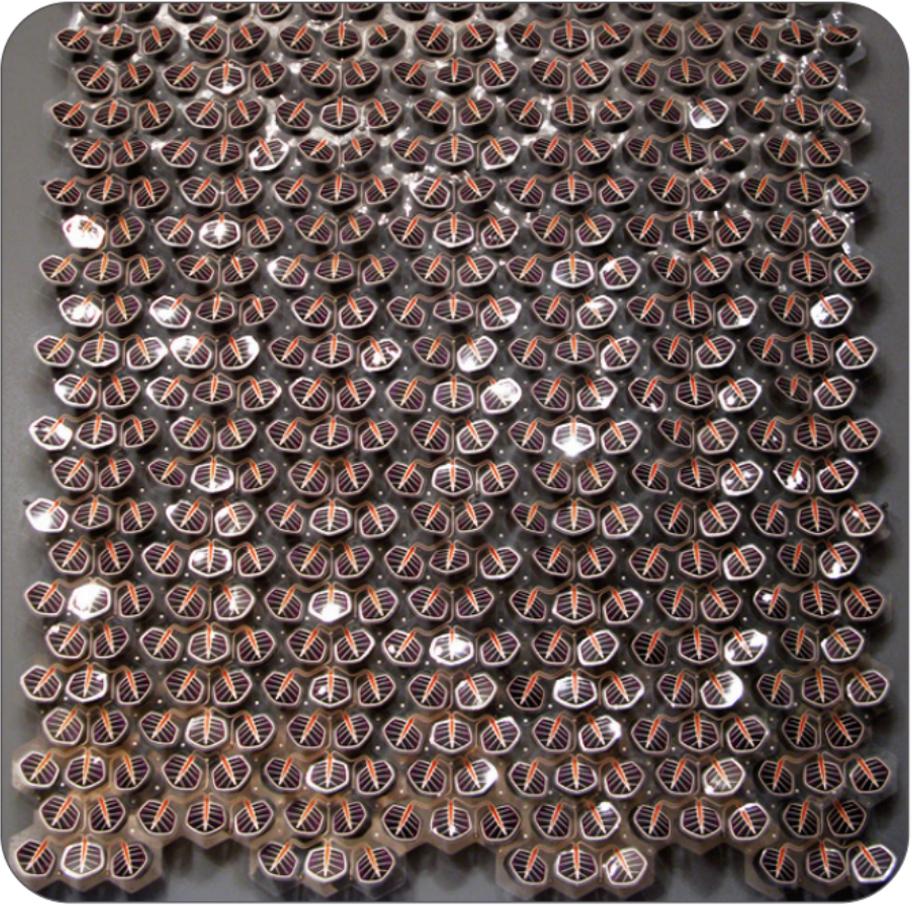
**manufacturer** Marieke Staps

**designer** Marieke Staps

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## GROW



GROW, a hybrid energy-delivery device was inspired by ivy. Its 'leaves' are flexible photovoltaic panels that generate solar power; their fluttering generates wind power. The designers utilize recycled and reclaimed materials wherever possible and ensure that at the end of GROW's lifespan, sustainable methods of recycling and reclamation will minimize its environmental footprint.

Materials: thin film photovoltaics, piezoelectric generators, screenprinted conductive ink encapsulated in ETFE fluoropolymer lamination, stainless steel screws, neoprene rubber, copper wire, and aluminium.

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**manufacturer**

**SMIT- Sustainably Minded Interactive Technology, LLC** (prototype)

**designer**

**Samuel Cabot Cochran**

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## Mini Dune



Dune is an interactive landscape which reacts to human behaviour. This hybrid of nature and technology consists of large amounts of fibers which react to the sound and motion of passing visitors by lighting up.

Dune investigates nature in a futuristic relationship with urban space by means of looking, walking and interacting.

Exhibited is a set of mini Dune's which brighten when you touch them.

Materials: tubes, microchip, LEDs and other media.

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**manufacturer**

Studio Roosegaarde

**designer**

Daan Roosegaarde

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