



Mitsui Chemicals

NEWS RELEASE

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MITSUI CHEMICALS, INC.

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Material Meets Creative Team: #7

## MR™ Lens × Rhizomatiks

“optical walls” – Walls of Light Rising Through the Air

Mitsui Chemicals, Inc. (Tokyo: 4183; President & CEO: Tsutomu Tannowa) has revealed the seventh project under “Material Meets Creative Team,” a creator-based collaboration project that aims to promote the appeal of materials from an all-new perspective. An announcement for this seventh product was made in the August 2019 edition of BRAIN magazine, which specializes in promotional and creative fields. For this latest project, Mitsui Chemicals combined its lens materials and optical design technologies, then collaborated with Rhizomatiks member Youichi Sakamoto to produce “optical walls” – a lens that uses light to create spaces. ( Movie : <https://youtu.be/DsmtPiimPtQ> )

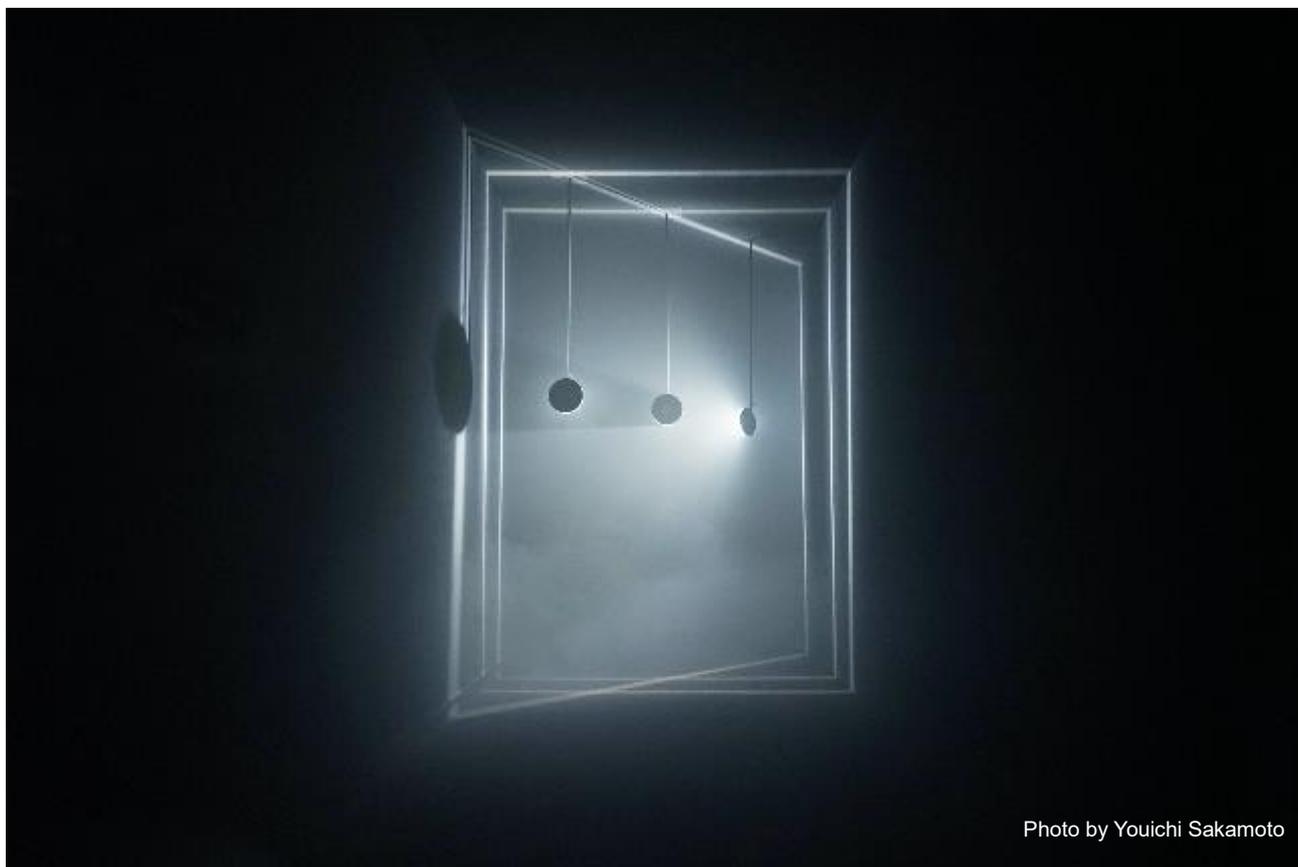


Photo by Youichi Sakamoto



Passing diffused LED light through a carefully designed lens setup converts it to direct light, forming a space made of light.  
Photos taken at the Lexus installation during Milan Design Week 2019.



(Left: Lenses of various shapes considered for the project. Right: Part with lens equipped. Photos by Shinsuke Sugino)

Mitsui Chemicals has a wide range of optical materials, including lens materials for glasses and smartphone cameras. In particular, the company's MR™ Series – the de facto standard material for highly refractive lenses in glasses – is available in a variety of lineups.

For this most recent project, these materials were combined with optical design technologies possessed by Mitsui Chemicals subsidiary ARRK Corporation (Tokyo: 7873; President & CEO: Atsushi Komoriya) to design and produce the “optical walls” lens, which changes the shape of light. When diffused LED light passes through the lens, it is converted to direct light, allowing a space to be marked by light in an empty area.

Rather than employ existing spatial presentation technologies based on lasers or projectors, the “optical walls” concept represents the trial of a new, highly safe and lightweight approach to spatial presentation. Utilizing this new lens design means that lightweight optical parts are all that is needed, making it possible to carry out spatial presentation using drones or other such setups.

\* More information on the ideas and concepts behind “optical walls” will be published on this specially created webpage at a later date: <https://www.sendenkaigi.com/mccr/en/>

\* This “optical walls” design was used for Lexus's LEADING WITH LIGHT installation at the Milan Design Week 2019 this April.

## ◆ MR™ Series (<https://www.mitsuichem.com/en/special/mr/>)

A thiourethane-based ophthalmic lens material developed using Mitsui Chemicals' proprietary polymerization technologies, the MR™ Series features a high refractive index, high Abbe number, light weight and high impact resistance. This makes it the de facto standard of highly refractive lens materials, chosen by many glasses wearers around the world for its excellent balance of thinness, lightness, toughness, clear vision and more. In recent years, the Quality of View concept has seen Mitsui Chemicals combine its materials here with the likes of wavelength control technologies to offer new solutions, with the company continuing to tackle R&D initiatives aimed at providing new value to all people who require glasses.

## ◆ Youichi Sakamoto (Rhizomatiks)



An artist and hardware engineer, Sakamoto joined Rhizomatiks in 2010 after working at an architectural firm. He has since been involved in the design and production of many Rhizomatiks installations, including “Dimensions” and “strips.” As an individual artist, he exhibited “blank” at NTT InterCommunication Center [ICC] in 2008, and in more recent years has been supervising art unit 9+1 to have works shown both in Japan and abroad. Sakamoto is currently taking part in the ICC's Open Space 2019 exhibition.

## ◆ Rhizomatiks (<https://rhizomatiks.com/en/>)

Founded in 2006, Rhizomatiks is a creative production that consists of creators and producers with a variety of background in media arts, data arts, engineering, interface design, product design, architecture, video, and music. Rhizomatiks works on many creative projects with its advanced technological skills and highly sophisticated expression.