



SDGs for Kaltech



Kaltech’s photocatalytic technology contributes to a sustainable society.

Development of unique and excellent photocatalysts



Proprietary photocatalytic materials

Photocatalytic filter materials

Photocatalysts represent Kaltech’s core competence. The performance of a photocatalyst is dramatically improved by applying a unique process to titanium oxide, its main material. This material know-how is Kaltech’s “secret sauce.” We are currently conducting further material development aimed at realizing a “super photocatalyst.”

Joint research on photocatalysts to benefit society



Verifying effectiveness against viruses

Pond water purification experiment

In addition to basic research, we are conducting joint research with universities and research institutes to expand the range of photocatalyst applications to everything from household appliances to numerous industrial applications. We are conducting demonstration experiments aimed at applying photocatalysts’ air-purifying effect to hospitals, vegetable/fruit factories, and distribution systems, and water-purifying effect to land-based aquaculture and pond water purification.



Helping solve society’s problems

Contributions through business



- Air purification that creates safe and secure spaces
- Reduction of food loss
- Design that doesn’t get in the way of living spaces
- Resource circulation and utilization

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

15 LIFE ON LAND

Contributions through community activities



- Donations of products to shopping districts and other commercial organizations to revitalize local economies
- Donations to sporting organizations to stimulate amateur sports
- Cooperation with support groups to help disabled persons live independently

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

17 PARTNERSHIPS FOR THE GOALS

Purifying air and water with photocatalysts

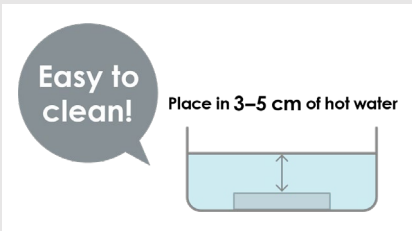
Kaltech's unique photocatalytic technology purifies air by decomposing airborne organic substances such as viruses, fungi, and odors.

Besides shipping sterilization and deodorizing machines equipped with photocatalytic technology around the world, we are also applying photocatalysis to water purification as part of efforts to expand the range of application of this technology.



Photocatalytic filter can be washed and used many times

The photocatalytic filter can be repeatedly cleaned and reused, maintaining its sterilizing and deodorizing effect. You get long-term usage, and you reduce waste since there's no need to replace the filter.



Reducing food loss

The Food Fresh Keeper, a box that maintains food's freshness at room temperature, utilizes Kaltech's photocatalytic technology to keep air inside it clean. For example, by suppressing the growth of mold on bread and decomposing ethylene gas emitted from food, we believe the box will contribute to reducing food loss.



Using forest thinning wood as part of our products

The handle of the Food Fresh Keeper is made of Yoshino cypress obtained from forest thinning in Nara. It is made by Yoshitatsu Shoten, which, like Kaltech, wants to protect the environment and is committed to Japanese products. Yoshitatsu Shoten makes structural pillars from the core of the timber, then uses the remaining wood to make chopsticks and Food Fresh Keeper handles.



Cardboard packaging box is made from recycled paper

Kaltech's environmental consideration goes beyond the products themselves. For example, our product cardboard boxes are made from recycled paper and no longer use excessive colors in the design, thus reducing plate-making film and ink.



Kaltech's SDGs efforts

- Use product cardboard boxes made from recycled paper
- Avoid excessive design elements (colors) and thus reduce plate-making film and ink

Efforts to reduce CO₂ emissions



Supporting sports activities

We contribute to amateur sports by co-sponsoring a variety of sporting events. These include the 12th Japan National Junior High School Wrestling Invitational (November 2021), the 18th All Japan Aerobics Championship (December 2021), and the Japan National Junior High School Skating Competition (February 2022).



Photos: Japan National Junior High School Wrestling Invitational (left)
Japan National Junior High School Skating Competition



Cooperating with merchants to stimulate the local economy

Semba Shinsaibashisuji Cooperative (July 2021); four local merchant associations near the National Stadium (August 2021); Dotonbori Store Association (September 2021); others. Amid an economic downturn due to the pandemic, we have supported local merchant associations and cooperatives. To help stimulate local economies, we donated Kaltech products to shops and cooperatives in order to provide a safe and secure space for customer interaction.



Photos: Donation ceremony, Semba Shinsaibashisuji Cooperative (left)
Donation ceremony, local merchant associations near National Stadium



Supporting art for persons with disabilities

In January 2022, we cooperated in the Paralympic Art* World Cup 2021, an event celebrating artists with disabilities. Everyone who participated in the award ceremony wore our portable air purifiers around their neck. As a cooperating company, we engaged in activities such as presenting the Kaltech Award to excellent works.

* Read more about Paralympic Art here.
<https://paralymart.or.jp/sdgs/>

