

Niterra Co., Ltd.

Niterra Presents Exhibition of “Brightening the Future of the Earth” with the Power of Water and Air at Expo 2025 Osaka, Kansai

The exhibition will showcase the company’s Autonomous Portable Circulation Technology, which delivers sustainable resources and energy to anyone anywhere.

NAGOYA, JAPAN, August 28, 2024 — Niterra Co., Ltd., Japan’s leading manufacturer of spark plugs and sensors with an evolving portfolio focused on ceramics and beyond, is pleased to announce its participation as a Silver Partner in the Expo 2025 Japan, Future Society Showcase Projects: Future Life Expo “Future City” (hereinafter referred to as “Future City”) ^{*1)} with the exhibition of “Brightening the Future of the Earth.”

The “Future City,” where the company’s Brightening the Future of the Earth exhibition will be located, is a collaborative exhibition project by the Expo Association and 12 co-sponsors. This initiative transcends organizational, corporate, and industry boundaries, leveraging each participant’s expertise and technological prowess to embody the theme of “To the city of happiness”—a vision where economic development coexists with the resolution of social issues, as envisioned by Society 5.0 ^{*2)}.

In this “Future City,” Niterra is committed to the vision of “Harnessing the Power for a Radiant Earth with Unique Technology and Innovation.” Its exhibition concept, titled “CyclusNiterrium - Niterra laboratory for sustainable recycling society”^{*3)}, aims to showcase an individual exhibit that highlights how the power of “Water” and “Air” can illuminate the future of the Earth.



 **CyclusNiterrium**

●Challenges and Solutions

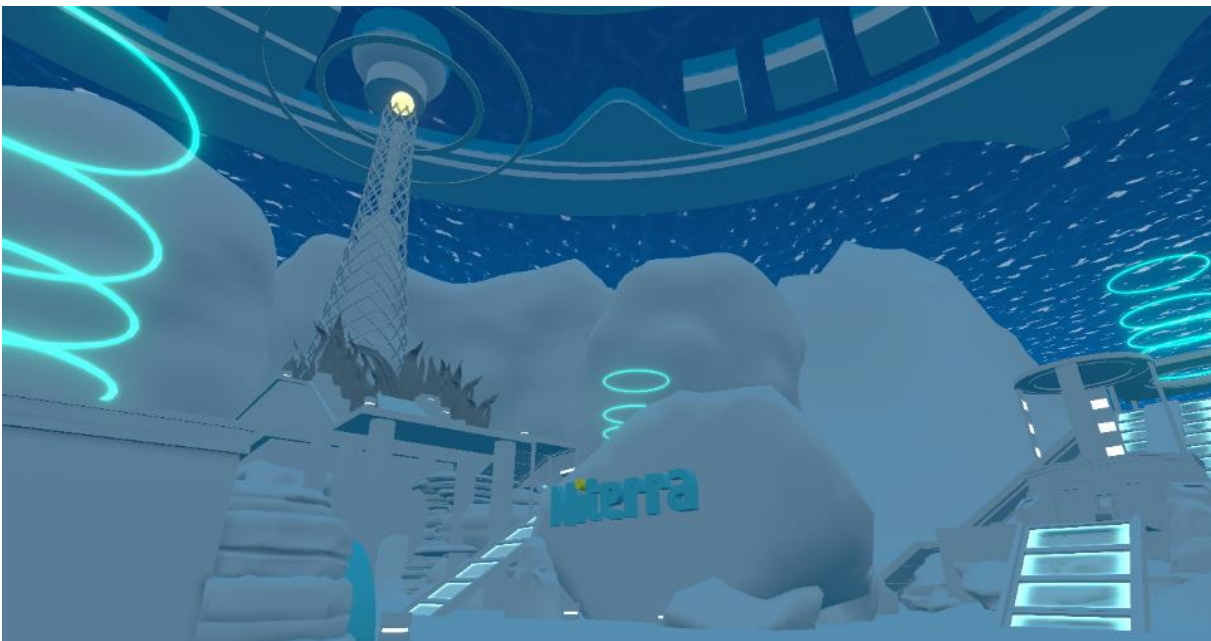
In the face of global environmental changes, exemplified by climate change, one of the pathways to a radiant future society is to establish a circular society that coexists with the Earth through sustainable energy and resources. However, the current large-scale stationary energy supply systems and their circulation technologies present challenges, such as the need to concentrate resources and energy in fixed locations and the inability to deliver them equally to all regions and people.

To create a society where everyone can enjoy a radiant future, Nitterra proposes a establishing autonomous portable circulation technology. In such a world, sustainable energy and resources can be delivered efficiently, equitably, and without waste, to anyone, anywhere.

●Exhibition Experience

A navigator embodying autonomous portable circulation technology at the exhibition venue will introduce the unique technologies throughout the venue, allowing visitors to experience the world of "CyclusNiterrium" fully. Additionally, visitors can interact with life forms imbued with circulation technology, called "Niteon" ^{*4)} through its latest simulation devices equipped with ultrasonic technology. The company will also invite visitors to a virtual venue where they can embark on adventures in a world where Niteon thrive, learning more about the circulation technology and creation of Niteon.

Nitterra will showcase an individual room at the Virtual Expo. In this room, visitors can embark on adventures in a world where Niteons thrive and learn about our circulation technology through the creation of Niteon. We hope this will be an exciting opportunity for visitors to learn and explore "What is a circular society?" and "What can we do?" while also encouraging visitors to think together with those around them. We look forward to welcoming many visitors.



【References】

Expo Association City of the Future: <https://www.expo2025.or.jp/en/future-index/future-life/city/>

Expo Association Virtual Expo: <https://www.expo2025.or.jp/en/future-index/virtual/virtual-site/>

Expo Association Press Release (July 17, 2024): <https://www.expo2025.or.jp/en/news/news-20240717-01/>

Our Company's Special Website for Osaka-Kansai Expo: <https://www.ngkntk.co.jp/english/expo2025>

※1) Future Life Expo "Future City": The Future Life Expo is one of the six areas of the Future Society Showcase project, functioning as an incubation-type initiative to implement various ideas. The "Future City" is a major project within the Future Life Expo. It is based on the concept of Society 5.0 and comprises five fields of various business areas. In the "Environment and Energy" field, where our company will exhibit, the theme is "Creating various 'circulations' to generate new benefits from energy. An evolved initiative towards a sustainable Earth."

※2) Society 5.0: Japan's national strategy "Society 5.0" refers to a human-centered society that achieves both economic development and the resolution of social issues through a system that highly integrates cyberspace (Virtual space) and physical space (Real space). It represents a new society following the hunter-gatherer, agricultural, industrial, and information societies.

※3) CyclusNiterrium: A coined word combines the Latin words "cycclus" (circulation), our English company name "Niterra," and "ium" (place). It shows our unique technologies and ideas that contribute sustainable recycling society.

※4) Niteon: A coined word combines our English company name "Niterra" and "Add-on," meaning technology augmentation. It is the general name for our original characters (autonomous portable circulation devices) imbued with circulation technology.

About Niterra

Founded in Nagoya, Japan in 1936, Niterra Co., Ltd. (formerly NGK Spark Plug Co., Ltd.) is renowned for its NGK-branded spark plugs and NTK-branded ceramic products. Niterra, a coined word combining the Latin words "niteo" (shine) and "terra" (Earth), was introduced in April 2023 to express the reborn company's commitment to sustainability through an evolving portfolio focused on ceramics and beyond. Under the corporate message "IGNITE YOUR SPIRIT," Niterra is now expanding into the growth fields of mobility, healthcare, environment and energy, and communications. The company's consolidated revenues in fiscal 2023 (to March 2024) totaled 614.4 billion yen (4,389 million USD). Niterra has 32 bases in Japan and 61 overseas, and approximately 16,000 employees worldwide. Please visit <https://www.ngkntk.co.jp/english/>.