

Trends in Japan

Sci-tech

Japan is synonymous with groundbreaking inventions and scientific breakthroughs. From trains to robotics to fabrics to the increasingly important field of environmental technology, Japan leads the world. Be the first to discover the future of science and technology.

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Hayabusa Is Back

The Japanese Technology behind a Six-Billion Kilometer Journey



Hayabusa travels through space. (C)JAXA

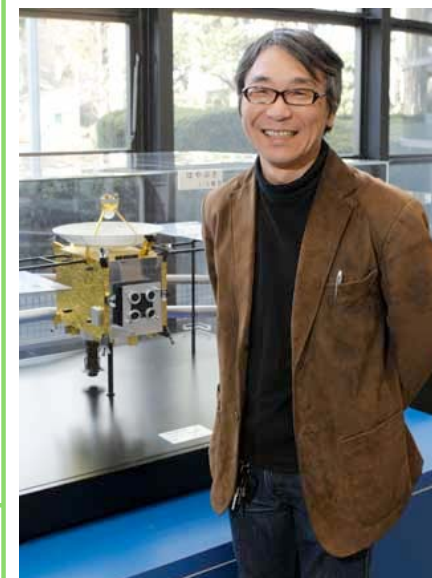
In June 2010, the Japanese asteroid exploration spacecraft *Hayabusa* returned to Earth after an epic journey into space, in the course of which *Hayabusa* became the first spacecraft to land on any celestial body other than the moon and bring back samples.



Hayabusa landing on Itokawa. (C)Ikeshita Akihiro



Retrieving the capsule after it detached from Hayabusa. (C)JAXA



Professor Kuninaka Hitoshi of JAXA.
(C)Okubo Keizo

Japan's Revolutionary Achievements in Organic Synthesis

Cross-Coupling Reactions Win Nobel Prizes for Japanese Chemists



Dr. Suzuki Akira

In 2010, two Japanese scientists won Nobel Prizes in Chemistry for their work in the field of cross-coupling reactions. The results of Japanese breakthroughs in organic chemistry are all around us today in televisions, cell phones, and computer monitors.



Organic EL illumination panels
(C) Panasonic Electric Works Prototype
organic EL illumination panels



A cell phone display incorporating
organic EL technology



Dr. Negishi Ei-ichi
(C)Purdue University photo

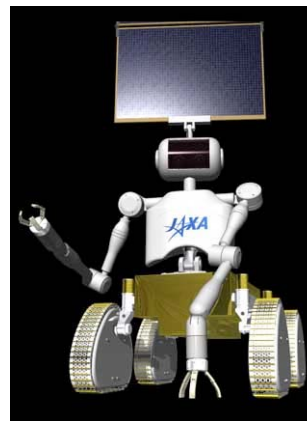
Robots on the Moon

Using Japan's Ground-Breaking Technology to Achieve an International First

In August 2010, Japan announced ambitious plans for a ground-breaking mission that will use robots to explore the moon.



Japan's lunar exploration program hopes to put a Japanese crew on the moon in the middle of the 2020s. (C) JAXA



Exploration robots like this one will explore the surface of the moon from the lunar research station. (C) JAXA



A mission to land on the moon is planned for the middle of the next decade. (C) JAXA



Research is underway on a crawler equipped with a low pressure track mechanism. (C) JAXA

Japan's High-tech Toilets

Futuristic Technology Born of a Love of Cleanliness



The toilet lid lifts automatically when someone approaches, and closes again after use. (C) INAX Corporation.

Japan's obsession with cleanliness and high-tech culture has given birth to the cleanest and most comfortable toilets in the world.



Aerated water and a mixture of large and small bubbles ensure cleanliness and comfort. (C) TOTO Ltd.



The water that comes out of the nozzle can be controlled for temperature, strength, and speed, ensuring hygienic and comfortable cleaning after use. (C) TOTO Ltd.



Detergent suds rinse the bowl thoroughly after use, in Panasonic's A La Uno model. (C) Panasonic Electric Works Co., Ltd.



The latest INAX model has an automatic light that comes on for nighttime use. (C) INAX Corporation



High-tech lavatories like this are features of many Japanese homes. (C) TOTO Ltd.