(Okayama, Japan, 24 September 2015) This issue includes a feature on new insights into 'plant stress' and how plants absorb nutrients and toxins; news of an agreement by Okayama University and IAEA on radioactive waste management and environmental remediation, the world's first hybrid lung transplant, developing iron-controlled biology, and networking to combat infectious diseases; research highlights on high-efficiency energy transfer in photosynthetic organisms, key genes in epidermal cell differentiation for survival of plants, critical points of water in carbon nanotubes, damage-free structure of photosystem II, and synthesis of compounds for water-oxidation; an innovative method to fabricate metallic nano-surfaces for surface-enhanced Raman spectroscopy; and a 'vista' of Okayama's Bizen Yaki pottery.

Okayama University e-Bulletin highlights news and views from one of Japan's largest comprehensive universities internationally recognized for its dynamic and innovative approach to interdisciplinary scientific research and pioneering educational programs. Contents of the September 2015 issue of Okayama University e-Bulletin:

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/ Feature

Plants feel stress! [] Frontiers in plant mineral stress tolerance and how nutrients and toxins are absorbed by rice and other plants

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/feature/vol12/feature_001.html

Caption

Beneficial effect of silicon on plant. Silicon is able to protect the plants from various stresses such as pathogen, insect damage and water loss. News

Okayama University and IAEA sign a new agreement related to radioactive waste management and environmental remediation

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/news/vol12/news_001.html

Developing new insights into iron-controlled biology

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/news/vol12/news_002.html

Combatting Infectious Diseases with Research Networks

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/news/vol12/news_003.html

World's first hybrid lung transplant: Simultaneous lung transplants from both brain-dead and living donors

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/news/vol12/news_004.html

Caption

Hybrid lung transplant (simultaneous transplant from brain-dead and living donor) conducted at Okayama University Hospital.

Life Science World 2015 : Okayama University presents its latest research achievements at Asia's largest bio event

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/news/vol12/news_005.html

Plants feel stress!

Écrit par Okayama University Vendredi, 25 Septembre 2015 10:20 -

Research highlights

Exploring the structural basis for high-efficiency energy transfer in photosynthetic organisms

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/research_highlights/vol12/highlights_001.htm

Caption

Crystal structure of plant PSI-LHCI supercomplex

Damage-free structure of photosystem II and the synthesis of model compounds for water-oxidation

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/research_highlights/vol12/highlights_002.htm

Key genes in epidermal cell differentiation are essential for survival of plants

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/research_highlights/vol12/highlights_003.htm |

Evidence for solid-liquid critical points of water in carbon nanotubes

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/research_highlights/vol12/highlights_004.htm I Intellectual Property and Enterprise

Quick and low-cost fabrication of metallic nano-surfaces for surface-enhanced Raman spectroscopy

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/ipe/vol12/ipe_001.html Topics Letters from alumni

Johannes Effenberger

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/topics/vol12/letters.html

Okayama Travelogue

The lure of Bizen Yaki

http://www.okayama-u.ac.jp/user/kouhou/ebulletin/topics/vol12/travelogue.html

Club Activities

The art and culture of Japanese flower arrangement: Okayama University Ikebana Club http://www.okayama-u.ac.jp/user/kouhou/ebulletin/topics/vol12/club_activities.html