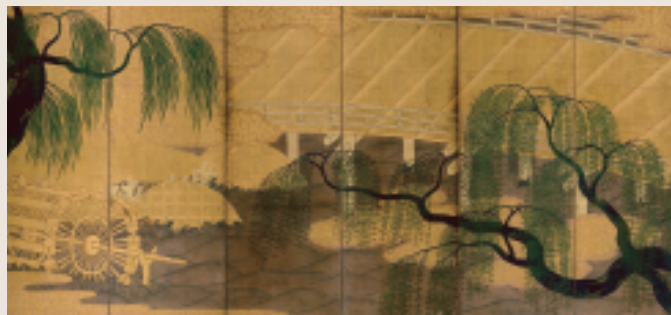


Scientific Recording of the Cultural Heritage Assets

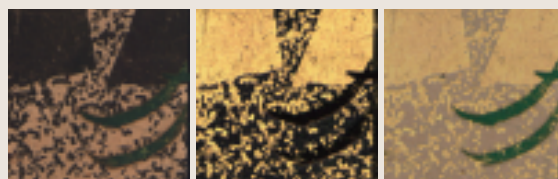


Ujibashi Golden Byōbu of four seasons (courtesy of Tokyo National Museum)

Kyoto is a city of culture, art and technology. At the Ide Laboratory of the Graduate School of Engineering, the state-of-the-art imaging technologies are utilized for scientific recording of cultural heritages assets in Kyoto and around the globe. The ultra-high precision scanner system for cultural assets digitizes large artworks such as Japanese folding screens (*byōbu*), wall paintings, precious old design maps of important historical buildings and world heritage industrial design plans. It is distinct in its high dimensional and color reproduction accuracy. These systems are of high demand at the Japanese great disaster areas where some invaluable artifacts of were affected, and even were destroyed.

The reproduction of the painting on the front page of this booklet is from a scene of a pair of folding screens “byōbu” of Tokyo National Museum. The Ujibashi Byōbu showing four seasons near the Uji Brige of Uji city, Kyoto Prefecture. The *byōbu* is estimated to be about 400 years old painted on gold layers. It is an important relief of that era showing the artisans skill in working with gold material. The scanning was done using ultra high resolution three color, multispectral, and polarized light techniques.

In 2013, we collaborated with several national and international institutes, to scientifically record important cultural heritage, to digitize on-site and record in microscopic level. We carried out projects in China (Inner Mongolia, Hong Kong), United States, as well as more than 5 sites in Japan, to establish a global basis of collaboration to preserve, utilize and pass down to the next generation the world’s cultural resources. We hope that this technology from Kyoto will act as a catalyst in encouraging a renewed global discussion and interest on culture.



A small part of the Byōbu is shown here. It is an example of how polarized imaging can be used to study gold features and other shiny surfaces. The three images shown depict images containing different levels of reflection. The first is an image showing only the diffused reflection, the second shows only the specular reflection and the third is a composite image with both types of reflection.

Introduction of Kyoto University’s Printed Publication



Research Activities

A quarterly journal showcasing diverse examples of Kyoto University’s current research achievements.
http://www.kyoto-u.ac.jp/ja/issue/research_activities/index.htm



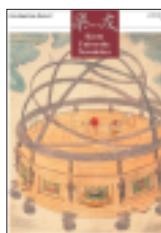
Kyoto University Degree Programs for International Students

A brochure introducing Kyoto University’s English-taught degree programs.
<http://www.opir.kyoto-u.ac.jp/kuprofile/>



International Strategy Brochure: 2x by 2020

A brochure introducing Kyoto University’s international strategy, formulated in 2013.
http://www.kyoto-u.ac.jp/ja/issue/international_strategy/index.htm



Kyoto University Newsletter: “Raku-Yu”

Kyoto University’s international newsletter. Issued twice a year.
<http://www.kyoto-u.ac.jp/ja/issue/rakuyu/index.htm>



Admissions Guide for International Applicants

A guidebook providing comprehensive information for international students who wish to apply to Kyoto University, including information about life at the university.
http://www.kyoto-u.ac.jp/ja/issue/ryugaku_annai/index.htm



Handbook for International Students

A guidebook providing information about life at the university for international students
<http://www.kyoto-u.ac.jp/ja/issue/handbook/index.htm>



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