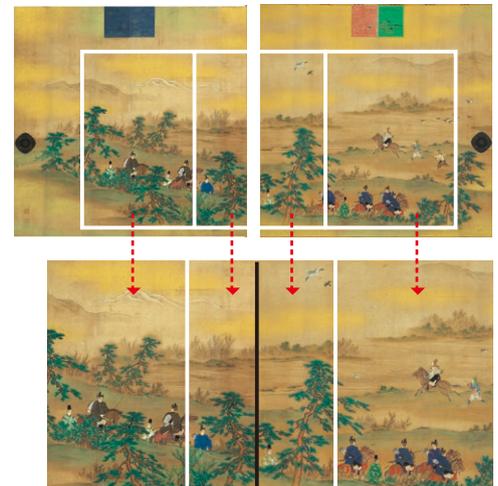
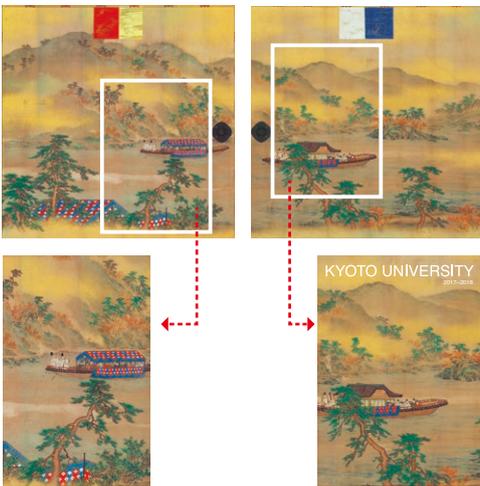


# Cover Story

## Scientific Recording of Cultural Heritage Assets by the Ide Laboratory



Located in Kyoto, a city of culture, art, and technology, the Ide Laboratory at Kyoto University has developed state-of-the-art imaging technologies to scientifically record cultural heritage artifacts in Kyoto and around the globe. The Ide Laboratory's high-precision imaging system for cultural assets digitizes large artworks such as Japanese screens (*byōbu*), papered sliding doors (*fusuma*), wall paintings, and precious old design maps of important historical buildings. It is distinct in its high dimensional and color reproduction accuracy, being one order of magnitude higher than commercial imaging systems. The digitization process has been carefully designed to minimize intrusive effects, and the lab has also been successful in adding analytical imaging features, which enables non-destructive and non-invasive analysis of material composition and color.

In 2011, the Ide Laboratory collaborated with Ninnaji Temple, designated as a UNESCO World Heritage site and an Important Cultural Property, to digitize on-site and record at a microscopic level the contents of an early Edo Period building, including its wall paintings and sculptures. The world's most advanced analytical imaging technologies were utilized for the recording and preservation of the building's heritage assets. The database of pigments and colorants from this project is expected to significantly enhance our understanding of the art and technologies of the early Edo period.

The image on the front of this brochure is a detail from the paintings in the *shinden* (palace and garden) of Ninnaji Temple. The remarkably well-preserved paintings are a valuable source

of historical data about the lifestyles of the people in the era depicted. "Mifune (Three-Boat) Festival on the Oi River" depicts a scene in the Arashiyama area of western Kyoto in which Fujiwara no Kintō (966–1041) and other talented members of the nobility are performing poetry and music on the three boats.

The image on the inner cover shows the Emperor hunting with falcons in Katano (present-day Osaka). As a pastime of Japan's nobility, falconry is believed to have a history of over 1600 years. It was recorded in the *Nihon Shoki* (The Chronicles of Japan), the second oldest record of Japanese history, dating from 720. Falconry flourished in Japan throughout the Edo Period. The era's first shogun, Tokugawa Ieyasu, enjoyed the sport, and used it to symbolize his authority and his plans, as the nation's ruler, to transform the violence of his conquest into a system of laws, art, and social activities with an emphasis on peace.

During the past decade, the Ide Laboratory has carried out projects in China (Mainland, Hong Kong, Inner Mongolia), the UK, Spain, Italy, Korea, Egypt, Iran, the Philippines, Myanmar, and the USA, as well as at over fifty sites in Japan. Recently, with the support of the Japanese Cultural Heritage Agency and other organizations, the lab is placing a particular emphasis on international on-site education and manpower training to protect endangered cultural assets. Through this work, the lab seeks to establish a global network for collaboration to preserve and utilize the world's cultural resources, and pass them down to the next generation.