

Poster Presentation

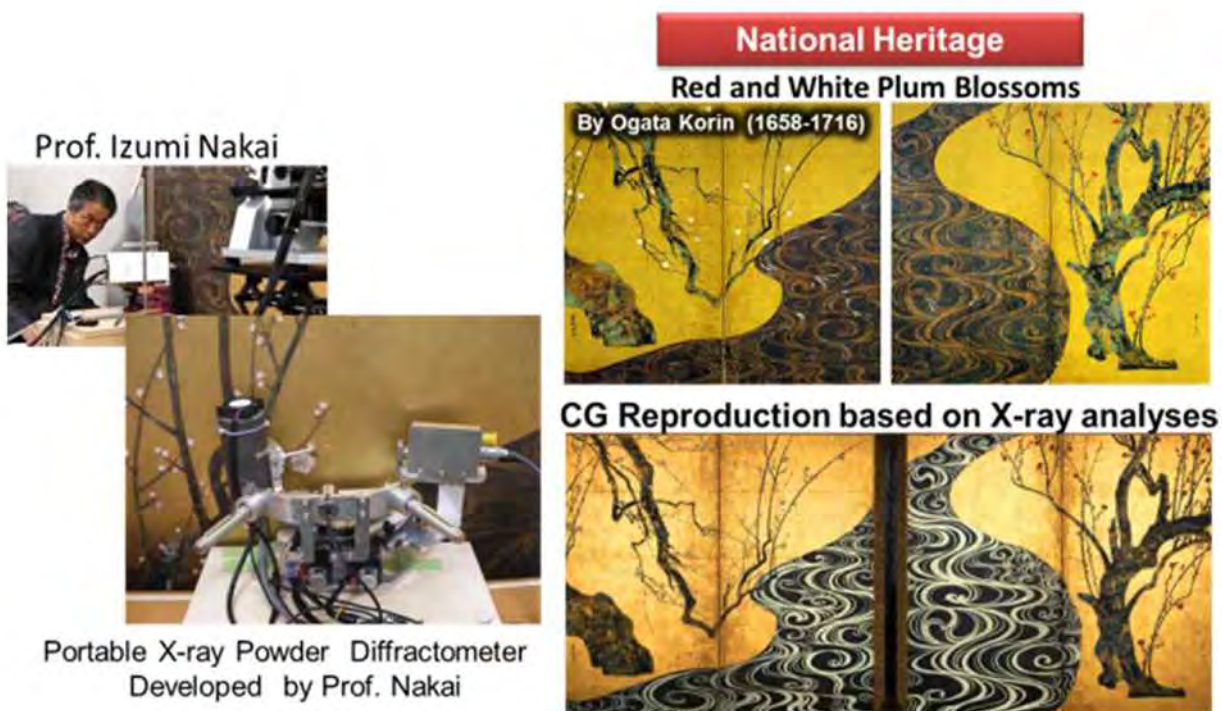
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Japanese Crystallography in Culture and Art

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We can find many seeds of crystallography in Japanese culture. Most of the family crests have symmetry elements such as rotation axes and mirror symmetry elements. Sekka-zue, a picture book of 86 kinds of crystals of snow, was made by Toshitura Doi, who is a feudal lord in Edo-period and he observed snow using a microscope in nineteenth century. In recent years, people enjoy to make crystal structures, polyhedrons, carbon nanotube, quasicrystal etc. by origami, the art of folding paper [1]. In the field of science, the Japanese crystallography has contributed to explore culture and art. An excellent example is unveiling the original color of Japanese painting "Red and White Plum Blossoms" by Korin Ogata [2]. Prof. Izumi Nakai (Tokyo University of Science) developed an X-ray fluorescence analyzer and an X-ray powder diffractometer designated to the investigation of cultural and art works and had succeeded in reproducing the silver-colored waves through computer graphics after X-ray analyses of crystals on the painting. The scientific approach by Prof. Nakai et al. unveiled the mystery of cultural heritage of ancient near east, ancient Egypt etc. and is being to contribute to insight into the history of human culture. [1] An event to enjoy making crystals by origami is under contemplation. [2] The symposium "Crystallography which revives heritages" was held on February 16, 2014 at Atami in Japan.



Insight into Art by Crystallography

Keywords: International Year of Crystallography, Japanese activity