

KOSHIHARA LAB.

Structural performance of architecture using wood, soil, and stone



Department of Human and Social Systems

Engineering and Design for Timber Structures

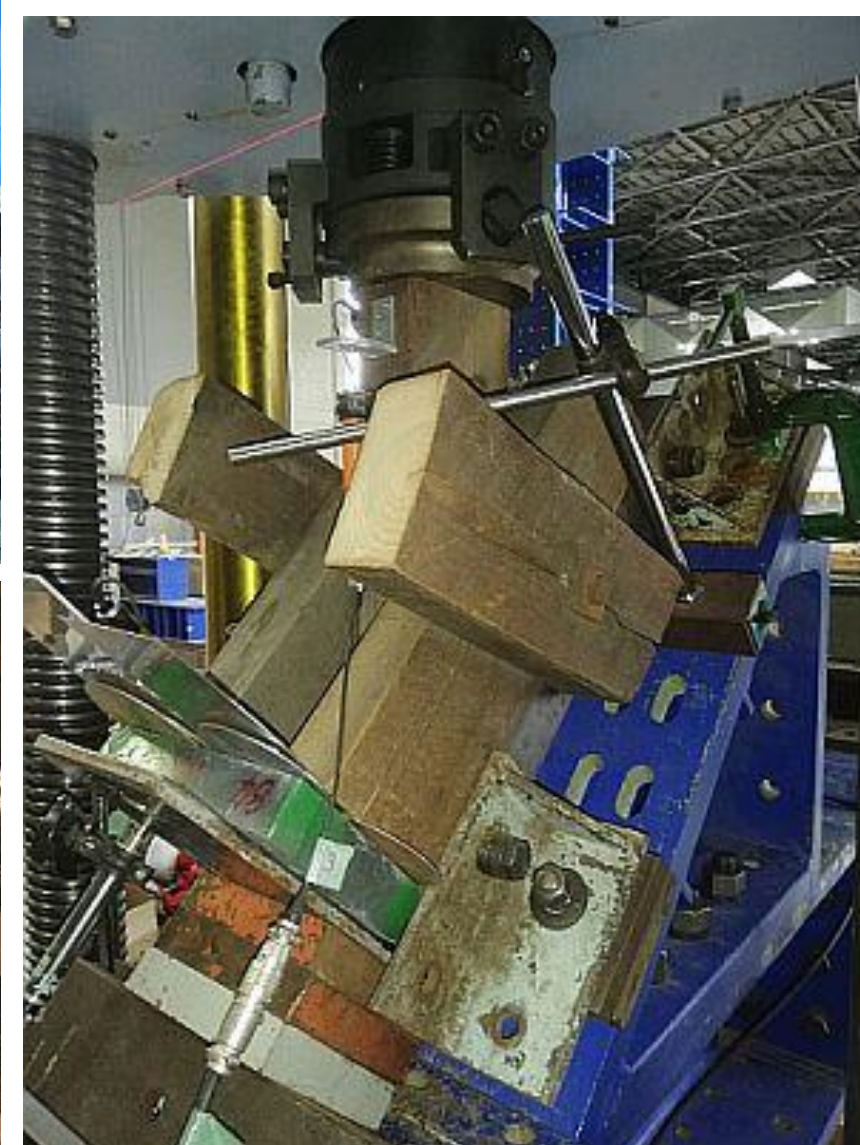
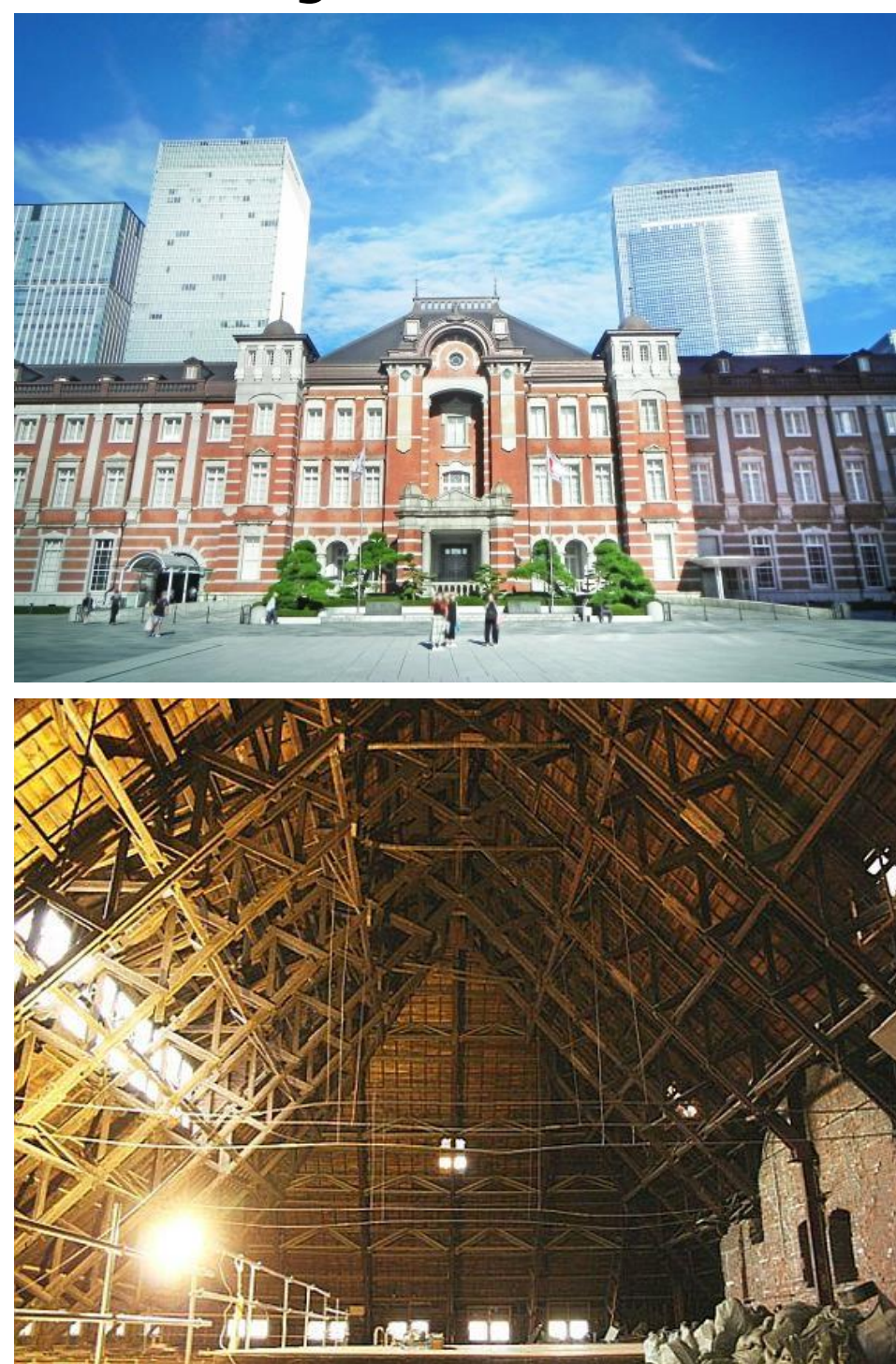
<http://wood.iis.u-tokyo.ac.jp/>

In this laboratory, we are investigating and researching construction methods mainly for wood. We are conducting research on a wide range of subjects, from traditional and modern wooden architecture registered as cultural properties to modern wooden architecture and even brick architecture. In addition, students are taking the initiative in various projects, such as producing things using wood without being bound by the framework of architecture.

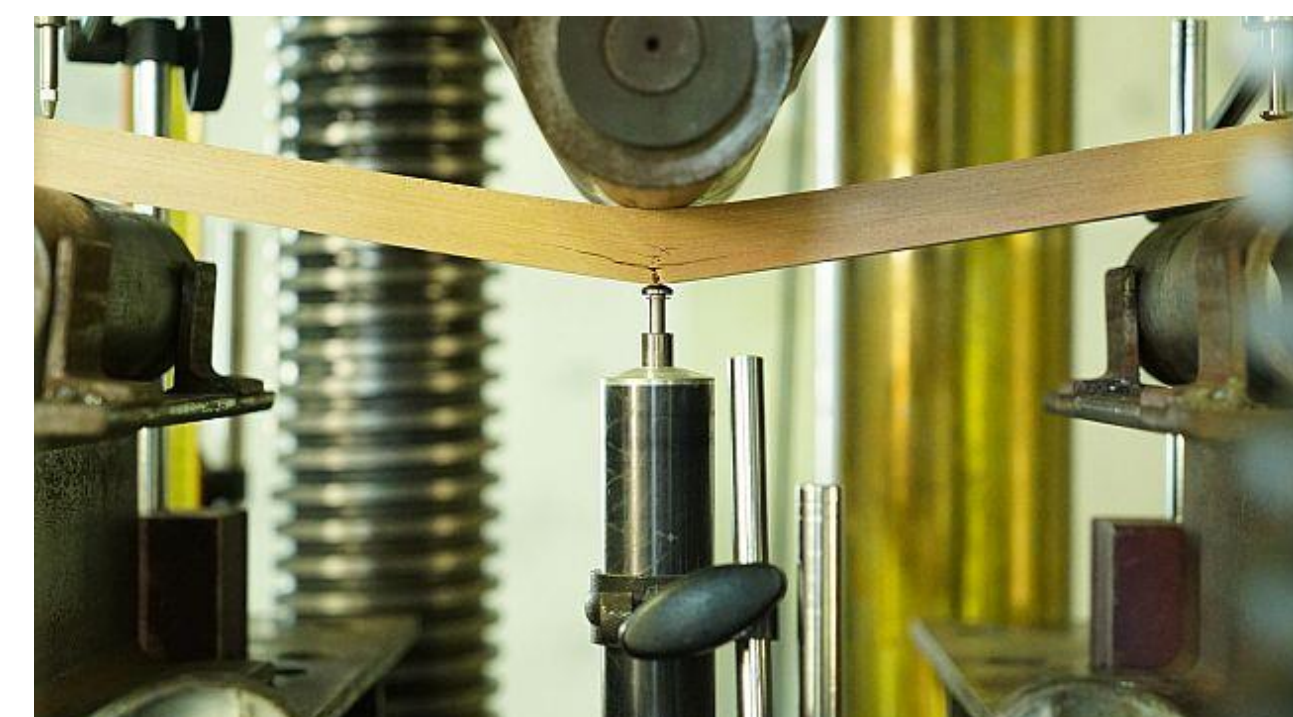


Research case of old materials

☑Roof truss joint experiment at Tokyo Station (2022)
For the roof truss of Tokyo Station, which has been in continuous use for over 60 years after the war-damaged reconstruction, we conducted a loading experiment at the joints and verified changes in strength.



☑Strength measurement of Meiji Jingu old torii (2023)
We collected specimens from the pillar of the old torii gate of the Meiji Jingu Shrine and measured their strength.



☑Strength test in modern brick building in Nagasaki prefecture (2021)

In Nagasaki Prefecture, many brick buildings were built using konjac bricks, which are thin and long and flattened around the Meiji period. seismic retrofitting is currently underway. In our laboratory, we conducted an experiment on wall out-of-plane bending strength using konjac bricks and reproduced joints.

