

Conservation of Earthen Architecture 13. A letter from Mexico. In *Newsletter of the Society of Science for Conservation of Cultural Properties in Hokkaido-Tohoku, Japan* 57 (September 2024)

In this issue, I will report on our participation in EARTH USA 2024, 12th International Conference on Architecture & Construction with Earthen Materials, which took place in Santa Fe, New Mexico, USA in mid-September. EARTH USA has been held almost biannually by Adobe in Action, a New Mexico-based nonprofit organization. The year's presentation's themes were mainly related to the following topics:

- a) Proposals for sustainable cities and architecture
- b) Promotion of earthen building techniques through workshops
- c) Documentation and research on traditional earthen architecture
- d) 3D printer approaches to construction and architecture
- e) Proposed revision of earthen building codes (state/federal) in the United States [panel discussion].
- f) Engineering testing of earthen architecture

PDFs of the abstracts of each presentation can be consulted and downloaded from the conference website: <https://www.earthusa.org/conference-schedule-earth-usa-2024>. An edited volume of proceedings (print and digital) is also available for sale <https://www.lulu.com/spotlight/earthusa>.

Some highlights on interesting presentations: "[From waste to resource: The potential and conditions of reuse of excavated earths as construction materials](#)" reported the practical process of reuse of excavated soil and sand from construction and urban infrastructure work sites in Paris to compensate for deposit problems such as disposal amount, disposal location, and health hazards. Authors explained experiments and efforts to circulate excavated soil, not only through calculations, but also through actual classification, storage, and supply. Researchers of our research project group, Azul Ramírez Rodríguez and Luis Fernando Guerrero Baca ("Reassessing earthen architecture: a multidisciplinary approach") presented "[Research on the cycle of domestic development in anthropology as a strategy to understand changes in earth building traditions. The case of a Mazatec community](#)". A short documentary "[Construcción tradicional con tierra y materiales locales en Mazatlán Villa de Flores, Oaxaca](#)" based on the workshop was also presented and was very well received at the conference. There were also interesting presentations on documentation and research on traditional earthen architecture from Japan and China: "[Research on architectural techniques for openings of storehouses](#)," a study on the details of the fire-protective components painted in tiers around storehouse doors; "[Survey of storehouses with earthen masonry walls in Yamaguchi Prefecture, Japan](#)" a study on the earthen masonry technique, which is rare in Japan; and a study of earthen masonry in post-earthquake reconstruction in Sichuan Province, China, "[Survey on rammed earth dwellings in Radish Village, Sichuan Province, China](#)" which monitored changes in building materials and techniques used in the restoration and reconstruction of earthen structures and their subsequent durability during post-earthquake reconstruction in Sichuan Province, China.

The 3D printing approach to building and architecture was also a hot topic, including [“Building with clay: A pedagogical approach to introducing earth to architectural students”](#) and [“Robotic Nubian vault construction”](#).

Santa Fe, New Mexico, where the conference was held, is located near Taos, an indigenous North American settlement that has been inhabited since the 13th -14th centuries. San Miguel Church founded in Santa Fe in the early 17th century was made of sun-dried mud brick, and it seems like all construction in Santa Fe are the same earthen construction. However, many of the buildings are reinforced concrete structures with exteriors clad in colors and textures that imitate earth, giving them a slightly old-fashioned theme park. They are called “pseudo-adobes” or “adobe-mimetics”.