

NUCLEAR: LANDMARKER FOR A WASTE ISOLATION SITE – RESULTS SUMMARY

arch out loud hosted a competition that asked designers how do we design architecture with a message that could endure for millennia?

PRESS STATEMENT

Architectural research initiative arch out loud has released the winners of its' NUCLEAR international open-ideas competition.

Since the Cold War, one of the most challenging and urgent tasks facing governments around the world has been the disposal of transuranic nuclear waste. As a by-product from nuclear weaponry production, transuranic waste is not only harmful, but also boasts a formidable decay process lasting thousands of years. To address this issue, millions of barrels of highly radioactive waste have been buried in repositories deep beneath the earth's surface. One such disposal site is the Waste Isolation Pilot Plant (WIPP) in New Mexico, United States. To ensure public safety, it is imperative that the site remain undisturbed for the duration of the waste's decay process.

arch out loud asked competition entrants to design a marker or marker system to deter inadvertent human intrusion into the Waste Isolation Pilot Plant. The marker should exist as a means of passive institutional control of the site for the duration of 10,000 years, following the closure and deactivation of the WIPP. The purpose of the marker is to communicate with future generations that transuranic waste is buried within a repository at the facility, located 2,150 feet beneath its surface, and should remain isolated until the risks posed by its release have been sufficiently diminished.

The NUCLEAR competition yielded quite a variety of proposals. From fixed, physical monuments to transitory landmarks, participants envisioned an enormous range of approaches towards the topic. Some projects featured a series of markers, each changing and adapting to conditions over time. Many allowed the site to be occupiable and engaged the viewer through the creation or repurpose of biological, technological, and natural forces.

The arch out loud team will be presenting an analysis of the competition proposals at the Waste Management in Phoenix, Arizona this upcoming March. The winners and runner-up projects will be on continuous display through the five day symposia event.

Full results for the Nuclear competition can be viewed at: www.archoutloud.com/nuclear-results

JURY

The competition jury consisted of Patrik Schumacher, Ben Van Berkel, Martha Schwartz, Marc Tsurumaki, Eva Franch, Meejin Yoon, Geoff Manaugh, Hsinming Fung, Daniel Arsham, Vivian Lee, Jamie Von Klemperer, Russel Patterson, Thomas Klein, Micheal Madsen, Theodor Hoerr, and Elaine Molinar.

JURY COMMENTS

“Perhaps the very act of this competition, is a marker in itself – and perhaps the only viable.”

Michael Madsen

“In the scenario of transuranic nuclear waste I am interested how we can deal with the environment to activate ideas and matter, triggering innovative ways of interactive simulation, looking into how the essence of sustainability started.”

Ben Van Berkel

“When thinking about the challenge of creating a marker that will last for 10,000 years, it needs to be simple to interpret, without complicated text or graphics to convey the history or the danger that is placed at the site.”

Vivian Lee

“This competition has brought the need to include all areas of technical expertise, not just the hard sciences, into the public discussion on radioactivity. To include all of humanity in the development of a path forward that will not focus only on the "bad" side of how man has used nuclear reactions, but also on the "good" that has come out of research into nuclear reactions and radioactivity. This is a solution that all of humanity has to be involved with developing. No longer can it be blamed on rogue scientists of the past.”

Thomas Klein

"Nuclear" provokes a nearly impossible design proposition that undermines the best attempts to thwart the cultural and physical vagaries of time. The winning entries all treated the passage of time as an essential component of marking the site instead of an obstacle to be overcome through exclusively architectural measures. In short, time was arguably the most important material to these schemes overriding any physical or tectonic presuppositions.”

Theodore Hoerr

The by-products of carbon-sequestration testing coexist with the by-products of nuclear power, presenting a zone of highly artificial geology sure to signal human influence to a future explorer.

Meejin Yoon

WINNING PROPOSALS

1st Place: Testbed

Participants: [AGENCY-AGENCY] - Tei Carpenter, Arianna Deane, Ashley Kuo

Location: Brooklyn, New York, USA

Runner-up: Lodestar

Participants: Noah Green, Ryan Rideout, Gilberto Villalobos

Location: Seattle, Washington, USA

Runner-up: A Crystalline Funeral

Participants: Jiahui Guo, Bin Yan

Location: St. Louis, Missouri, USA

Runner-up: A Storm Is Blowing From Paradise

Participants: Steven Schimamoto

Location: Brooklyn, New York, USA

CONTACT

Please contact info@archoutloud.com with any questions or comments.

*The next **arch out loud** international competition will release in December and asks designers to propose a mixed housing solution that brings together different groups of people on the coast of Mumbai, India: www.archoutloud.com/dwell-intro*