

NEWSLETTER

Colorado Earth • October 2022 Edition

This **Newsletter** is to celebrate women working in the Natural Building Industry. Throughout the world women have been involved in construction - in fact the first written record of women working with stone and wood structures date to 13th century Spain. As shown in the image below, it was customary for women to apply adobe plaster for protection of the walls. At Colorado Earth we want to celebrate our connection to the past, and all the women working today to make our built environment more sustainable and beautiful.



MEET THE
COLORADO EARTH DESIGN TEAM



CHRISTINA RANSBURY

Christina loves building with earth because of its simplicity, its texture, its strength, its function, its form, and all the ways in which it just feels right!

She lived off-grid in Hawai'i for 8 years whereby, living so remotely, she developed the skill of being resourceful and creative with materials available locally. From learning the intricacies of bamboo joinery to creating entire mosaic floors of broken tile, near nothing was wasted!

Her artistry continues to expand today as she works toward harmonizing architecture, interiors, landscapes & fashion in order to preserve some of the traditional lifestyle principles found in Biomimicry, Wabi-Sabi, Vastu, and Feng-Shui.

Christina has a degree in Interior Design and now primarily works as an Architectural Designer & Drafter. She is an avid learner and is consistently expanding her knowledge through attending carbon-smart building classes, workshops, conferences, or just getting her hands dirty any chance she gets!

Working with EcoBlox is a dream come true for Christina because it is an accessible and logical technology for many and truly has the capability to make natural building mainstream!



ELIZABETH HURTADO

Elizabeth Hurtado is a multidisciplinary artist and architectural designer. She earned a Master of Fine Arts from the University of North Texas in 2005 and has taught various university-level art courses, including printmaking, figure drawing, and conceptual art. Following a desire to continue her education.

Elizabeth obtained a Master of Architecture degree from the University of Texas at Arlington in 2017.

She has been designing custom homes for a diverse clientele ever since. Both in her artistic and architectural practice, she prefers to work with natural materials and is passionate about sustainable design and construction.

Her favorite building material is unfired earth (lime-stabilized) because of its beauty, efficiency, resiliency, and healthier impact on both body and the environment. Elizabeth also loves gardening, learning all about regenerative agriculture, and adventuring with her dogs.

MEET SCARLETT LEE

Scarlett Lee is a PhD candidate and tutor at the University of Edinburgh.

She has been developing fabric formed rammed earth technology with consistent prototype tests and development, and she found that fabric formwork has great advantages over conventional timber formwork.

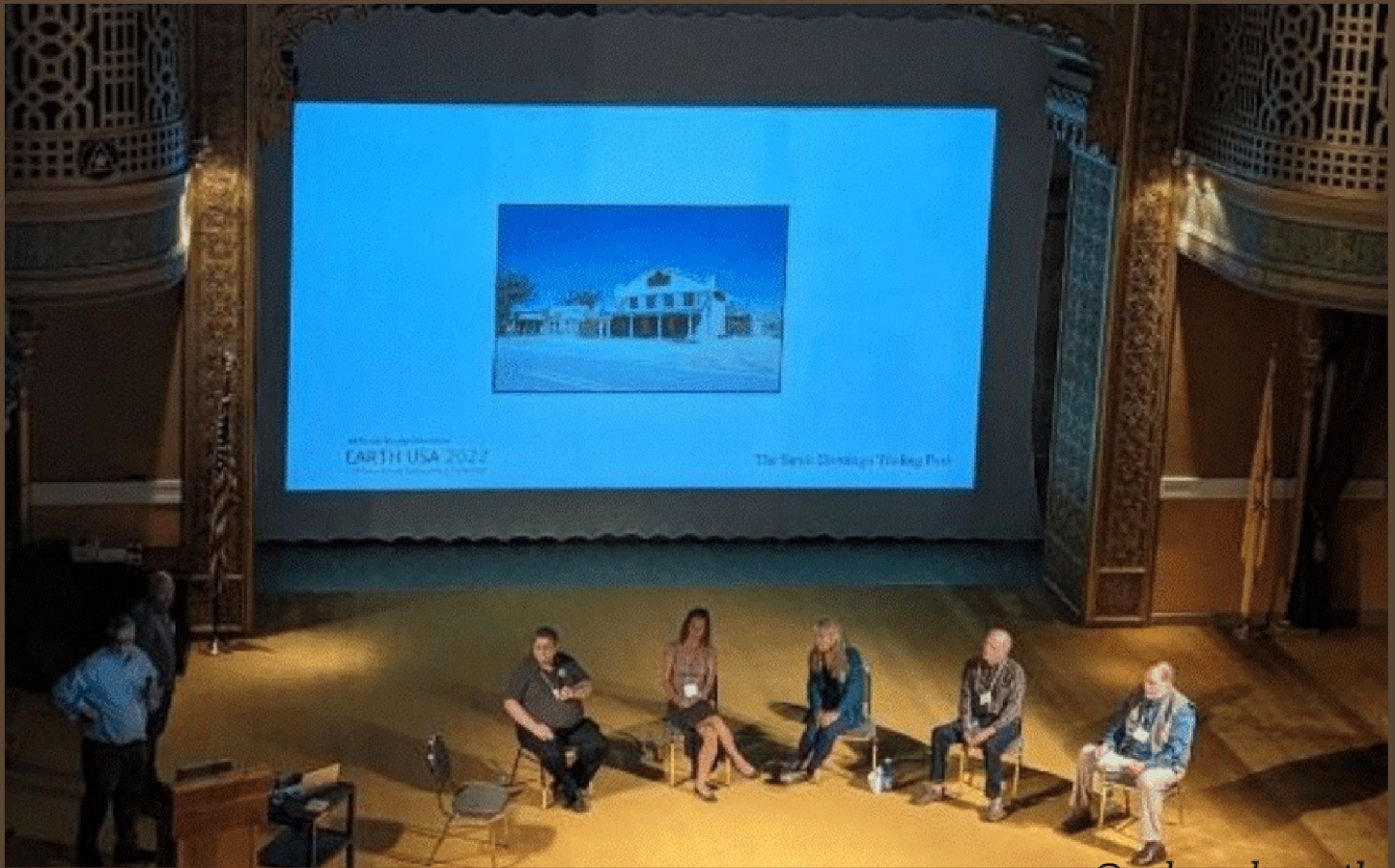
She has developed the technology with an initiative to provide a flood-resilient earthen housing solution for vulnerable communities and discovered the features of fabric formed rammed earth - low-cost, flexible to create flood-resilient form, community-driven, aesthetic, enhanced density - will be favourable to build houses in emergency conditions.

The application of the technology is well demonstrated in her architectural proposal Weave, Senegal Elementary School showing how the technology can be used to empower the local community. She has shared her research actively via papers, magazines, lectures, and blogs and she was also recently awarded the Fred Webster Prize at the Earth USA 2022 conference.



[More Details of Her Works Can be found At Her Webpage, Click here!](#)

Earth USA Conference



Panelists (from left to right): Michele Barbato, Lisa Morey, Carol Crews, Jake Barrow, Quentin Wilson

Lisa Morey with Colorado Earth was a panelist at the Earth USA conference in Santa Fe, New Mexico on September 24, 2022. The panel discussed the fire proof qualities of earthen construction and what can be done to disseminate this knowledge so that more structures are protected from wildfire events. Accompanied on the panel was Michele Barbato with UC Davis that is leading research on wildfire mitigation and resilience for the built environment.



Left to Right: Lola Ben-Alon, Gayatri Datar, Lisa Morey, Bruce King at Earth USA Conference in New Mexico, September 23-25, 2022

[To Learn More About Earth USA, Please Click Here!](#)

EarthenAble

Gayatri is a proud co-founder of EarthEnable, a social enterprise with a mission to improve the health of low-income communities by replacing dirt floors with affordable and sanitary floors. She holds a BA from Harvard College in Economics, an MBA from the Stanford Graduate School of Business, and an MPA in International Development from the Harvard Kennedy School.

Using techniques to refine, separate and utilize the dirt already in Rwanda means that these floors can be produced cheaply and at scale. In order to bring affordable earthen floors to Rwanda, the team at EarthEnable had to innovate. With the help of chemistry PhD Rick Zuzow from Stanford University, a new oil was created which could seal the floors properly and safely at a cost of 90% less than linseed oil.

THEY REALIZED THAT THEY COULD CHANGE LIVES IF THEY FOUND A WAY TO FLOOR RWANDA.

As of March 2022, EarthEnable has installed about 376,080.85 square meters (about 4,048,100.57 square feet) of healthy earthen flooring to directly replace dirt floors. Over 14,987 homes (about 62,944 people) impacted in over 2335 different villages who no longer have to live on a dirt floor and can lead healthier lives. We serve customers in 20 districts of Rwanda and 9 district of Uganda, with plans to expand to Kenya and additional districts each in Rwanda and Uganda in 2022 - 2023.



Above: Gayatri Datar – Getting every Rwandan a solid and healthy floor

[For More Information and To Support EarthEnable, Click Here!](#)



Lola Ben-Alon is an Assistant Professor at Columbia GSAPP, where she directs the [Natural Materials Lab](#) and the Building Science and Technology curriculum. She specializes in earth- and bio-based building materials, their life cycle, supply chains, fabrication techniques, and policy. Ben-Alon received her Ph.D. from Carnegie Mellon University. She holds a B.S. in Structural Engineering and M.S. in Construction Management from the Technion, Israel Institute of Technology. At the Technion, Ben-Alon co-founded the Experimental Art and Architecture Lab, and she has previously served as a curator and exhibition developed for Madatech, Israel's National Museum of Science, Technology, and Space. Her work has been widely exhibited, including at the Tallin Architecture Biennale, Tel-Aviv Museum of Art, the Israel Museum in Jerusalem, and Haifa Museum of Art. *Her research was published in Building and Environment, Journal of Green Building, Woodhead Publishing Series in Civil and Structural Engineering, and Automation in Construction.*

LABS

NATURAL MATERIALS LAB



The Natural Materials Lab promotes equitable design using natural, readily available, low-carbon, non-toxic, and uncalcinated building materials.

PEOPLE

Lola Ben-Alon, Director
Tashania Akemah, M.Arch '24
Zina Berrada, M.Arch '23
Zackary Bryson, M.Arch '24



[For More Information About Colorado Earth Website,
Click Here!](#)

TO ALL CLIMATE ADVOCATES:

Filmmakers searching for unique ADOBE/EARTH structures for a documentary on women innovators driving decarbonization in the built environment.

For details, contact

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