



## **Bio**

Mae-ling Lokko is an architectural scientist and building technology researcher from Ghana and the Philippines whose work centers on the upcycling of agrowaste and biopolymer materials into high performance clean building material systems for humidity control, indoor air quality remediation and water quality control applications. Lokko holds a Ph.D. and Masters of Science in Architectural Science from the Center from Architecture, Science and Ecology, Rensselaer Polytechnic Institute and B.A from Tufts University. Her research integrates a broad range of technical, environmental, social and cultural criteria that questions contemporary material-value systems, codevelops business models for upcycling between the Global North and South and evolves material life cycle design criteria to meet generative justice criteria. Lokko teaches seminars and studios on energy and ecology in relation to the built environment, upcycling and eco effective material life cycle design both at the SoA and at the graduate Center for Architecture, Science and Ecology in Industry City, Brooklyn.

Lokko is the founder of Willow Technologies, Ltd. based in Accra, Ghana that upcycles agrowaste into affordable bio based building materials and for water quality treatment applications. Her work was nominated for the Visible Award 2019, Royal Academy Dorfman Award 2020 and she was a finalist for the Hublot Design Prize 2019. Lokko's recent projects has exhibited globally at the Triennale Milano (2020), Somerset House (2020), Serpentine Gallery, London (2019), Radialsystem, Berlin (2019), Royal Danish Academy of Fine Arts (2019), Luma Foundation, Arles (2019), 4th Istanbul Design Biennial (2018), Rhode Island School of Design (2018) and at the Royal Institute of British Architects-North (2018).

**Rensselaer Polytechnic Institute**  
110 8th Street  
Troy NY 12180  
July 10, 2020

**ARCC**  
Board Committee

Dear Prof. Rashed-Ali and committee members,

**RE: At-Large Board Member Position, Architectural Research Centers Consortium**

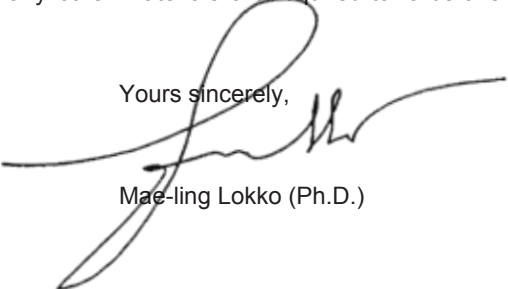
I would like to express interest through this application for the board member at-large position for the Architectural Research Centers Consortium. As the Director of RPI's Building Sciences program and as a core faculty member at the Center for Architecture, Science and Ecology (CASE), over the last decade my work has primarily investigated how wider, pressing issues of 21st century --climate change, population growth, rising energy demands, socioeconomic disparity, and parallel cultural shifts-- can be critically investigated and impacted through the transformation of architectural research models, intersectoral material life cycle design and the expansion of building sciences to address rapidly changing demands of building performance. In this regard, my work has focused on both the formal development of biomaterial systems and next generation material life cycle design as well as the architectural research frameworks that underpin such building material economies.

Given the ARCC historical role and commitment to advancing architectural research globally and developing associated infrastructures, I would be honored to contribute and participate through active involvement on the Board across in specific ways:

- I hope to work collaboratively to identify, support and develop associated research areas that focus on the expansion of building sciences from its foundational roots in building physics to include 21st century sciences including biology, chemistry, behavioral and data sciences. Through conference planning and research outreach, I also have interest in promoting new models of design research that leverage architectural design methodology as a core framework for research. This places a huge priority on methodological innovation that stems from architecture as well as advocates for the robust integration of allied design disciplines into the redesign of criteria of performance and evaluation.
- Given the international membership of the ARCC, I am interested in working to expand membership and participation from architectural research centers in the Global South, particularly in Africa and South America. I hope that this may play a productive role in activation and acceleration of bidirectional models of knowledge production and exchange within academia and industry in the Global North-South through bridged architectural research networks.
- Lastly, as a new member of the Steering Committee of the US Architects Declare chapter, I am interested in working within the ARCC organization, and its broad research areas, to support the development of integrated knowledge ecosystems that are critical in shifting dominant energy and ecological paradigms within the field.

I would be grateful to be considered and please do let me know if any other materials are required towards this application.

Yours sincerely,



Mae-ling Lokko (Ph.D.)