



# Looking South: Urban-Metabolism-In-Formality.

## *Research Seminar*

Date: Wednesday, May 31th (14h to 18h).

Place: LOCI Bruxelles, Rue Henri Wafelaerts 47/51, 1060 Saint-Gilles

Online via Teams and on-site participation Room AV- 02.

. First part: Keynote presentation by Owusu Amponsah: Informality and sustainable city development nexus, *Kwame Nkrumah University of Science and Technology*, Ghana (KNUST).

. Second part: Ongoing research (*UCLouvain, ULima Peru, PUCP Peru, KNUST Ghana and Technische Universität München*).

Organizing committee Urban Metabolism Lab: Alejandra Acevedo, Dorothy Nalumu, Daniel Otero Peña, and Elisabetta Rosa.

Chair: Daniela Perrotti.

\* Photo: "Atrapanieblas" (fog harvesting). Pamplona Alta, Lima, *Movimiento Peruanos Sin Agua*, 2021



# Research Seminar

## Urban-Metabolism-In-Formality

WEDNESDAY, MAY 31, 2023

14h00-14h10  
Opening words  
Daniela Perrotti

### CONFERENCE

14h10-15h00  
Keynote speaker  
Owusu Amponsah  
Theme: Informality and sustainable city development nexus.

### RESEARCH UM LAB + OTHER LABS

15h00-15h40  
**Module 1: Ongoing research Lima**

- . Ramzy Kahhat: Linking the informal sector with research on Industrial Ecology: Experiences from Peru and Mexico.
- . Jaime Sarmiento and Andrés Lira: Circular Economy and Life Cycle Analysis of Housing in Informal Settlements in Lima.
- . Favio Chumpitaz: Urban metabolism analysis in an informal settlement with the MUSIASSEM method in Lima.
- . Alejandra Acevedo: Mitigating food dependency of informal settlements in South America: neighborhood- level metabolic model and detection of spaces of opportunities.

15h40 – 16h00  
Comments and discussion

16h00-16h40  
**Module 2: Ongoing research Ghana and Cameroon**

- . Jean Philippe De Visscher: ELOBI - Waste and water management in the informal settlements of Yaoundé, outcomes from three design workshops.
- . Dorothy Nalumu: Building data capacity for assessing the contribution of Nature-based solutions to the urban metabolism: data framework and policy support for informal settlements in fast-growing West-African cities.
- . Bright Kirk Enu: Citizens' acceptability and preferred nature-based solutions for mitigating hydro-meteorological risks in Ghana.
- . Stephen Appiah Takyi: Nature-based solutions as a tool for sustainable city development: An assessment of the prospects and challenges in rapidly urbanizing Ghanaian city.

16h40 – 17h10  
Comments and discussion  
Coffee break

17h10 – 17h30  
**Module 3: Ongoing research Brussels**

- . Daniel Otero: The Spatial Dimension of Urban Metabolism a Design Atlas of Resource-Sensitive Urban Archetypes.
- . Elisabetta Rosa: Exploring the nexus between formality and informality through object biography. Metabolic perspectives and hypothesis for future research.

17h30-17h50  
Comments and discussion

### CLOSING

17h50-18h00  
Closing remarks of the Seminar  
Daniela Perrotti