ENERGY | AFRICA
from Technopolitics to Technofutures
For over 30 years the Center for African Studies at the University of Florida has organized annual lectures or a conference in honor of the late distinguished Africanist scholar, Gwendolen M. Carter. Gwendolen Carter devoted her career to scholarship and advocacy concerning the politics of inequality and injustice, especially in southern Africa. She also worked hard to foster the development of African Studies as an academic enterprise. She was perhaps best known for her pioneering study *The Politics of Inequality: South Africa Since 1948* and the co-edited four-volume *History of African Politics in South Africa, From Protest to Challenge* (1972-1977).

In the spirit of her career, the annual Carter lectures offer the university community and the greater public the perspectives of Africanist scholars on issues of pressing importance to the peoples and societies of Africa. Since 2004, the Center has (with the generous support of the College of Liberal Arts & Sciences) appointed Carter Faculty Fellows to serve as conveners of the conference.

**Past Carter Conference Themes**

**2018** Text Meets Image & Image Meets Text: Sequences & Assemblages, Out of Africa & Congo  
**2017** On the Edge: What Future for the African Sahel?  
**2016** Tropics of Discipline: Crime and Punishment in Africa  
**2015** Schools of Architecture & Africa: Connecting Disciplines in Design and Development  
**2014** Kongo Atlantic Dialogues: Kongo Culture in Central Africa and the Americas  
**2013** The Politics of Permanent Flux: State-society Relations in the Horn of Africa  
**2012** Health and Development in Africa  
**2011** African Independence: Cultures of Memory, Celebrations, & Contestations  
**2010** Bridging Conservation and Development in Latin America and Africa: Changing Contexts, Changing Strategies  
**2009** African Creative Expressions: Mother Tongue & Other Tongues  
**2008** Migrations In and Out of Africa: Old Patterns and New Perspectives  
**2007** African Visual Cultures: Crossing Disciplines, Crossing Regions  
**2006** Law, Politics, and Society in South Africa: The Politics of Inequality Then and Now  
**2005** States of Violence: The Conduct of War in Africa  

**2004** Movement (R)evolution: Contemporary African Dance  
**2003** Dynamics of Islam in Contemporary Africa  
**2002** Zimbabwe in Transition: Resolving Land and Constitutional Crises  
**2001** Governance and Higher Education in Africa  
**2000** Renegotiating Nation and Political Community in Africa at the Dawn of the New Millennium  
**1999** Aquatic Conservation and Management in Africa  
**1998** Africa on Film and Video  
**1997** Communication and Democratization in Africa  
**1995** African Entrepreneurship  
**1994** Transition in South Africa  
**1993** Africa’s Disappearing Past: The Erasure of Cultural Patrimony  
**1992** Sustainability in Africa: Integrating Concepts  
**1991** Involuntary Migration and Resettlement in Africa  
**1990** Health Issues in Africa  
**1989** Structural Adjustment and Transformation: Impacts on African Women Farmers  
**1988** Human Rights in Africa  
**1987** The Exploding Crisis in Southern Africa  
**1986** The African Food Crisis: Prospects for a Solution  
**1985** SADCC’s Bid for Independence from South Africa: Will it Succeed?

**2019 Sponsors**

Center for African Studies  
College of Liberal Arts and Sciences  
Office of Research  
U.S. Department of Education  

Cover image by Kristin Doughty  
Program design by Jenna Agres
Conference Overview

ENERGY | AFRICA: from Technopolitics to Technofutures

University of Florida 2019 Carter Conference
March 22-23

This two-day event maps the shifting contours of the African continent’s energy space: from energy sources and modes of energy extraction and generation to the political relations and visions of human need and possibility that underwrite them. The sharing of insights from varied scales and vantage points across the continent promises a broadly synthetic and theoretically open-ended perspective on emerging energy realities relevant to human and environmental futures in Africa and beyond.

Combining the lens of Science and Technology Studies, Anthropology, Law, History, Political Science, Architecture, Urban Studies, and Design, these concerns are addressed by a diverse group of international scholars and practitioners. Conference participants investigate the networks of knowledge and resources through which new energy systems are realized and the mix of expertise and lay sensibility, high-tech and everyday materials, current needs and future aspirations that shape both extant and imagined energy systems across the continent. Panelists, moreover, consider how the resulting techno-social arrangements enable particular configurations of public life and political power and in what relation to or divergence from nation-states and transnational corporations—long assumed fundamental to modern energy regimes.

It is well-recognized that the African continent and its surrounding offshore and subterranean spaces provide a substantial share of world energy resources. Subject to the caprices of corporate capitalism and rentier states, it is also well-noted that Africans are largely underserved in terms of energy access—a fact made bare by activists, academics, and countless ordinary citizens. Departing from these two scenarios—one of excess and the other of exclusion—the conference pays particular attention to African Energy Innovations. Presentations showcase and interrogate energy solutions formulated in Africa, from Africa-sourced materials, via Africa-based institutions and actors, to serve African demands.

Beyond consideration of African energy systems in the present—from national grids and transnational pipelines, to homemade generators and mobile technologies that supplant inherited infrastructures—the unfolding discussions consider what African cases portend for global energy futures. Whether rescaling local devices for broader circulation or reworking received arrangements to reflect on-the-ground realities, we address the implications of these inventions and interventions for energy ethics, techno-scientific authority, and environmental justice.

Join us for 3 panels, keynote address, and closing forum:
Panel 1: From Grand Schemes to New Visions of Energy in Africa
Panel 3: Energy Metabolism, Infrastructure and Energy Futures
Keynote Address: Omolade Adunbi, Enclaves of Exception: Special Economic Zones, Infrastructure, Energy and Extractive Practices in Nigeria

Brenda Chalfin
Director, UF Center for African Studies
Keynote Address

Enclaves of Exception: Special Economic Zones, Infrastructure, Energy and Extractive Practices in Nigeria

In the last two decades, there has been an exponential increase in the number of countries setting up Special Economic Zones. SEZs aim to remove hindrances to trade and create opportunities for economic growth. While much of the academic literature on SEZs focuses on the state practices in establishing SEZs, no attention is paid to other practices that bear resemblance to SEZs. Drawing on ethnographic fieldwork in Nigeria, I complicate the notion of SEZs as an exclusive state regulatory practice. Using the example of artisanal refineries organized by youths in the Niger Delta, this paper seeks to rethink SEZs and its relationship to oil extraction and state regulatory practices. If SEZs are zones of exception specially designated to have their own regulatory and fiscal practices that are different from state practices, I suggest we see regulatory practices of extraction by youths in the creeks of the Niger Delta as SEZs.

This talk asks how are the youth in the Niger Delta engaged in a process that is reshaping extractive governance in Nigeria? How is it that zones of extraction established by youths exemplify a form of mimicking of multinational oil corporation practices in the Niger Delta? How are emergent oil infrastructures constructed by youth demonstrative of the functionality of SEZs? The paper suggests that the politics of crude oil governance reveal complex, integrated, and innovative forms of extractive practices by youth groups within many Niger Delta communities. The paper shows how artisanal refineries provide a useful lens within which to see how environmental practices are reshaping livelihoods, community relations and governance in Nigeria.

Omolade Adunbi, PhD
Associate Professor, Afroamerican and African Studies & Program in the Environment, University of Michigan

Dr. Omolade Adunbi is a political anthropologist and an Associate Professor at the Department of Afroamerican and African Studies (DAAS) and Program in the Environment at the University of Michigan, where he is also affiliate faculty of the Donia Human Rights Center, African Studies Center, and a Distinguished Faculty Fellow for Environmental Sustainability, Grahams Sustainability Institute. Originally from Nigeria, he received his PhD in Anthropology from Yale University in 2010. His primary research interests are resource distribution, governance, human and environmental rights, transnational institutions, multinational corporations and the postcolonial state.
2019 Conference Agenda

Day One: Friday, March 22

9:00 a.m. - 9:30 a.m.  Welcome
Brenda Chalfin Director, UF Center for African Studies
Leonardo Villalon Dean, UF International Center

9:30 a.m. - 12:30 p.m.  Panel 1: From Grand Schemes to New Visions of Energy in Africa
Chair: Sebastian Elischer Department of Political Science, University of Florida

9:30 a.m. - 10:30 a.m.  Part 1: Grand Schemes
Kairn Klieman Department of History, University of Houston
Historical Silences, American Biases: Key Issues in Writing the History of African Oil
Nelson Oppong Department of Social Sciences, City University of New York
Between Elite Reflexes and Deliberative Impulses: A Comparative View of New Oil and the Politics of Reform in Africa

10:30 a.m. - 10:45 a.m.  Coffee Break

11:00 a.m. - 12:00 p.m.  Part 2: New Visions
Kwabena Oteng Acheampong Harvard Law School & Ghana Institute of Management and Public Administration
The New Gas Developmentalism in Ghana
Buyana Kareem Urban Action Lab, Makerere University
Working with the Urban Poor for Transitions to Sustainable Energy: Insights from Africa

12:00 p.m. - 12:30 p.m.  Discussion

12:30 p.m. - 1:30 p.m.  Lunch: Grinter Hall rm. 471

2:00 p.m. - 4:30 p.m.  Panel 2: Practices and Policies of Energy Innovation Design
Chair: Renata Serra UF Center for African Studies

2:00 p.m. - 3:00 p.m.  Part 1: Socio-political Adaptations
Jacquie Walubwa School of Tourism, University of Johannesburg
Energy Pathways and Innovations in Kenyan Informal Settlements
Erin Dean Department of Anthropology, New School of Florida
Energy and Autonomy in Zanzibar

3:00 p.m. - 3:15 p.m.  Coffee Break
3:30 p.m. - 4:30 p.m.  

**Part 2: Socio-technical Experiments**

**Michael Degani** Department of Anthropology, Johns Hopkins University  
Adventures in Aircrete

**Jamie Cross** Social Anthropology, University of Edinburgh  
Displaced Energy: Solar Lighting as Humanitarian Good

4:30 p.m. - 5:00 p.m.  

Discussion

6:00 p.m. - 7:30 p.m.  

**Energy | Africa Keynote Address & Reception**

UF INNOVATE | the HUB 747 SW 2nd Ave, Gainesville, FL 32601  
Chair: **Akintunde Akinyemi** UF Department of Language, Literatures, and Cultures

**Omolade Adunbi** Department of Afroamerican and African Studies, University of Michigan  
Enclaves of Exception: Special Economic Zones, Infrastructure, Energy and Extractive Practices in Nigeria

---

**Day Two: Saturday, March 23**

Grinter Hall rm. 404

9:00 a.m. - 11:00 a.m.  

**Panel 3: Energy Metabolism, Infrastructure and Energy Futures**

Chair: **Abdoulaye Kane** Department of Anthropology and UF Center for African Studies

**James Inedu-George** School of Architecture and Planning, University of Witwatersrand & Design Director, HTL Architecture, Lagos  
The Generative City

**Kristin Phillips** Department of Anthropology, Emory University  
Prelude to a Grid: Production, Precarity, and the Cosmology of Energy in Singida

**Kristin Doughty** Department of Anthropology and Director of Susan B. Anthony Institute for Gender, Sexuality and Women’s Studies, University of Rochester  
Infrastructures of Conversion, Infrastructures of Repair: Methane Extraction in Lake Kivu

10:30 a.m. - 10:45 a.m.  

Coffee Break

11:00 a.m. - 11:30 a.m.  

Discussion

12:30 p.m. - 1:30 p.m.  

**Closing Participant Forum**  
**Africa’s Energy Futures**: Making Connections and Mapping Directions

12:30 p.m.  

Lunch: Grinter Hall rm. 471
Workshopping a Book Intro: “Historical Silences, American Biases: Key Issues in Writing the History of African Oil”

Kairn Kleiman, University of Houston
I am a historian of oil in Africa, and my book Before the ‘Curse’: Petroleum, Politics and International Oil Companies in Africa, 1890–1980 reconstructs the history of interactions between Africa’s political actors and international oil companies from 1890 on. It highlights colonial/post-colonial continuities in terms of the companies’ impacts on national and international politics and identifies antecedents to the “Oil Curse” associated with oil-producing nations today. For my presentation I would like to “workshop” the introductory chapter (title is indicated above). Because I intend for the book to be accessible to the general public, policy-makers, and oil and gas professionals, I specifically seek input regarding the tone, voice, and complexity of historical arguments presented.

Between Elite Reflexes and Deliberative Impulses: A Comparative View of New Oil and the Politics of Reform in Africa

Nelson Oppong, City University of New York
The aftermath of Africa’s recent oil boom between 2006 and 2014 – when increased global demand conjoined with a relatively stable political and economic order across the continent – witnessed renewed hope in the capacity of liberal reforms to steer optimum transformation. However, there is limited insight about the distinctive political economy trajectories of oil in countries where democratic governance and liberal norms have been institutionalized. Through comparative insights drawn from the experiences of emerging oil producers, including Ghana, Uganda and Kenya, this presentation delves into the ideas, regimes and interests that underpin the material politics of oil in Africa. It frames the challenges of reform in these countries as part of a fundamental question: should the politics of Africa’s energy-based transformation be viewed through the narrow prism of the rational calculations of dominant elites, instead of the impulses of democratic pluralism and contentious politics at multiple scales?

The New Gas Developmentalism in Ghana

Oteng Acheampong, Harvard University
Following Ghana’s emergence as a hydrocarbon province, attention has understandably centered on oil as the most valuable and globally tradable petroleum commodity. By contrast, gas is harder to store, transport, or trade on international markets. For precisely these reasons, paying attention to the political economy of gas and the infrastructure and techno-legal innovations required to commercialize and domesticate it could open new pathways to Ghana’s development. Focusing here on para-statal politics and the interplay between two state-owned commercial entities, I examine a new energy developmentalism that is emerging around Ghana’s gas commercialization project.

Working with the Urban Poor for Transitions to Sustainable Energy: Insights from Africa

Buyana Kareem, Makerere University
The indivisible challenges of urbanization, poverty and growing inequality require multiple and contextually diverse pathways to sustainable energy. Although the urban poor are increasingly recognized as key stakeholders in energy policy and planning processes, many institutional arrangements often fail to bring about fair inclusion of their knowledge and aspirations. In order to make energy transitions inclusive, cities authorities need transformative capacity. Drawing on two case studies from different urban contexts of Uganda and South Africa, this paper explores the nature of inclusive energy transitions between city authorities and the urban poor and the extent to which this has contributed to transformative urban development trajectories. The findings suggest that the inclusivity of transitions to sustainable energy will be strengthened when city authorities (1) acknowledge the everyday realities of the urban poor and build on their knowledge to identify priorities for transformative change, (2) support intermediaries who are chosen by the urban poor themselves and (3) engage in experimenting inclusive pathways to the provision of sustainable energy sources. These practices can help to build transformative capacity that puts the urban poor at the center of transitions to sustainable energy in cities.
Participant Abstracts

Energy Pathways and Innovations in Kenyan Informal Settlements

Jaquie Walubwa, University of Johannesburg
Kenya Vision 2030 development blueprint proposes the generation of more energy at a lower cost and increased efficiency with provisions on climate action, planned urbanism and gender equality. Kahawa Soweto embodies waste to energy innovations which integrate knowledge and practices for the purpose of leapfrogging sustainable urbanization. This knowledge captured in visual ethnography is distinctly unique as it is cross fertilized by learnings and experimentations of academics and non-academics. They jointly research on possibilities of re-inventing informal settlements to meet the complex nature of socioecological conditions indicating that science can work with policy and societal actors especially in non-conformist marginalized communities.

Energy and Autonomy in Zanzibar

Erin Dean, New College of Florida
This presentation considers the possibilities for energy autonomy anticipated by the recent and rapid influx of solar technology on the island archipelago of Zanzibar. Following a technical failure that left the archipelago without electricity for three months in 2009-10, the Zanzibari government has pursued several options to increase energy independence, including solar power. In this presentation, I explore how solar innovations and investments contribute to the re-imagining of social, economic and political relationships while simultaneously reproducing persistent discourses of inclusion and exclusion, of autonomy and dependence.

Adventures in Aircrete

Michael Degani, Johns Hopkins University
“Aircrete,” or “cellular foam concrete,” is a lightweight, energy efficient building material. While some corporations hold proprietary patents on the technology, DIY technicians around the world are cultivating more home-brew, open-source methods. This talk follows my collaboration with B, an American ex-soldier and mining engineer as he repurposes legacies of imperial extraction into the propagation of this material across urban Africa. Drawing on solarpunk, speculative design, and the metaphysics of foam, I argue that aircrete materializes a different vision of Tanzania’s nascent industrialization and of the “African Anthropocene” more broadly—one not based on the density of rock aggregate and fossil fuels, but rather the distributed, relational stability of air.

Enclaves of Exception: Special Economic Zones, Infrastructure, Energy and Extractive Practices in Nigeria

Omolade Adunbi, University of Michigan
In the last two decades, there has been an exponential increase in the number of countries setting up Special Economic Zones. SEZs aim to remove hindrances to trade and create opportunities for economic growth. While much of the academic literature on SEZs focuses on the state practices in establishing SEZs, no attention is paid to other practices that bears semblance to SEZs. Drawing on ethnographic fieldwork in Nigeria, I complicate the notion of SEZs as an exclusive state regulatory practice. Using the example of artisanal refineries organized by youths in the Niger Delta, this paper seek to rethink SEZs and its relationship to oil extraction and state regulatory practices. If SEZs are zones of exception specially designated to have their own regulatory and fiscal practices that are different from state practices, I suggest we see regulatory practices of extraction by youths in the creeks of the Niger Delta as SEZs. The paper asks: how are the youth in the Niger Delta engaged in a process that is reshaping extractive governance in Nigeria? How is it that zones of extraction established by youths exemplify a form of mimicking of multinational oil corporation practices in the Niger Delta? How are emergent oil infrastructure constructed by youth demonstrative of the functionality of SEZs? The paper suggests that the politics of crude oil governance reveal complex, integrated, and innovative forms of extractive practices by youth groups within many Niger Delta communities. The paper shows how artisanal refineries provide a useful lens within which to see how environmental practices are reshaping livelihoods, community relations and governance in Nigeria.
Participant Abstracts

The Generative City

James Inedu-George, University of Witwatersrand & HTL

Over the past decade, several African countries have begun to attach banks of individual solar panels on the roofs of thatched huts to provide energy. They argue that this will not only provide liberation for the people but enhance their freedom and productivity, which eventually will start to lead droves of Rural Africans out of poverty. This act, although noble, has turned out to be an oxymoron, except where these panels are grouped together, for instance in the large market initiatives launched by the Nigerian Government with its pilot program in Sabon Gari Market Kano. Africa and its Rural Electrification program provides a canvas for an experiment on these cities and the architecture typologies that emanate from them. For instance, if the solar panels are grouped instead of scattered on individual homes, in the form of a tower to catch the maximum sunlight, while this provides maximum energy, can it not create a new rural typology to liberate villages and achieve the objectives of the governments above? This contradictory situation has created an opportunity for African Cities to create a new typology in architecture and on a larger scale, a new type of city, a generative city based on several types of farming. It is this that becomes the subject of this discourse.

Prelude to a Grid: Production, Precarity, and the Cosmology of Energy in Singida

Kristin Phillips, Emory University

Rural central Tanzanians have long utilized a variety of energy sources: firewood fuels cooking; wind separates grain from chaff; sun ripens the millet. More recently, solar panels charge phones and a planned wind farm promises to light homes and community spaces. Despite these developments, rural Singida remains an “energy desert,” only peripherally and selectively served by electricity infrastructures and fossil fuels. This paper asks: how do Singidans conceptualize and instrumentalize differences between energy sources? How do they patchwork power sources together, eking energy from their natural and social environment? And how do cosmological notions of energy relate to colonial and post-colonial infrastructures?

Infrastructures of Conversion, Infrastructures of Repair:
Methane Extraction in Lake Kivu

Kristin Doughty, University of Rochester

Based on ethnographic research with methane extraction on Lake Kivu on the Rwanda/DRC border between 2016 and 2018—including with methane extraction plants, governmental monitoring agencies, and people living along the lake—this paper examines the transformations of landscape and infrastructure brought by these new projects, to probe the relationships among official efforts to control violence, people, nature, and energy. It asks, how might examining these energy infrastructures at their points of emergence inform how we think about temporality and repair of both peoples and pipelines?
Participant Biographies

Kwabena Oteng Acheampong, Harvard Law School  

Kwabena Oteng Acheampong is an S.J.D. Candidate at Harvard Law School from where he also obtained his LL.M. in 2013. He has a sabbatical from teaching (Administrative Law and Alternative Dispute Resolution) at the Faculty of Law, Ghana Institute of Management and Public Administration (GIMPA). Prior to joining GIMPA in September 2013, Oteng worked for more than a decade at Ghana’s Commission on Human Rights and Administrative Justice (CHRAJ), where he investigated several human rights and high-profile anti-corruption cases and helped shape key policies and legislation in Ghana’s anti-corruption drive. Following the establishment of the Constitution Review Commission (CRC) in January 2010 to review Ghana’s 1992 Constitution, he was selected by CHRAJ to assist the CRC as one of the latter’s Counsels/Researchers. He is a Part-time Senior Associate at the Accra-based Law and Development Associates and also holds degrees from the Kwame Nkrumah University of Science and Technology (B.Sc. Agriculture, 2001) and the University of Ghana (LL.B., 2007).

Omolade Adunbi, University of Michigan  

Omolade Adunbi is a political anthropologist and an Associate Professor at the Department of Afroamerican and African Studies (DAAS) and Program in the Environment at the University of Michigan, where he is also affiliate faculty of the Donia Human Rights Center, African Studies Center, and a Distinguished Faculty Fellow for Environmental Sustainability, Grahams Sustainability Institute. Originally from Nigeria, he received his PhD in Anthropology from Yale University in 2010. His primary research interests are resource distribution, governance, human and environmental rights, transnational institutions, multinational corporations and the postcolonial state. His latest book, *Oil Wealth and Insurgency in Nigeria* (Indiana University Press, 2015), explores the violence of oil extraction and conflict over resource control in the Niger Delta. It focuses in particular on the “two faces” of NGOs in the region and the “ancestral promise of wealth” that land and oil symbolize for Niger Delta communities. His current research addresses the growing interest of China in Africa’s natural resources and its interrelatedness to infrastructural projects and artisanal refineries. Also a frequent contributor to the popular online publication, *Africa is a Country*, Dr. Adunbi is an advocate for public scholarship and enthusiastic analyst of contemporary culture and politics. His teaching interests include transnationalism, globalization, power, violence, human and environmental rights, the postcolonial state, social theory, resource distribution and contemporary African society, culture and politics. He is the 2017 recipient of the Royal Anthropological Institute’s Amaury Talbot Prize for African Anthropology.

Kareem Buyana, Makerere University  

Kareem Buyana holds a PhD in Sociology from Stanford University. He is the principal investigator for Leading Integrated Research on Agenda 2030 (LIRA) at the Urban Action Lab of Makerere University, Uganda. The LIRA project focuses on the connections between global measures of energy sustainability in cities and micro-scale pilots of energy solutions in informal urban settlements of Kampala (Uganda) and Nairobi (Kenya). Kareem has published on experimentation for sustainable energy transitions in cities, climate challenges and solutions in African cities and co-producing knowledge for sustainable urban development in Africa. Kareem is an Editorial Board Member of Socio-Ecological Practice Research (SEPR), a Journal that publishes scholarly articles to achieve the dual ambition of producing new knowledge and improving (instead of just informing) ecological practice. Kareem's research has been coupled to interfaces with policy-makers at the UN, where he has provided policy advice on development programming for the Sustainable Development Goals (SDGs) in Uganda, Lesotho and Ethiopia. He has contributed to global flagship publications on the future of cities, particularly “The Weight of Cities: Resource Requirements for Future Urbanization,” which was released recently by the International Resource Panel of the United Nations Environment Programme (UNEP).
Participant Biographies

**Jamie Cross, University of Edinburgh** Jamie.Cross@ed.ac.uk

Jamie Cross is Senior Lecturer in Social Anthropology and Associate Dean of the College of Arts, Humanities and Social Sciences at the University of Edinburgh. His research on "The Solar Future" extends to India, Papua New Guinea, and Burkina Faso where he examines relationships involved in creating markets for renewable energy technologies in contexts of global poverty and the values, practices and meanings that mediate relations to electrically powered things. A recent ESRC funded research project Off the Grid: Relational Infrastructures for Fragile Futures (2013-15) looked comparatively at infrastructures for energy and health in parts of rural India, Papua New Guinea and Scotland. Dr. Cross also leads the ESRC/AHRC funded Displaced Energy project (2016-18) which is developing qualitative approaches to energy infrastructures in refugee camps and settlements across sub-Saharan Africa. Among his many public anthropology commitments, Dr. Cross is a co-founder of the Centre for New Economies of Development and Urjaa Samadhan, a non-profit social enterprise that works to catalyze solar repair services in rural India. He also runs the Off Grid Solar Scorecard, an initiative intended to draw attention to material politics and sustainable design in the global solar industry. He manages the Solar Cardboard project, which aims to build an open source, ethically sourced, solar powered lighting device around circular economy design principles. He is the author of *Dream Zones: Anticipating Capitalism and Development in India* (2014 Plutor Press) and the forthcoming *Everything is Not Illuminated*.

**Erin Dean, New College of Florida** edean@ncf.edu

Erin Dean is Associate Professor of Anthropology at New College of Florida. She is an environmental anthropologist whose research focuses on conservation and development in Zanzibar and mainland Tanzania. She is particularly interested in how control of land and resources is negotiated and ordered based on gender, age, ethnicity, class, political affiliation, and institutional status. Her most recent research project, in partnership with Kristin Phillips (Emory University), is a multi-sited study considering how the emerging infrastructure of renewable energy is shaping and reshaping gendered, geographic, and sociopolitical relations in everyday life in Tanzania. In addition to energy development, her ongoing work considers a variety of topics of both emergent and persistent concern to community members, including forest and marine conservation, “participatory” resource management, knowledge production, gendered identity, food security, land rights, and political authority. At New College of Florida, she also coordinates the Sarasota Oral History Project, a local project in which students conduct oral history interviews with community members and produce audiovisual biographical stories.

**Mike Degani, Johns Hopkins** mdegani1@jhu.edu

Michael Degani is Assistant Professor in the Department of Anthropology at Johns Hopkins University, broadly focusing on energy use and infrastructure in African cities. He received his PhD in anthropology from Yale University in 2015 and was supported by fellowships from the National Science Foundation, the Social Science Research Council, the Wenner Gren foundation, and the Fulbright-Hayes foundation. He is currently a Postdoctoral Fellow of the American Council of Learned Societies (2018-19). His book manuscript *The City Electric* is an ethnography of the municipal power grid in Dar es Salaam, Tanzania, exploring the informal economies of infrastructural breakdown and their effects on the rhythms and textures of everyday life in a postsocialist African metropolis. He is currently beginning a second project that explores the use of alternative and experimental building materials in Dar es Salaam. His work has appeared in *American Ethnologist, Cultural Anthropology, Limn and Afrique Contemporaine.*
Participant Biographies

**Kristin Doughty, University of Rochester** kristin.doughty@rochester.edu
Kristin Doughty is Associate Professor of Anthropology and Director of the Susan B. Anthony Institute for Gender, Sexuality and Women’s Studies at the University of Rochester. She is a political/legal anthropologist with geographic focus in Africa, particularly in Rwanda. Prof Doughty’s current research project in Rwanda, *Threats to Power: Cultural Politics of Energy and Unity in Post-Genocide Rwanda*, examines the intersection of energy politics and post-genocide reconstruction through a focus on methane extraction in Lake Kivu. This research is funded by grants from the Wenner-Gren foundation and National Science Foundation. This work builds on her first book, *Remediation in Rwanda: Grassroots Legal Forums* (University of Pennsylvania Press, Ethnography of Political Violence Series, 2016), which examined how the Rwandan government used law as a purported tool of reconciliation in the aftermath of genocide. Doughty is in the early stages of another collaborative ethnographic research project that builds on understandings of justice cross-culturally, here examining how the high concentration of prisons in upstate New York shapes everyday life, as part of the emerging multidisciplinary Rochester Decarceration Research Initiative. She has begun teaching anthropology as part of the Rochester Prison Education Project, including spring 2019 at Albion Correctional Facility. Doughty’s research has been published in *American Anthropologist, Journal of the Royal Anthropological Institute, Political and Legal Anthropology Review, the International Journal for Transitional Justice*, and in several edited volumes. She holds a PhD in Anthropology from the University of Pennsylvania (2011) and has been on the faculty at the University of Rochester since 2012.

**James Inedu-George** inedusvault@gmail.com
James Inedu George is an architect and Design Director of HTL, with an international practice in Nigeria, Dubai, Melbourne and South Africa, where he focuses is on Innovative Sustainable Solutions and Future Cities. HTL is a 7-man, research-based innovation practice, producing theory and building work. Some projects in Nigeria include: a new Fourth Mainland Bridge (published in *ArchAfrika*, September 2011) and ‘Lagos: An Absence of Systems’ (exhibited at Goethe Institut, Lagos, 2009). His office has received funding from the German Government to mount Affordacity and Isi Ewu, an exhibition of their research on Affordable Future African City Solutions. He was a participant at the Biennale d’architecture d’Orleans in Paris with his publication, “An Interruptive Manifesto.” In 2017, he was nominated for the Rolex Mentor and protégé program. Committed to public engagement, James is a contributor to the online magazine, YNaija, where he writes a series of letters to the president about how architecture can help solve the economic issues in Africa and beyond. He runs a weekly ideas podcast called “An African Conquering the World.” He is currently fascinated by the multilayering of City Space and how the infrastructure of the city can be interrupted with architecture. He finds inspiration for Affordable Futuristic Constructions in traditional African Architecture for Global use. He teaches about the possibilities that can emanate globally from a new understanding of present conditions in Africa.

**Kairn Klieman, University of Houston** kklieman@uh.edu
Kairn A. Klieman is an Associate Professor of History at the University of Houston, and the co-founder/ co-director of the Graduate Certificate in Global Energy, Development, and Sustainability (GEDS). Originally trained as a specialist in pre-colonial African history and comparative historical linguistics, her first book *The Pygmies Were Our Compass: Bantu and Batwa in the History of West-Central Africa, Early Times to c. 1900 C.E.* was a finalist for the Herskovitz Award and a CHOICE Outstanding Academic Book in 2004. Dr. Klieman shifted her focus to energy history in 2006, and is currently working on a book entitled Before the “Curse”: Petroleum, Politics and U.S. Oil Companies in the Gulf of Guinea, Africa, 1890s-1980s. Along with Mr. Tom Mitro, a retired regional CFO for Chevron in Angola, Dr. Klieman co-founded the GEDS Certificate, which introduces industry employees, government officials, and NGO leaders to current problems, past histories, and preferred “best practices” for creating oil and gas projects that will prove beneficial over the long term for stakeholders at the local, national, and international levels. Dr. Klieman has received numerous awards, grants and fellowships (Fulbright-Hayes, Social Science Research Council, Belgian-American Foundation, The West African Research Association, Rice Humanities Research Center, UH Teaching Excellence Award), and has delivered lectures on African oil history for the U.S. State Department, MIT, The University of Ibadan (Nigeria) The Rachel Carson Center (Munich), The University of Oklahoma, Texas A&M, Brown University, and Boston University.
Participant Biographies

Nelson Oppong, City University of New York noppong@bmcc.cuny.edu
Nelson Oppong is an Adjunct Assistant Professor at the City University of New York’s Social Sciences Department, where he teaches human geography and political science. Prior to this role, taught different courses in international development, political science, global governance at the University of Bath and Oxford University. His research is devoted to the intersections of global norms and domestic political economy drivers of reform in developing countries. He has spent several years consulting for different development agencies and public sector organizations on machineries of government, sustainable development, institutional appraisal and public sector reform across Africa, the Caribbean and Pacific regions. Nelson is as a member of the Editorial Working Group of the Review of African Political Economy, a leading journal devoted to critical political economy analysis of Africa, and a fellow of the Higher Education Academy (HEA) of the UK. He possesses a D.Phil. (Ph.D.) degree in International Development from the University of Oxford, where he also obtained an M.Phil. degree in Development Studies, an M.Phil. degree in Political Science, and a Bachelor of Arts (Hons.) degree in Political Science, with French and Philosophy, from the University of Ghana.

Kristin D. Phillips, Emory University kdphill@emory.edu
Kristin D. Phillips is a cultural anthropologist who has taught Anthropology, African Studies, and Development Studies at Emory University in Atlanta, Georgia since 2012. Between 2003 and 2017, Phillips conducted ethnographic field research in Tanzania to investigate how smallholder farmers participated politically to vie for state resources (for health, education, and agriculture). Her first book, An Ethnography of Hunger: Politics, Subsistence, and the Unpredictable Grace of the Sun (Indiana University Press, 2018) explores the experience of food insecurity and its political implications in Tanzania. Other publications explore the politics of policy-making, multipartyism, food security, and education. Since 2017, Phillips has been collaborating with environmental anthropologist Erin Dean to examine how people understand, use, and experience renewable energy technologies in a resource-poor and postcolonial context. The project explores how the emerging infrastructure of renewable energy in Tanzania is being assembled, by whom, and to what effect; how Tanzanians make decisions about and anticipate energy sources; and how Tanzanians’ engagements with renewable energy reflect or reconfigure existing social, political, and economic connections. The research aims to show how the emerging infrastructure of renewable energy in Tanzania is shaping gendered, geographic, and sociopolitical relations in everyday life.

Jacquie Walubwa, University of Johannesburg walubwajacque@gmail.com
Jacquie Walubwa is a passionate transdisciplinary scholar who loves to hike and explore new frontiers. She focuses her energies on looking for solutions to African challenges with the community to achieve SDGs in the real world. She has received many awards, notably grants from the French Embassy to Kenya and LIRA 2030. Currently she is a postdoctoral research fellow at the University of Johannesburg with research interests in urban livelihoods, specifically focusing on waste to energy conversions. She spends her time straddling between South Africa and Kenya and is currently leading the Kenya chapter of LoNSEK project in Nairobi, which aims at localizing SDGs using energy as a pathway to the community, where energy solutions are co-produced with the most vulnerable in the communities.