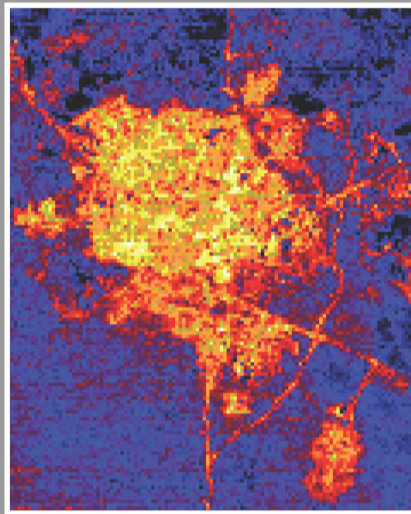


Ben-Gurion University of the Negev  
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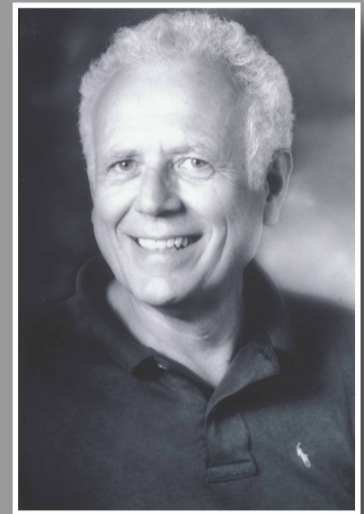
The 5<sup>th</sup> Jeffrey Cook Workshop

# The Challenge of Climate Responsive Architecture in Hotter and Drier Cities

March 8, 2017 ~ Sede Boqer Campus



In an era of climate change and increased urbanization, decision-makers are facing the challenge of mitigating and adapting to the combined effects of nature and human development. Given the increasingly common climate change scenarios by which many cities will become drier as well as hotter, desert environments can be considered as a laboratory for years to come. This workshop will focus on desert architecture with an eye toward such a future, combining insights on climate change processes with knowledge on environmentally-responsive architecture and urban design. Issues to be addressed include ways to mitigate climatic exacerbation and adapt to a changing climate, Urban Heat Island measuring and modeling, energy usage, thermal comfort, and more.



## Program

### 10:00-10:30 Welcome, Opening Lecture

Eddie Bet-Hazavdi (MNI) – Energy and intelligent cities.

### 10:30-12:00 Session I – Climate and Energy

Guedi Capeluto (IIT) – Climate change and health in Israel: Adaptation policies for extreme weather events.

Isaac A. Meir (BGU) – Green technologies in planning and design vis-à-vis climatic uncertainty.

Hofit Itzhak Ben-Shalom (TAU) – Meso and microclimate exacerbation in an arid region – The case of Beer Sheva.

Yodan Rofe (BGU) – Urban design in the face of multiple environmental challenges.

Shai Kaplan (BGU) - Meeting urban planners half-way: Climate models for in-practice use.

### 12:15-13:45 Session II - Architectural Design for Comfort in Desert Cities

Ariane Midell (ASU) - Thermal comfort, mean radiant temperature, and shade in hot dry climates.

David Pearlmutter (BGU) - Designing for pedestrian comfort in thermally stressful cities.

James Wang (NUS) – Outdoor park thermal comfort in Singapore.

E. Erell (BGU) – Modelling the potential for PV installation in residential buildings in dense urban areas.

Aviva Peeters & Limor Shashua-Bar (TVL) – Developing shading guidelines for urban open spaces in Israel.

### 14:30-16:00 Session III – Cook Award, Keynote, Discussion

Prof. Anthony Brazel (ASU) – Microclimate, architecture, and landscaping, Phoenix, Arizona: The legacy of Jeff Cook.

**Note that participation is free of charge, but reservation is mandatory due to logistics. RSVP via return email.**

ASU – Arizona State University, USA / BGU – Ben-Gurion University of the Negev, Israel / IIT – Technion – Israel Institute of Technology / MNI – Ministry of National Infrastructures, Energy and Water, Israel / NUS – National University of Singapore / TAU – Tel Aviv University, Israel / TVL - TerraVision Lab, Israel

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