

## **Urban Climate Mitigation and Adaptation: from Science to Solutions**

### **Abstract**

This lecture will begin with a description of a project being planned at Yale University on scalable urban climate solutions. The project aims to tackle the global climate crisis from the perspective of urban carbon mitigation and urban climate adaptation. This will be followed by (1) a case study on how the City of New Haven, Connecticut, USA, should cope with heat stress and extreme hydrological conditions in current and future climates, and (2) a synthesis of the investigator's research on understanding and reducing urban heat stress. The case study is based on a capstone class the investigator co-taught with a professor of environmental law and policy. The insights from the case study and from his past and ongoing research will be discussed in the context of active urban climate adaptation via green infrastructure changes and retrofitting of urban surfaces with novel, climate friendly construction materials.