



Geographical Analysis and Modeling of Urban Heat Island Formation

Guest Editors:

Prof. Dr. Yuji Murayama

Faculty of Life and Environmental
Sciences, University of Tsukuba,
Tsukuba 305-8572, Japan

mura@geoenv.tsukuba.ac.jp

Dr. Ruci Wang

Faculty of Life and Environmental
Sciences, University of Tsukuba,
Tsukuba 305-8572, Japan

wang.ruci.fw@u.tsukuba.ac.jp

Deadline for manuscript
submissions:

10 February 2022

Message from the Guest Editors

Dear Colleagues,

The urban heat island (UHI) phenomenon, related to rapid urbanization, has attracted considerable attention from academic scholars and governmental policymakers because of its direct influence on citizens' daily lives. The UHI effect causes a series of negative human impacts, including indirect economic loss, poor air quality, reduced comfort, imbalanced public health, and increased mortality rate. The temperature difference between the center and the periphery is expanding, especially in big cities. It could be the result of changes in land use/cover composition and increasing anthropogenic heat sources. Monitoring and modeling urban heat island formation are crucial to managing sustainable development, especially in developing countries.

This Special Issue focuses on data, method, techniques, and empirical outcomes of urban heat island studies from a time and space perspective. We wish to showcase your research papers, case studies, conceptual or analytic reviews, and policy-relevant articles to help to achieve urban sustainability.

Prof. Dr. Yuji Murayama

Dr. Ruci Wang

Guest Editors

