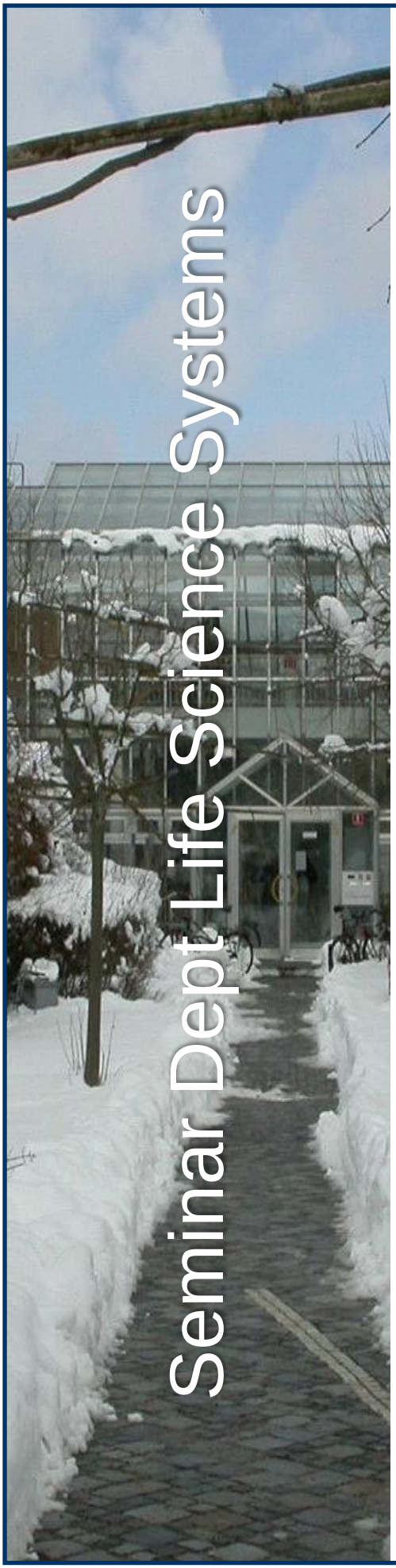

MAKE IT REAL! Urban climate science for planning healthy cities in Asia

Prof. Dr. Chao Ren
University of Hong Kong

More than half of the world's population have become urban dwellers, and the rise of mega- and high-density cities is irreversible. While megacities make societies economically more efficient, they pose environmental challenges. Climate threats come from poor air quality, heat waves, drought and floods, resulting in reduced human health. The understanding of how climate affects cities has generated wide-ranging concern from both the public, local and national governments and agencies. This 'climate of concern' has led to a call for climate resilient and healthy cities.

The study of urban climate has been developed since the 19th century due to the anthropogenic modification caused by industrialization and urbanization. Although the research in urban climatology has been expanded in the past decades, the impact of climate knowledge in urban planning and design is still low, especially in Asian countries. Thus, the presentation will introduce several consultancy projects in Asian high-density cities. The presentation will not only look at the ways of urban climatic applications but also introduce the practical experience of guideline development. For example, a Chinese 'Urban Climatic Consideration in City Master Plan' has been developed. Its focuses on urban wind corridors, greenery and thermal environment, allocation of industrial areas, renewable energy and sponge cities. It not only provides suggestions on data collection, methodology but also touches on implementation and technical reports. The presentation will illustrate the idea of 'science in time, science in place', and explain how to deliver a cross-disciplinary collaborations.

Dept Life Science Systems

Wintersemester 2024/25

Monday, 14.10.2024, 16:15–17:00

Online https://tum-conf.zoom-x.de/j/69079483987?pwd=elJ6bStBbXo0RHQ4aUJjVGlqRVpLdz09

Meeting-ID: 690 7948 3987

Kenncode: 021482

Prof. J. Kollmann (Tel. 08161-714144, johannes.kollmann@tum.de)