

WEIHENSTEPHANER FORUM 2020 | AE 5

ARBOR - TECH

15-16
OCT

Symposium via Zoom

Link to the online event:
www.ar.tum.de/gtla

Arbor-Tech is the 2020 edition of the Weihenstephaner Forum and the fifth edition of the international Architecture and Environment Symposium series.

In the context of climate change and accelerating urbanization, urban vegetation is more important than ever. With their size and biomass, trees are the most important elements for creating required and pleasant living conditions. However, the established techniques with which we plan tree planting and then implement and maintain them are often not suitable to meet the increasing demands and expectations in progressively disadvantageous growing conditions. The design approaches are therefore often very limited. Historical examples of targeted manipulation of growth, show how trees can be made to perform functions that go far beyond those of a naturally grown tree or a tree that usually grows in our cities today. Examples of this include the living bridges in India, the 'Tanzlinden' or hedge laying. Likewise, new technologies in researching and maintaining trees add an important factor in reviving and rethinking the way past cultural techniques can be reinvented for today's needs.

At the symposium, we will discuss innovative forms of green architecture and green infrastructure that result from an integrated process of „co-design“ and „co-evolving“ of people, trees, practices and technologies. The starting point are the human-plant-environment interactions of historical or vernacular approaches. The aim is to learn from these examples and to apply them to our current framework, new approaches and design visions, and to develop new approaches that, in addition to landscape architecture, architecture and urban planning, could also become relevant in disciplines such as agroforestry.

Program

THURSDAY 15TH OCTOBER 2020

Evening lecture

19:00 Prof. Dr. Sonja Dümpelmann - UPenn
Model Trees: Standards, Systems, and Science in
the History of Urban Arboriculture

FRIDAY 16TH OCTOBER 2020

09:00 Welcome:

Prof. Dr. Ferdinand Ludwig &
Prof. Dr. Michael Hensel

09:15 Prof. Dr. Ferdinand Ludwig
Introduction Morning Session

09:30 Prof. Dr. Monika Egerer
Promoting urban ecosystem services:
Evidence and ways forward

10:00 PD Dr. Matthias Bürgi - WSL
Assessing traditional knowledge on forest uses

10:30 Coffee Break

10:45 Dipl.-Ing. Lisa Höpfl - TUM
Historic practises and techniques of tree
manipulation - Background and systematic

11:15 Dr. Defne Sunguroğlu Hensel - TU Wien
Ecological Prototypes: The role of green
construction and design in urban restoration

11:45 Discussion and Conclusion of Morning Session

12:15 Lunch Break

13:15 Introduction Afternoon Session
Prof. Dr. Michael Hensel

13:30 Prof. Dr. Thomas Rötzer - TUM
Growth and ecosystem services of urban trees - simulation
studies using the process-based growth model CityTree

14:00 Qiguan Shu M.A. - TUM
Topological tree skeleton models for designing and
managing urban green system

14:30 Wilfrid Middleton M.A. - TUM
Utilising photogrammetry for structural analysis
workflows in living architecture

15:00 Coffee Break

15:15 Dr. Mohammad Asrafur Rahman - TUM
Cool trees for our cool cities: optimizing the
benefits at local scale

15:45 Dipl.-Ing. Andreas Detter (Tree Consult Munich)
Inspecting trees for strength and stability.
Non-destructive methods from the practice of
a consulting arborist

16:15 Discussion & Final Comments

17:00 - end -

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co-organized by
Professor Dr. Ferdinand Ludwig
Technical University of Munich
Department of Architecture
Professorship for Green
Technologies in Landscape
Architecture

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