

UNIVERSITY OF THESSALY
School of Engineering - Department of Civil Engineering

Series of Scientific Lectures
Academic Year 2021-2022

This lecture is co-organised with the

Department of Forestry, Wood Sciences and Design

**Innovative products of wood modification –
Uses in outdoor structures**

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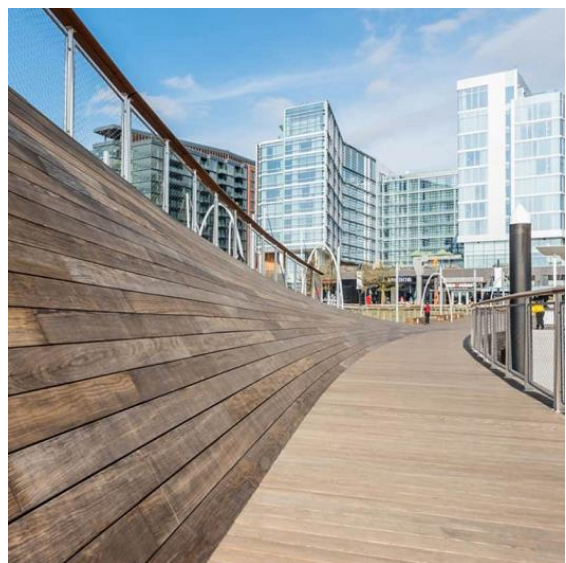
Professor, Department of Forestry, Wood Sciences and Design
Laboratory of Wood Science & Technology

Wednesday **30/3/2022**, Time: **11:00**

Webinar: [MS Teams](#)

Live Streaming: [DIAVLOS](#), [YouTube](#)

Abstract: This lecture is related to state-of-art technologies of thermal and chemical modification of wood, which result in highly innovative wood products with improved physical, mechanical, chemical and biological properties. The lecturer, following a short introduction in wood modification, attempts to display main drawbacks of the natural material, which shall be limited and/or restricted. Then, he shortly presents two of the most prominent products of chemically modified wood, which can be of interest for the new civil engineer and architect, designer, or technologist. Nowadays in Europe, such new modified wood products can be encountered in a variety of outdoor applications.



In addition, the chemical processes of acetylation and furfurylation of wood are briefly discussed; useful technical feedback is given from the international bibliography and the Greek practice, in which they have been tested in recent years. At the end, the lecturer presents the method of thermal modification of wood, and a relevant thermally-treated product, which is used mostly in claddings and outdoor decks.

