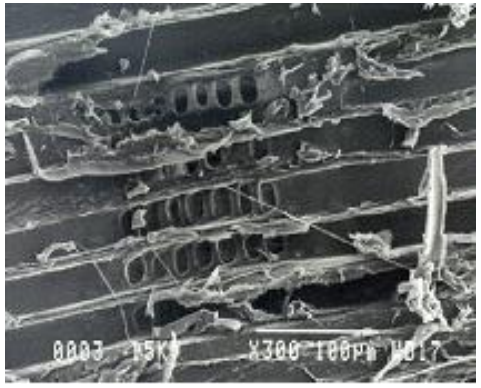
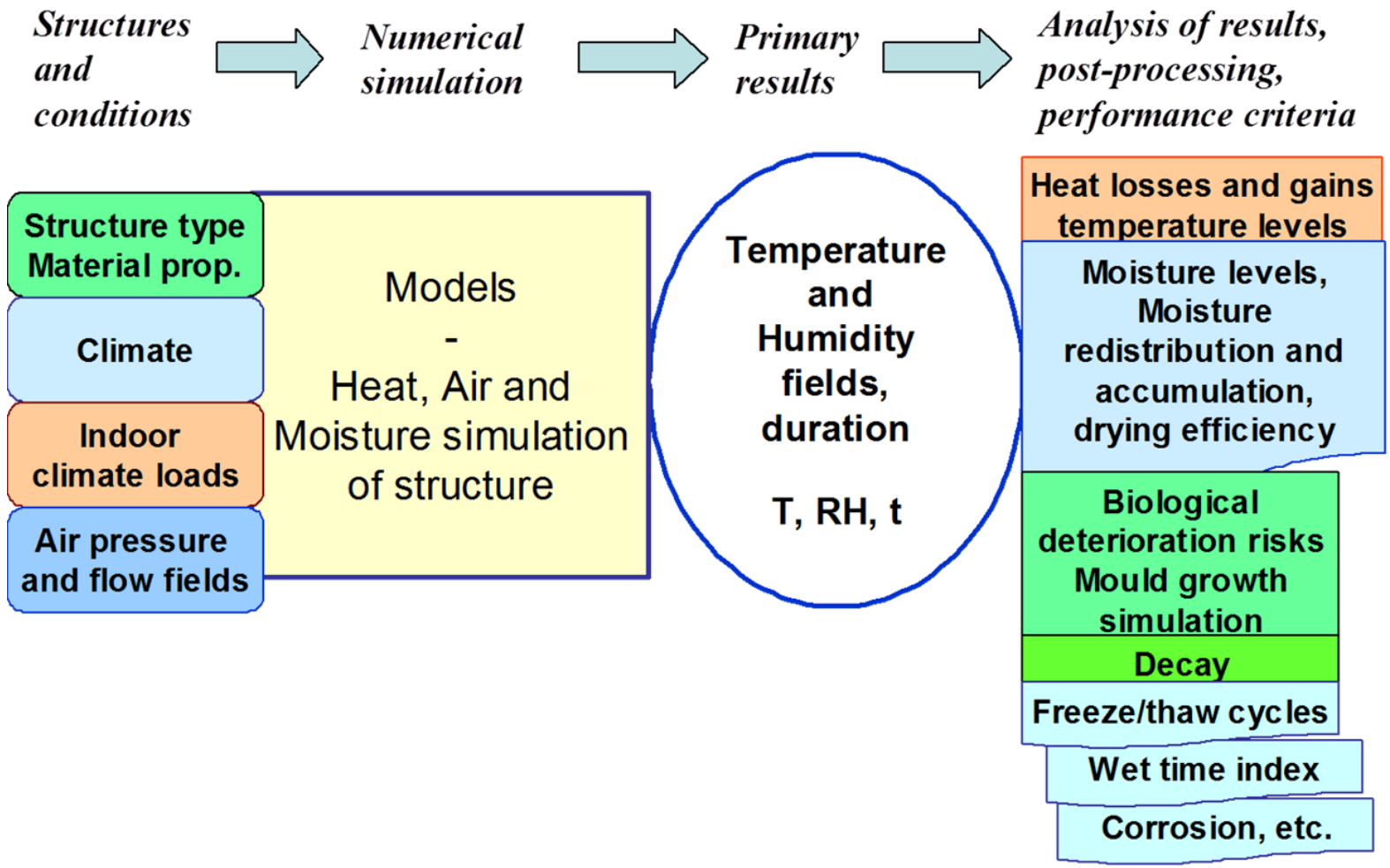


How to Evaluate the Risk of Mold Using the Mold Growth Index

Buildings XIII Workshop

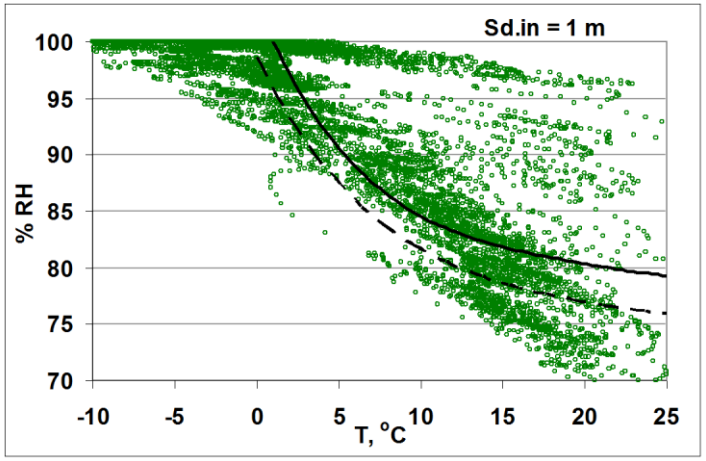
Tuomo Ojanen

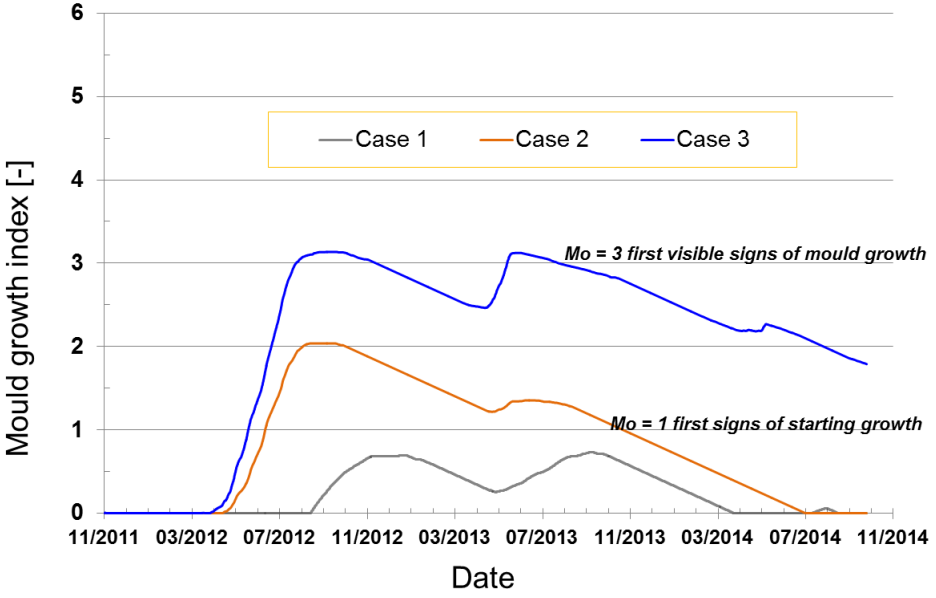
How to evaluate moisture caused risks in building structures



Mold growth risk analysis

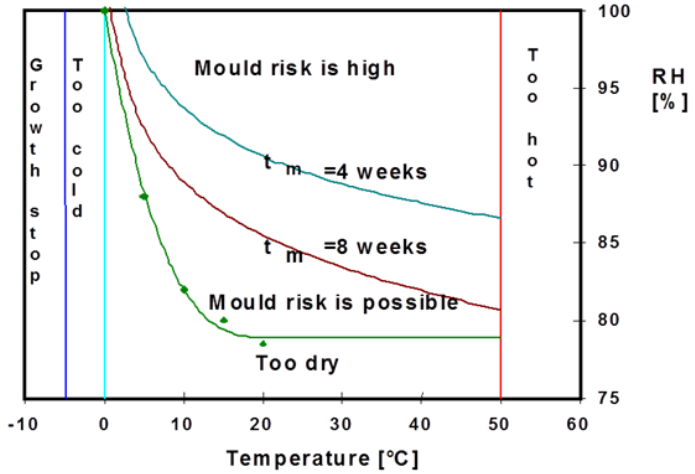
- Mold growth is one of the first signs of too high moisture content in (building) materials
- It may affect the indoor air quality and the appearance of surfaces





Workshop - Mold Growth Index model

- Principles of the model development
- Mold Index
- Equations
- Parameters
- Use for different materials - Classification
- Evaluation of critical mold growth levels in structures
- Applications
- Numerical tool for mold risk analysis



Workshop agenda

Welcome and workshop agenda	Time	Tuomo Ojanen
Principles - Motivation and theory	1h 50’	
From visual findings to mold index	15’	Tuomo Ojanen
The need for improved moisture performance evaluation criteria in ASHRAE Standard 160	30’	Samuel Glass, Forest Service, USA
VTT mold model, equations, parameters and performance criteria	40’	Tuomo Ojanen
Discussion		
Break	20’	
Practices - Tools and application examples	1h 50’	
Introduction into practices	5’	Tuomo Ojanen
Comparison of mold index model predictions with field observations in North America	30’	Samuel Glass
WUFI Bio and WUFI VTT post-processing tools for HAM results		Hartwig Künzel, Fraunhofer Institute for Building Physics IBP
Example case: From HAM simulations to mold risk evaluation		
Discussion		
Closing the workshop		Tuomo Ojanen