Wood to your good health

Riina Muilu-Mäkelä

Forest Value Partnering Webinar 15th November 2017
Wood to your good health

Physical properties of wood material
- Moisture buffering
- Antimicrobial properties
- Acoustics

Health effects of volatile organic compounds of wood
- Qualitative and quantitative measurements
- Negative health effects
- Positive health effects

Psychophysiology
- Activity of autonomic nervous system
- Brain activity
- Attention tests, Preference studies, Cognitive load

riina.muilu-makela@luke.fi

© Natural Resources Institute Finland
Existing partners and experience

- Quantitative and qualitative method to analyze VOCs of wood
- Platform, test rooms.
- In collaboration with Tampere University we have methods to analyze psychophysiological effects of wood on human wellbeing and
- Cell models and proteomic studies to evaluate the effects of wood material on eye health during computer work stress
Missing profiles/partners

- Partner with cell or mouse models to test effects of VOCs
- Partner, who will program sophisticated data collection and analysis software
- Partner, who will develop methods to evaluate physiological parameters and/or brain activity during the test setup.
- Industrial partners
- Marketing point of view

Impact of the study

→ Marketing and designing with wood
→ Development of wood products
→ Supports bioeconomy and sustainable development
Thank you!