2018 Joint Convention

Society of Wood Science and Technology (SWST)
The Japan Wood Research Society (JWRS)

Era of Sustainable World - Tradition and Innovation for Wood Science and Technology

November 5–9, 2018
Noyori Conference Hall, Nagoya University, Japan

Sunday, November 4

17:00-19:00	Registration at Nagoya Tokyu Hotel Lobby

Monday, November 5

11:00-13:00	Registration at Nagoya Noh Theater

Nagoya Noh Theater

13:00-13:15	Noh Performance
13:15-13:30	Welcome: Dr. Shigehiko Suzuki, Dr. Nicole Brown, Dr. Kazuhiko Fukushima
13:30-14:15	Dr. Akira Isogai, Tokyo University, Japan, **"Wood Cellulose Nanofibrils: Promising New Bio-Based Nanomaterials for Creation of a Sustainable Society"**
14:15-15:00	Dr. Hans Joachim Blaß, Karlsruhe Institut für Technologie (KIT), Germany, **"Advances in Cross Laminated Timber Structures"**
15:00-15:15	Discussion
15:15-15:30	BREAK
15:30-16:15	Dr. Andreja Kutnar, InnoRenew CoE, Slovenia, **"Unlocking the Potential of the Circular Economy with Wood Science"**
16:15-17:00	Dr. Yves Weinand, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland, **"Innovative Timber Structures"**
17:00-17:15	Discussion
18:00-19:30	Welcome Reception - Hotel Nagoya Castle

Tuesday, November 6

7:00-8:00	Registration - Lower Level Noyori Conference Hall

Noyori Conference Upper Room with broadcast to lower room - Early Stage Researchers
Session Chairs: Jose Guerrero, Oregon State University, United States and Hiroyuki Yamamoto Nagoya University, Japan

8:00-8:04	**Integrating Digital Image Correlation as a Strain Measurement Technique for Tensile Properties of Grape Cane Fibers** Balkis A. Bakar, Oregon State University, United States
8:04-8:08	**Fungi Resistance of Oriented Strand Board Treated with ß-cyclodextrins/Allyl Isothiocyanate Inclusion Complexes** Lili Cai, Mississippi State University, United States
8:08-8:12	**Performance of Linear Friction Welded Birch Wood *(Betula pendula roth)* Post-manufacture Thermally Modified in Vacuum and Steam Atmosphere** Petr Čermák, Mendel University in Brno, Czech Republic
8:12-8:16	**Potential of Microwave Plasticization for Wood Shaping - Process Parameters and its Effect on Wood Plasticity** Jakub Domeny, Mendel University in Brno, Czech Republic
8:16-8:20	**Business Model Innovation: A Case from Swedish Wood Construction Industry** Sarah Ebadzadeh Semnani, Linköping University, Sweden
8:20-8:24	**A Lean Logistics Framework: A Case Study in the Wood Fiber Supply Chain** Paula Fallas Valverde, Virginia Tech, United States

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Tuesday, November 6 *continued*

8:24-8:28	**Moisture Performance and Durability of the Wood Surface Modification-Charring after Artificial Weathering** Lei Han, Luleå University of Technology, Sweden
8:28-8:32	**Difference of Enzymatic Saccharification among Commercial Softwood Kraft Pulps** Riku Inakagata, Mie University, Japan
8:32-8:36	**Application of Bio-based Composites for the Automotive Industry: Material Characteristics of Miscanthus Biochar-Reinforced Polypropylene** Hisaaki Ishihara, Pennsylvania State University, United States
8:36-8:40	**The Effect of Element Type and Layer Structure on the Physical Properties of the Bamboo-based Board** Koki Kitamura, Shizuoka University, Japan
8:40-8:44	**XRD Measurement of Heat Treated Wood Under Tensile Load** Erina Kojima, Nagoya University, Japan
8:44-8:48	**Mechanical and Physical Properties of Wood/Plastic Composites Used Pre-mixed Wood Flour with Different Types and Amount of Maleic Anhydride-modified Polypropylene** Kazushige Murayama, Gifu University, Japan
8:48-8:52	**Possible Advanced Material Utilization to Foster Sustainable Forest Management: Preliminary Results on African Blackwood *(Dalbergia melanoxylon)* from the Tanzanian Miombo Forest** Kazushi Nakai, Kyoto University, Japan
8:52-8:56	**Comparative LCA and LCC Study for Different Recycling Options for Recovered Solid Wood from Construction** Michael Risse, Technische Universität München, Germany
8:56-9:00	**The Anatomical Features of Tracheid and another Axial Elements "Ginkgo-Fiber" in Normal Mature Stemwood of Ginkgo Biloba** Kenji Sasaki, Akita Prefectural University, Japan
9:00-9:04	**Isolation of Lignin with High Solubility and Fusibility in Concentrated Sulfuric Acid Hydrolysis of Softwood** Yuya Shiraki, Mie University, Japan
9:04-9:08	**Deformation Behavior and Vibration Characteristics of Laminated Veneer Products for Musical Instruments - Effects of Initial Moisture Contents of Veneer** Takeshi Takahashi, Akita Prefectural University, Japan
9:08-9:12	**Effect of CNF Addition Ratio and Size of PP Pellet on The Mechanical Properties of WPC** Takako Ueno, Shizuoka University, Japan

Noyori Conference Upper Room
Wood Physics

Session Chairs:
Eini Lowell, USDA Forest Service PNW Station, United States
Yuzo Furuta , Kyoto Prefectural University, Japan

9:30-9:45	**Changes in Dynamic Viscoelastic Properties of Compression Wood due to Hygrothermal Treatment and their Relationships with Hygrothermal Recovery** Shuoye Chen, Nagoya University, Japan
9:45-10:00	**Change of Sound Absorption Coefficient of *Larix kaempferi* Wood by Heat Treatment** Hyunwoo Chung, Seoul National University, Republic of Korea
10:00-10:15	**Improvement of Wood Thermo-Hydro-Mechanical Densification Process by Enhancing Steam Diffusion, Distribution and Evaporation** Changhua Fang, International Center for Bamboo and Rattan, China

Noyori Lab
Composites/Adhesion

Session Chairs:
Doug Gardner, University of Maine, United States
Gloria Oporto, West Virginia University, United States
Kenji Umemura, Kyoto University, Japan

9:30-9:45	**A Soybean Soluble Polysaccharide Based Hyperbranched Structure Formation and its Performance on Soy Protein-Based Adhesive** Yi Zhang, Beijing Forestry University, China
9:45-10:00	**Continuous Flax Fibre Reinforced PLA Composite** Tibor L. Alpár, University of Sopron, Hungary
10:00-10:15	**Wood Adhesives Based on *Pinus radiata* Bark Tannins** Alex Berg, University of Concepción, Chile

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Tuesday, November 6 *continued*

10:15-10:30	**Physical and Mechanical Properties of Methyl Methacrylate Impregnated Wood from Three Fast-Growing Tropical Tree Species** Yusuf Sudo Hadi, Bogor Agricultural University, Indonesia
10:30-10:45	COFFEE
10:45-11:00	**Moisture-Dependent Orthotropic Elasticity and Strength Properties of Chinese Fir Wood** Jiali Jiang, Chinese Academy of Forestry, China
11:00-11:15	**Morphogenetic Perspective on the Hydrothermal Compression of Wood** Marie-Pierre Laborie, University of Freiburg, Germany
11:15-11:30	**Determination of Moisture Content and Moisture Content Profiles in Wood during Drying by Low-Field Nuclear Magnetic Resonance** Jianxiong Lv, Chinese Academy of Forestry, China
11:30-11:45	**Optical Characteristics of Douglas Fir at Various Densities, Grain Directions, and Thicknesses Investigated by Near-Infrared Spatially Resolved Spectroscopy** Te Ma, Nagoya University, Japan
11:45-12:00	**Effect of the Use of Effluent (Smoke) from Charcoal Making on Physical Properties and the Reduction of Growth Stress of Melinjo *(Gnetum gnemon L.)* Wood** Sri Nugroho Marsoem, Universitas Gadjah Mada, Indonesia
12:00-12:15	**How Ionic Liquid Pre-treatment of Surface-densified Wood Leads to Ambiguous Brinell Hardness Values** Benedikt Neyses, Luleå University of Technology, Sweden
12:15-12:30	**The Variation of Tensile Properties of Single Vascular Bundles in Moso Bamboo** Lili Shang, International Center for Bamboo and Rattan, China
12:30-14:00	LUNCH
14:00-14:15	**An Improved Nondestructive Approach Based on a Combination of Capacitance and Near-Infrared Spectroscopy for Estimating Moisture Content of Timber** Vu Thi Hong Tham, Nagoya University, Japan
14:15-14:30	**Correlation between Complex Index of Refraction Value of THz Region and Wood Properties Measured by SilviScan** Han Wang, Nagoya University, Japan

10:15-10:30	**Wood Adhesive and Green Adhesion - A Short Review of Our Research on Protein-based Wood Adhesives** Qiang Gao, Beijing Forestry University, China
10:30-10:45	COFFEE
10:45-11:00	**A Unique Mechanochromic Property of Cellulosic/Synthetic Polymer Composites Incorporating Cholesteric Liquid Crystalline Structure** Kazuma Miyagi, Gifu University, Japan
11:00-11:15	**Failure and Deformation Behavior of Wooden Sandwich Composite with Taiji Honeycomb Core Under Three-Point Bending** Jingxin Hao, Central South University of Forestry & Technology, China
11:15-11:30	**Changes of Surface and Bonding Properties among Wood Different Sections Induced by High Voltage Electrostatic Field (HVEF) Treatment** Qian He, Nanjing Forestry University, China
11:30-11:45	**Effect of Moisture Content and Thickness of Surface Layer of Mat on the Temperature-Vapor Pressure Behavior during Hot Pressing of Strand Board** Hikaru Kobori, Shizuoka University, Japan
11:45-12:00	**In-Situ Synthesis of ZnO Nanoparticles on Cellulosic Fiber and its Application in Biomass Rubber Composites** Yalan Li, Northeast Forestry University, China
12:00-12:15	**Achievements of Magnetic Wood As High-Performance Electromagnetic Wave Absorbers** Zhichao Lou, Nanjing Forestry University, China
12:15-12:30	**Micro-Nanocellulose Extracted From Pineapple Stem *(Ananas Comosus)* Plant and its Application in Polyvinyl Acetate (PVAc) and Urea-Formaldehyde (UF) Adhesives for Wood** Roger Moya, Instituto Tecnologico de Costa Rica, Costa Rica
12:30-14:00	LUNCH
14:00-14:15	**Hot-pressing Composite Curling Deformation Characteristics of Plastic Film-Reinforced Pliable Decorative Sliced Veneer** Xiaorui Peng, Chinese Academy of Forestry, China
14:15-14:30	**Experimental Study on the Flexural Behavior of Composite Shorea Plywood – Pine OSB Floor Panel** Bambang Suryoatmono, Parahyangan Catholic University, Indonesia

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Tuesday, November 6 *continued*

14:30-14:45	**Electronic Resistance Drilling for Wood Density Assessment in Trees** Xiping Wang, U.S. Forest Products Laboratory, United States	
14:30-14:45		**A Study on the Interaction Between Internal Structural Changes and Water Sorption of MDF and OSB** Wanzhao Li, Nanjing Forestry University, China

Biodegradation & Preservation

Session Chairs:
Nami Kartal, Istanbul University, Turkey
Wayan Darmawan, Bogor Agricultural University, Indonesia
Tsuyoshi Yoshimura, Kyoto University, Japan

Business & Marketing

Session Chairs:
Henry Quesada, Virginia Tech University, United States
Yoshihisa Fujii, Kyoto University, Japan

14:45-15:00	**Natural Weathering of Water-Based Acrylic and Hydro-plus Coatings on Three Tropical Woods at Bogor Indonesia** Wayan Darmawan, Bogor Agricultural University, Indonesia	**Understanding the Effect of Performance and Sustainability on the Shelf Price of Paper-Based Products** Sudipta Dasmohapatra, Duke University, United States
15:00-15:15	**Durability of Cross Laminated Timber against Termite Damage** Tamara Franca, Mississippi State University, United States	**Optimizing Perception Oriented Classification of Sawn Board from a Fibre-Managed Plantation Resource** Kent Davis, University of Tasmania, Australia
15:15-15:30	**Biodegradability of the Composites Made from Natural Fiber and Glass Fiber Using Different Adhesives** Yu Fu, University of North Texas, United States	**Interdisciplinary Research through Wood Science** Andreja Kutnar, University of Primorska / InnoRenew CoE, Slovenia
15:30-15:45	**Cell Wall Properties of Waterlogged Archaeological Wooden Artifacts, 2400 Years Ago** Juan Guo, Chinese Academy of Forestry, China	**How Can We Introduce Modern Japanese Wooden Housing Technologies to the Southeast Asian Countries?** Yoshihisa Fujii, Kyoto University, Japan
15:45-16:00	COFFEE	COFFEE
16:00-16:15	**Distribution Measurement of Chemical Retention in Fire-Retardant Treated Wood with Nondestructive Techniques** Masumi Hasegawa, Kyushu University, Japan	**Development of an Extended Input-Output Table to Clarify the Economic Effect of Wooden Check DaMs** Huzita Tomohumi, Akita University, Japan
16:15-16:30	**Abiotic Degradation of Cell Corner Lignin under Waterlogged Circumstances** Yoon Soo Kim, Chonnam National University, Republic of Korea	**Winning Transformations: Assessing the Effectiveness of Pulp and Paper Companies' Turnaround Initiatives** Alice Palmer, The University of British Columbia, Canada
16:30-16:45	**Thermal Modification of Wood Materials during Heat Treatment under Vacuum** Anelie Petrissans, Université de Lorraine, France	**Application of Montecarlo Simulation to Hardwood Lumber Yields** Henry Quesada, Virginia Tech, United States
16:45-17:00	**Olives and Wood Protection: Adding Value to Agricultural Residues** Matthew Schwarzkopf, University of Primorska / InnoRenew CoE, Slovenia	**Consumer Purchase Intention and Willingness to Pay for Eco-friendly Wood Flooring in Chongqing City, China** Qin Tan, The The University of Tokyo, Japan

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Tuesday, November 6 *continued*

Poster Session 1 - Noyori Conference Hall Lower Level
17:00-18:00

Session Chairs: Levente Denes, University of Sopron, Hungary and Yasuyuki Matsushita, Nagoya University, Japan

student poster	**VOCs Emissions From Wood and Hemp Fibres: In Search for a Low Emission Alternative to Wood-Based Constructional Materials** Tereza Adamová, Czech University of Life Sciences, Czech Republic
student poster	**Assessment of the Effect of Fast Pyrolysis, and Hydrothermal Liquefaction Techniques on the Physico-Chemical Properties of Bio-oil from Loblolly Pine Biomass as Biopolyol** Osei Asafu-Adjaye, Auburn University, USA
student poster	**Integrating Digital Image Correlation as a Strain Measurement Technique for Tensile Properties of Grape Cane Fibers** Balkis A. Bakar, Oregon State University, United States
student poster	**From the Forest to Products: How Segregation Systems Will Allow the Characterisation of Fibre-Grown Plantations for Higher Value Production** Michelle Balasso, University of Tasmania, Australia
student poster	**Relations between Anatomical Features and Viscoelastic Behavior of Tropical Hardwoods** Júlio Barros, University of Sao Paulo (USP), Brazil
student poster	**Transparent Polymer Nanocomposites Reinforced with Immiscible Nanocelluloses Fabricated via a Water-Based Pathway** Subir Kumar Biswas, Kyoto University, Japan
student poster	**ß-Cyclodextrins as Sustained-Release Carriers for Natural Wood Preservatives** Lili Cai, Mississippi State University, United States
student poster	**A New Method for Exploring and Explaining Dimensional Stability of Commercial and Lesser-Used Wood Species from the Congo Basin** Victor Deklerck, Ghent University, Belgium
student poster	**A Supplier Selection Tool and Assessment Model for the Wood Industry: A Case Study in the Wood Fiber Supply Chain** Paula Fallas Valverde, Virginia Tech, United States
student poster	**Biodegradability of the Composites Made from Natural Fiber and Glass Fiber Using Different Adhesives** Yu Fu, University of North Texas, United States
student poster	**Cross-Sector Collaboration in the Forest Industry: A Review of the Literature** Jose Guerrero, Oregon State University, United States
student poster	**Non-destructive Measurement of Strain in Moist Eucalypt Wood Using Near Infrared Spectroscopy** Fei Guo, University of Canterbury, New Zealand
student poster	**Cooperative Catalysis with Nanocellulose and Proline in Stereoselective Aldol Reactions** Xin Habaki, Kyushu University, Japan
student poster	**Moisture Performance and Durability of the Wood Surface Modification-Charring after Artificial Weathering** Lei Han, Luleå University of Technology, Sweden
student poster	**Color Change of Wood by Wetting—Influence of Penetration Depth of Water** Chisumi Hattori, Kyoto Prefectural University, Japan
student poster	**Theoretical Analysis of Indirect Electrolysis Mechanism and Reactivity of Lignin Model Compounds** Yoshitaka Hirano, Kyoto University, Japan
student poster	**Separation of Vascular Bundle from Oil Palm Trunks and Development of High Performance Boards** Hiroaki Horiyama, Kyoto Prefectural University, Japan
student poster	**Seasonal Variation of Photoassimilate Allocation in Radial Growth of *Chamaecyparis obtusa* and *Cryptomeria japonica* Using 13CO2 Pulse-labeling** Shiho Ino, Shinshu University, Japan
student poster	**Application of Bio-based Composites for the Automotive Industry: Material Characteristics of Miscanthus Biochar-Reinforced Polypropylene** Hisaaki Ishihara, Pennsylvania State University, United States
student poster	**Deep Learning of Near Infrared Hyperspectral Image for Wood Species Identification** Hideaki Kanayama, Nagoya University, Japan
student poster	**Phenol Oxidase Involved in Polymerization of the Extractives during Heartwood Formation of *Cryptomeria japonica*** Yuri Kawashima, Nagoya University, Japan

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Tuesday, November 6 *continued*

student poster	**Production of Antiviral Compounds from Sugarcane Bagasse by Microwave Reactions** Chihiro Kimura, Kyoto University, Japan
student poster	**Comparative FT-IR Analysis of Wood Blocks Decayed by Six Species of Brown-Rot Fungi** Risako Kondo, Tokyo University of Agriculture and Technology, Japan
student poster	**Analysis of Mechanical Behavior of Cellulose in Wood Cell Walls under Axial Load Using Two Synchrotron X-ray Diffraction Techniques** Chang Goo Lee, Nagoya University, Japan
student poster	**Application of FT-IR Spectroscopy for Determination of Wood Durability** Shahlinney Lipeh, Oregon State University, United States
student poster	**Characterization of Water-Soluble Polymers from Surfuric Acid Lignin by Hydrothermal Treatment** Qiang Liu, Nagoya University, Japan
student poster	**A Unique Mechanochromic Property of Cellulosic/Synthetic Polymer Composites Incorporating Cholesteric Liquid Crystalline Structure** Kazuma Miyagi, Gifu University, Japan
student poster	**Mass Plywood Panel: A New Mass Timber Product in the Pacific Northwest of the US** Byrne Miyamoto, Oregon State University, United States
student poster	**Effect of the Photoperiod on the Microstructure of Xylem Cell Walls** Shun Muramatsu, Nagoya University, Japan
student poster	**SEM Observation of Wood Structures with Ionic Liquid** Shimpei Nishiyama, Nagoya University, Japan
student poster	**Fatigue Behavior of Japanese Red Pine under Compression Loading Tests Perpendicular to the Grain** Kosuke Shimizu, Nagoya University, Japan
student poster	**The Effect of Selected Factors on Spruce Dowel Joint Stiffness** Adam Sikora, Czech University of Life Sciences in Prague, Czech Republic
student poster	**Effect of the Non-wood Component Used in the Composites Based on Wood and Non-wood Materials on Selected Bending Characteristics** Tomáš Svoboda, Czech University of Life Sciences in Prague, Czech Republic
student poster	**Deformation Behavior and Vibration Characteristics of Laminated Veneer Products for Musical Instruments - Effects of Initial Moisture Contents of Veneer** Takeshi Takahashi, Akita Prefectural University, Japan
student poster	**Dynamic Viscoelastic Properties of Wood Swelling in Mixed Solution of Water and Ethanol** Kie Tanaka, Kyoto Prefectural University, Japan
student poster	**Prickle of Zanthoxylum Trees - On the Structure and Formation Process of Constituent Cell** Takeru Tomita, Kyoto Prefectural University, Japan
student poster	**Effect of the Residual Stress Distribution on Crooking of Lumber Sawn from Large-Diameter Japanese Cedar *(Cryptomeria japonica)* Logs** Tsubasa Tsunezumi, Nagoya University, Japan
student poster	**Correlation between Complex Index of Refraction Value of THz Region and Wood Properties Measured by SilviScan** Han Wang, Nagoya University, Japan
student poster	**Oxidative Coupling of Acylated Monolignol by Using Silver Oxide** Ayana Yamashita, Toyama Prefectural University, Japan
student poster	**Factors for Hygrothermal Recovery of Tension Wood** Katayama Yusuke, Nagoya University, Japan
	Esterification of Solid Wood for Plastic Forming Process Mitsuru Abe, National Institute of Advanced Industrial Science and Technology, Japan
	Understanding of Bonding Mechanism of a Plywood using Thermoplastic Adhesive Koji Adachi, Akita Prefectural University, Japan
	Value Analysis of Appearance-Grading vs Combined Appearance and Stress-Grading for Hardwood Logs Sailesh Adhikari, Virginia Tech, United States
	Growth Characteristics of 12 Jabon Provenance (*Neolamarckia cadamba* (Roxb) Bosser) and Their Relationship with Pilodyn Penetration in Provenance-Progeny Test in West Java Province, Indonesia Nelly Anna, University of North Sumatera, Indonesia

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Tuesday, November 6 *continued*

Direct Observation of Lignin Molecules Isolated in Miscible Polymer Blends by Atomic Force Microscopy
Miho Asaoka, Gifu University, Japan

Achieving Long-Term Adhesion and Bondline Durability with Difficult-to-Bond Australian Hardwood Species
Benoit Belleville, University of Melbourne, Australia

NIR Measurements of Thermally Modified Spruce and Pine with Different Surface Treatments
Niclas Bjorngrim, Luleå University of Technology, Sweden

Human Health Research at the InnoRenew CoE: An Overview of Ongoing Research to Improve Human Health in the Built Environment
Michael Burnard, InnoRenew CoE, Slovenia

Preparation and Characteristics of Waterborne Polyurethanes Film with Neem Oil Microemulsion
Yi-Chun Chen, National Chung-Hsing University, Taiwan

Evaluation of Essential Oils and Extracts from Leaf and Twig of *Cinnamomum reticulatum* against Wood Decay Fungi
Sen-Sung Cheng, National Taiwan University, Taiwan

Cellulose Nanofibrils Isolated from Bamboo Holocellulose by TEMPO-Mediated Oxidation
Korawit Chitbanyong, Kasetsart University, Thailand

The Chips Generated During Milling of Pine Wood by Helical Router-bits
Wayan Darmawan, Bogor Agricultural University, Indonesia

Fabrication of Highly Soft and Flexible Cross-Linked Hydrogels from Polysaccharides and Their Properties
Yukiko Enomoto, The University of Tokyo, Japan

Laser Micro Incisions to Wood Surface
Satoshi Fukuta, Aichi Center for Industry and Science Technology, Japan

Changes of Density, Impact Bending Strength and Chemical Properties of Heat-Treated Oak Wood
Milan Gaff, Czech University of Life Sciences in Prague, Czech Republic

Development of Bio-based Plastic Materials from Beta-1,3-Glucan Ester Derivatives
Hongyi Gan, The University of Tokyo, Japan

High Performance Photocatalyst Based on Cellulose Derived Biochar for Pollutant Degradation in Aqueous Media
Lu Gan, Nanjing Forestry University, China

Nanocellulose-Mediated Multifunctional Electroconductive Hydrogels
Jingquan Han, Nanjing Forestry University, China

A Review Based on Reliability of Furniture
Eva Haviarova, Purdue University, United States

Potential Utilization of US Hardwoods for Production of Musical Instruments
Eva Haviarova, Purdue University, United States

Market Opportunities for US Hardwoods
Eva Haviarova, Purdue University, United States

A Laccase Involved in Compression Wood Lignification in *Cryptomeria japonica*
Hideto Hiraide, Kyoto University, Japan

Artificial Lignified Cell Wall Synthesis Based on Polysaccharide Extracted from Cultured Cells
Seiya Hirano, Tokyo University of Agriculture and Technology, Japan

Difference in the Content of Biphenyl Structures between the Compression and the Opposite Wood Lignins of Japanese Cedar
Haruka Hirayama, The University of Tokyo, Japan

Longitudinal Suprastructure of Cellulose Microfibrils in Chara, the Aquatic Algae
Yoshiki Horikawa, Tokyo University of Agriculture and Technology, Japan

Effects of Drying Using High-temperature Setting Method on Main Component Contents of Japanese Larch Boxed-heart Square Timbers
Yoshihiro Hosoo, Shinshu University, Japan

Extended Creep Behavior of Various Wood-Inorganic Composites Derived by the Sol-gel Process Using the Stepped Isostress Method
Ke-Chang Hung, National Chung Hsing University, Taiwan

Sustainable Development – International Framework – Overview and Analysis in the Context of Forests and Forest Products with Competitive Innovations
Annika Hyytiä, University of Helsinki, Finland

Cellulose Nanofibers' Effect on Sustained Release Behavior of Fragrance Components
Kana Ishibashi, Industrial Research Institute of Shizuoka Prefecture, Japan

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Tuesday, November 6 *continued*

Out-of-plane Shear Strength of CLT with Japanese Larch and Sakharin Fir
Wataru Ishihara, Hokkaido Research Organization, Japan

Determination of Molar Mass Distribution of Lignin by SEC with a Multi-Angle Light Scattering Detector
Frantisek Kacik, Technical University in Zvolen, Slovakia

Study on Perforating Effect of Fire Retardant Resin Impregnating into Plywood
Chun Won Kang, Chonbuk National University, Republic of Korea

Depolymerization of Soda-AQ Lignin by H2O2/H2SO4 Treatment and MnO2 Treatment
Kyoko Saito Katsumata, The University of Tokyo, Japan

Warming Increased Nitrogen Availability and Tree Growth During the Last Five Decades as Revealed by Annual Ring Data of *Pinus merkusiiin* in Central Vietnam
Nguyen Tu Kim, Research Institute of Forest Industry, Vietnam

Surface Modification of Polyurethane Sheet with Electrospun Cellulose Acetate Fibers
Keiichi Koda, Hokkaido University, Japan

Effects of Existence States of Lignin Present in Wood on Physical Properties and Mechanical Properties of Wood
Keisuke Kojiro, Kyoto Prefectural University, Japan

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Era of Sustainable World - Tradition and Innovation for Wood Science and Technology

Wednesday, November 7

7:30-8:30	Registration - Lower Level Noyori Conference Hall

Noyori Conference Upper Room
Biorefinery & Bioeconomy

Session Chairs:
Michael Wolcott, Washington State University, United States
Hongmei Gu, U.S. Forest Products Laboratory, United States
Yoshikuni Teramoto, Gifu University, Japan

8:30-8:45	**Supply Chain Design and Optimization for a Biomass-Fired Power Plant: A Tradeoff between Fixed and Portable Depots for Biomass Preprocessing** Richard Bergman, U.S. Forest Products Laboratory, United States
8:45-9:00	**Influence of Natural Hybrid Poplar Variants on Energy Consumption of Cellulose Nanofibrillation** Hang Chen, Nanjing Forestry University, China
9:00-9:15	**Assessment of the Effect of Fast Pyrolysis, and Hydrothermal Liquefaction Techniques on the Physico-Chemical Properties of Bio-oil from Loblolly Pine Biomass as Biopolyol** Osei Asafu-Adjaye, Auburn University, USA
9:15-9:30	**Rapid Analysis for Predicting Agarwood Content Using Near Infrared Spectroscopy (NIRS)** Lina Karlinasari, Bogor Agricultural University, Indonesia
9:30-9:45	**Conversion of Wood Residues into Porous Activated Biochars for Energy Storage Applications** Ahmed Koubaa, Université du Québec en Abitibi-Témiscamingue, Canada
9:45-10:00	**Combined Pretreatment with Torrefaction and Washing using Torrefaction Liquid Products to Yield Upgraded Biomass and Pyrolysis Products** Zhongqing Ma, Zhejiang A & F University, China
10:00-10:15	**Real-Time Sensor Monitoring of Emitted Gases for the Pyrolysis Process of Biomass** Lee Smith, University of North Texas, United States
10:15-10:30	**Lignocellulosic Biomass Derived Activated Carbon for Potential Energy Storage Applications** Jingxin Wang, West Virginia University, United States
10:30-10:45	COFFEE

7:30-8:30	Registration - Lower Level Noyori Conference Hall

Noyori Lab
Mass Timber in Building Design and Construction

Session Chairs:
Manja Kitek Kuzman, University of Ljubljana, Slovenia
Kenji Aoki, University of Tokyo, Japan

8:30-8:45	**Perceptions of Municipal Civil-Servants on Benefits and Barriers to Wooden Multi-storey Building in Finland** Ritva Toivonen, University of Helsinki, Finland
8:45-9:00	**Multi-disciplinary Optimisation of Nail-Laminated Timber-Concrete Composite Panels Constructed of Fibre-Managed Plantation Eucalypt** Mohammad Derikvand, University of Tasmania, Australia
9:00-9:15	**Urban Planners' Views on Wood Material Use and the Effects of Lobbying: Case Multi-Story Building Sector in Finland** Anne Toppinen, University of Helsinki, Finland
9:15-9:30	**Evaluation of Cross-Sector Collaborations in Transition toward the Bioeconomy: Benefits, Challenges, and Opportunities** Jose Guerrero, Oregon State University/Grupo Argos S.A., United States
9:30-9:45	**Development Trends of Mass Timber Buildings in Europe and US** Manja Kuzman, University of Ljubljana, Slovenia
9:45-10:00	**Mass Plywood Panel: A New Mass Timber Product in the Pacific Northwest of the US** Byrne Miyamoto, Oregon State University, United States
10:00-10:15	**Mechanical and Bond Properties of Cross-Laminated Northern Hardwood Species from the Great Lakes Region of the United States** Munkaila Musah, Michigan Technological University, United States
10:15-10:30	**Life Cycle Cost Analysis for Mid-rise Cross-Laminated-Timber Buildings in the United States** Hongmei Gu, U.S. Forest Products Laboratory, United States
10:30-10:45	COFFEE

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Wednesday, November 7 *continued*

Wood Chemistry

Session Chairs:
Marie-Pierre Laborie, University of Freiburg, Germany
Toshiaki Umezawa, Kyoto University, Japan

10:45-11:00	**Preparation and Dye-flocculating Property of Lignin-Based Cationic Surfactants** Dan Aoki, Nagoya University, Japan
11:00-11:15	**Exploring Lignification on Enzymatically Produced in Vitro Cellulose Surfaces via Labeled Monolignols** Nicole Brown, Pennsylvania State University, United States
11:15-11:30	**Cellulose Nanofibril's Potential Application in Renewable Energy Harvesting** Zhiyong Cai, U.S. Forest Products Laboratory, United States
11:30-11:45	**Dispersion-induced Disordering of the Grain Boundary in Wood Cellulose Governs the Crystallinity of Nanocellulose** Kazuho Daicho, The University of Tokyo, Japan
11:45-12:00	**Can Cellulose Nanofibers be Isolated in a More Efficient and Cost Effective Manner? Challenges and Opportunities** Douglas Gardner, University of Maine, United States
12:00-12:15	**Biologically Active Substances of Southeast Asian Tropical Forest Biomass** Takeshi Katayama, Kagawa University, Japan
12:15-12:30	**Lignin-Derived Nanoprorous Carbon Spheres@ CuFeS2 Composite: Synthesis and Thermoelectric Properties** Daxin Liang, Northeast Forestry University, China
12:30-14:00	LUNCH
14:00-14:15	**Reactive Compatibilization of Microcrystalline Cellulose Reinforced Poly(lactic acid) Biocomposites with Tannic Acid-Crosslinked Epoxidized Soybean Oil Oligomers** Renhui Qiu, Fujian Agriculture and Forestry University, China
14:15-14:30	**Nanoscale Engineering of Cellulose Nanofiber Aerogels and Wood for Enhanced Anode Materials** Yun Lu, Chinese Academy of Forestry, China
14:30-14:45	**Antimicrobial Paper using a Coating Layer of Cellulosic Material and Copper Nanoparticles** Gloria Oporto, West Virginia University, United States

Cell Biology & Wood Structure

Session Chairs:
Laurence Schimleck, Oregon State University, United States
Alex Berg, UDT, Chile
Ryo Funada, Tokyo University of Agriculture and Technology, Japan

10:45-11:00	**Response of *Eucalyptus globulus* to Irrigation with CO2-Enriched Water** Takayuki Asada, Research Institute of Innovative Technology for the Earth, Japan
11:00-11:15	**Climatic Regulation of Cambial Activity on the Stem of Temperate and Tropical Trees** Md Hasnat Rahman, Tokyo University of Agriculture and Technology, Japan
11:15-11:30	**The Role of Microtubules on Cell Wall Formation of Wood** Ryo Funada, Tokyo University of Agriculture and Technology, Japan
11:30-11:45	**Identification of Lauraceae by Bag-of-Features Model Based on SIFT Descriptor** Sung-Wook Hwang, Kyoto University, Japan
11:45-12:00	**Species Level Identification of Hardwood Using Deep Learning Model** Kayoko Kobayashi, Kyoto University, Japan
12:00-12:15	**Lateral Arrangement of Cellulose Microfibrils in the Secondary Cell Wall of Wood Based on X-ray Scattering** Tomoko Kuribayashi, The University of Tokyo, Japan
12:15-12:30	**Characterisation of Twelve Years Old of Irradiated *Acacia mangium* Trees Using Gamma Ray** Ulfah J. Siregar, Bogor Agricultural University, Indonesia
12:30-14:00	LUNCH
14:00-14:15	**Growth and Mortality in Response to Climatic Extremes and Competition in Thinning Trials of Douglas Fir** Eini Lowell, USDA Forest Service, PNW Research Station, United States
14:15-14:30	**Cytological Changes in Ray Parenchyma Cells during Artificially Induced Cell Death in *Cryptomeria japonica*** Satoshi Nakaba, Tokyo University of Agriculture and Technology, Japan
14:30-14:45	**Morphological and Mechanical Properties of Transgenic Poplars and Pines with Modified Cell Wall Components** Ilona Peszlen, North Carolina State University, United States

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Wednesday, November 7 *continued*

14:45-15:00	**Cellulose Nanofibers as a Module for Paper-based Microfluidic Analytical Devices: Labile Substance Storage, Processability, and Reaction Field Provision and Control** Yoshikuni Teramoto, Gifu University, Japan	14:45-15:00	**Model Resolution and its Impact on Whole-Tree Wood Property Maps** Laurence Schimleck, Oregon State University, United States
15:00-15:15	**Lignin Modification in Grasses for Valorization** Toshiaki Umezawa, Kyoto University, Japan	15:00-15:15	**Deposition and Assembly of Polysaccharides during Secondary Wall Formation in Woods** Keiji Takabe, Kyoto University, Japan
15:15-15:30	**Transformation of the Chemical Composition of Wood using Silicone Oil Heat Treatment** Ubong Udoakpan, University of Uyo, Nigeria	15:15-15:30	**Tracing Photosynthetic Carbon Accumulation in Wood after 13CO2 Labelling** Miyuki Takeuchi, The University of Tokyo, Japan
15:30-15:45	**Toward the Applications of CNFs Materials for Automotive Parts** Hiroyuki Yano, Kyoto University, Japan	15:30-15:45	**Ultrastructure, Lignin Distribution and Mechanical Properties of Fiber in Developmental Bamboo Culm** Shumin Yang, International Center for Bamboo and Rattan, China
15:45-16:00	COFFEE	15:45-16:00	COFFEE

Poster Session 2 - Noyori Conference Hall Lower Level
16:00-17:00

Session Chairs: Levente Denes, University of Sopron, Hungary and Yasuyuki Matsushita, Nagoya University, Japan

Use of Pyrolitic Lignin to Produce Rigid Polyuerthane Foams
Ahmed Koubaa, Université du Québec en Abitibi-Témiscamingue, Canada

Effects of Glycerin on Injection Molding of Polypropylene Reinforced with High Content of Cellulose Fibers
Ahmed Koubaa, Université du Québec en Abitibi-Témiscamingue, Canada

Intra-Ring Variation and Wood Property Interrelationships in *Thuja Occidentalis L.*
Ahmed Koubaa, Université du Québec en Abitibi-Témiscamingue, Canada

Measurement of the Elastic Properties of Wood Using Non-destructive Tools
Ahmed Koubaa, Université du Québec en Abitibi-Témiscamingue, Canada

Formation of Networks of Earlywood Vessels in a Deciduous Ring-porous Hardwood, *Quercus serrata*
Kayo Kudo, Akita Prefectural University, Japan

Chemically-modified Rice Husks with Different Dicarboxylic Anhydrides and the Abilities as Ammonia or Trimethylamine Sorbent
Yasuji Kurimoto, Akita Prefectural University, Japan

A New Tensioning Method for Circular Saw Blade-laser Shock Tensioning Process
Bo Li, Chinese Academy of Forestry, China

Effects of Heat Treatment on the Chemical Composition and Thermal Decomposition Kinetics of Japanese Cedar and Beech Wood
Cheng Chun LI, National Chung Hsing University, Taiwan

Two-Year Monitoring of Bamboo Laminated Lumber Bookshelves used in Public Library in Taiwan
Far-Ching Lin, National Taiwan University, Taiwan

The Basic Properties of Wood Vinegars from Different Solvents Extracted *Zelkova serrata* Twigs
Su-Ling Liu, National Chung Hsing University, Taiwan

Effect of High Temperature Hot-Pressing Treatment on Plantation Moso Bamboo Color
Lingfei Ma, Zhejiang Agriculture and Forestry University, China

Preparation of Packaging Foam Using Nano-Fibrillated Cellulose Reinforced with Industrial Hemp
Matt Madrazo, Virginia Tech, United States

Relationship between Mass and Strength Profiles of Decayed Douglas Fir in Radial and Tangential Direction
Kei Maeda, The University of Tokyo, Japan

Adhesive Properties of Cellulose Nanofibers Added Poly (vinyl acetate)
Kenji Maeda, Industrial Research Institute of Shizuoka Prefecture, Japan

Pull-out Stress Relaxation Behavior of Lag Screw Timber Joints under Indoor Environment
Doppo Matsubara, Tokyo Metropolitan Industrial Technology Research Institute, Japan

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Wednesday, November 7 *continued*

Synthesis and Characterization of Alginic Acid Ester Derivatives
Yusuke Matsumoto, The University of Tokyo, Japan

Application of Time-Temperature-Humidity Superposition to Accelerated Aging of Wood
Miyuki Matsuo-Ueda, Nagoya University, Japan

Radical Transfer System in the Enzymatic Dehydrogenative Polymerization of Monolignol and Dilignols at Initial Stage of Lignin Formation
Yasuyuki Matsushita, Nagoya University, Japan

Relationships Between the Mechanical Properties and the Fracture Morphology of Various Wood Species in Lateral Tension
Yuka Miyoshi, Forestry and Forest Products Research Institute, Japan

Replacement of Hollow Concrete Building Block's Sand Aggregate by Coarse Softwood Sawdust
Charles Mulenga, Copperbelt University, Zambia

Measurement of Surface Checks at Artificially Weathered Heat-Treated Wood
Madoka Murai, The University of Tokyo, Japan

Life Cycle Assessment of Kiln-Dried Northern Hardwoods in CLT Production
Munkaila Musah, Michigan Technological University, United States

Factors Influencing to the Measurement of Stem Water Content of Living Trees by Dielectric Soil Moisture Sensor
Ryogo Nakada, Forestry and Forest Products Research Institute, Japan

Modelling of Forced Vibration of Wood Material
Gábor Németh, University of Sopron, Hungary

Research on Evaluation Method of Splitting in Timber on Drift Pinned Joint with Steel Inserted Plate
Yo Ochiai, The University of Tokyo, Japan

Tensile Property and Strength Distribution Prediction for Cross-Laminated Timber Composed of Hinoki
Keita Ogawa, Forestry and Forest Products Research Institute, Japan

Decay Property of *Agrocybe cylindracea* Occurring in Street Tree *Acer buergerianum* in Kyoto City
Kazuko Ono, Kyoto University, Japan

Application of a Thermal Treatment on Yellow Poplar to Promote its Outdoor Applications
Gloria Oporto, West Virginia University, United States

Relationship between Surface Check of Wooden Deck and Internal Moisture Content at Wet Condition—Influence of Wood Species and Check Depth
Tomoko Osawa, The University of Tokyo, Japan

Prediction of Drying Stress during the Saturated Steam and Superheated Steam Drying for Square Timber
Yonggun Park, Seoul National University, Republic of Korea

Fire Performance of Southern Yellow Pine Cross-Laminated Timber
Ilona Peszlen, North Carolina State University, United States

Moisture Transport in Southern Yellow Pine Cross-Laminated Timber
Ilona Peszlen, North Carolina State University, United States

Conventional Wood Analytical Method is not Applicable to all Kinds of Biomass
Harifara Rabemanolontsoa, Kyoto University, Japan

Potential of Near-Infrared Spectroscopy (NIRS) as a Tool to Assist in Identification of Wood Species Protected By CITES Appendix II: Case of Four Dalbergia Species from Madagascar
Tahiana Ramananantoandro, Université d'Antananarivo, Madagascar

Wood Specific Gravity and Wood Color Variation from Branches, Trunk and Roots of Native Tree Species from the Tropical Rainforest of Madagascar
Ravo Nantenaina Gabriella Razafinarivo, Université d'Antananarivo, Madagascar

Color Variation Owing to Wood Dyeing Using Metal Salts
Hiromi Saijo, Akita Prefectural University, Japan

Study on Colour of Heat-Treated Wood Veneers
Emilia-Adela Salca, Transilvania University of Brasov, Romania

The Anatomical Features of Tracheid and Another Axial Elements "Ginkgo-Fiber" in Normal Mature Stemwood of *Ginkgo biloba*
Kenji Sasaki, Akita Prefectural University, Japan

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Wednesday, November 7 *continued*

Fluidity of Bulk Bamboo Impregnated with Phenol Formaldehyde (PF) Resin
Masako Seki, National Institute of Advanced Industrial Science and Technology, Japan

Incentives and Barriers of Cross-Laminated Timber (CLT) Production and Commercialization
Bob Smith, Virginia Tech, United States

Combination of Polyethylene Glycol Impregnation and Paraffin Heating to Protect Raw Bamboo from Cracking
Fangli Sun, Zhejiang A & F University, China

Antioxidative Catechol Lignans/neolignans Isolated from Defatted Kernel of Tung Tree
Toshisada Suzuki, Kagawa University, Japan

Comparison of Mechanical Properties between Blue-Stained and Normal Sticks Cut from a Japanese Red Pine Flooring Board
Takashi Takeda, Shishu University, Japan

Application of Water Hammer to Liquid Permeation into Wood in Impregnation Technique
Soichi Tanaka, Kyoto University, Japan

Dendrochronology of *Cedrela odorata L.* and *Hymenaea courbaril L.* Trees Occurring in the Tropical Amazon Rainforest, Pará State, Brazil
Mario Tomazello-Filho, Universidade de São Paulo, Brazil

Development of a Lignin-Free Hardwood Block from *Zelkova serrata* and its Structural Evaluation
Rino Tsushima, Tokyo University of Agriculture and Technology, Japan

The Active Compound, 5-Demethylnobiletin, of Citrus Fruits against Lung Cancer Cell Line in Vitro and in Vivo
Yu-Tang Tung, Taipei Medicine University, Taiwan

Evaluation of Rolling Shear Properties of the Lamina for CLT Made of Japanese Cedar
Seiichiro Ukyo, Forestry and Forest Products Research Institute, Japan

The Potential Wood Species from Man-Made Forest in Indonesia
Imam Wahyudi, Bogor Agricultural University, Indonesia

Thermal Decomposition Kinetics of Acetylated Bamboo Analyzed by Model-Free Isoconversional Methods
Jin-Wei Xu, National Chung Hsing University, Taiwan

Strength Evaluation of Wood Based on Fatigue Behavior Analysis of Aged Wood
Mariko Yamasaki, Nagoya University, Japan

Influence of Sawing Order on Release of Residual Stress during Sawing Flitch of Japanese Cedar
Kana Yamashita, Forestry and Forest Products Research Institute, Japan

Novel Wood/Plastic Composite with Wooden Micro-multiple Plywood
Hidefumi Yamauchi, Akita Prefectural University, Japan

Fabrication of High Strength Lignocelluloses-Based Composites Using Polyethylenimine (PEI) as a Environmental Bonding Agent
Yutao Yan, Zhejiang A & F University, China

A Study on the Thermal Insulation Effect and Heat Transfer Efficiency of Building Materials
Seung Min Yang, Chungnam University, Republic of Korea

Variation of Tensile Properties of Single Fiber of *Bambusa pervariabilis*
Shumin Yang, International Center for Bamboo and Rattan, China

Characterization of Unidirectional Bamboo Boards Made of Heat-Treated Bamboo Sticks with PF Resin
Teng-Chun Yang, National Chung Hsing University, Taiwan

Stiff, Strong and Tough Cellulose Nanofiber Nanocomposite Hydrogels
Xianpeng Yang, Kyoto University, Japan

Experimental Study on the Influence of Fiber Direction on Various Strengths in Block-Shaped CLT of Hokkaido Larch
Shiori Yokoyama, Hokkai-Gakuen University, Japan

A Comparison Investigation on the Content of Free Sugar and Starch between Fiber and Parenchymal Cells in Bamboo
Zixuan Yu, International Center for Bamboo and Rattan, China

Study on Preparation and Properties of Carbon-based Composite Decorative Boards
Wenbiao Zhang, Zhejiang A & F University, China

Preliminary Study on Cell Wall Structure and its Mechanical Properties of C3H and HCT RNAi Transgenic Poplar Sapling
Rongjun Zhao, Chinese Academy of Forestry, China

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Wednesday, November 7 *continued*

Reveal the Deformation Sequence during Compression and Recovery Sequence during the Release of Compression of Chinese Fir Wood by Micro-density Approach
Youke Zhao, Chinese Academy of Forestry, China

Effects of Different Light Sources and Spectral Regions to the Degradation of Fir Wood Surfaces
Vjekoslav Živković, University of Zagreb, Croatia

Banquet - Nagoya University Restaurant With Student University Music Club Performances
18:00-20:00

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Thursday, November 8

Noyori Conference Upper Room
Wood in Health & Wellness

Session Chairs:
Eva Havariova, Purdue University, United States
Eiko Nakayama, Showa Women's University, Japan

8:30-8:45	**Assessing Human Stress Responses to Wood Furniture Using Salivary Cortisol as an Indicator of Stress** Michael Burnard, University of Primorska / InnoRenew CoE, Slovenia
8:45-9:00	**Use of Engineered Wood Products for Healthy Interior Applications** Eva Haviarova, Purdue University, United States
9:00-9:15	**Manipulating Papua New Guinea Balsa by Design for Acoustic Absorption in the Built Environment** Nathan Kotlarewski, University of Tasmania, Australia
9:15-9:30	**Wood in the Healthcare Facilities - Case Studies in Slovakia** Veronika Kotradyova, Slovak University of Technology in Bratislava, Slovakia
9:30-9:45	**Supporting the Use of Wood in the Built Environment: Health Research at the InnoRenew CoE** Michael Burnard, InnoRenew, CoE, Slovenia
9:45-10:00	**High Anticancer Properties of Defatted Jatropha Curcas Seed Residue and its Active Compound, Isoamericanol A** Ayako Katagi, Kagawa University, Japan
10:00-10:15	**When is a Proper Time to Change Something in the Wooden Facade? Defining Limit States and User Preferences** Jakub Sandak, InnoRenew CoE, Slovenia
10:15-10:30	**The Effect of Playing with Wooden Blocks on Autonomic Nervous Activity in Children** Yuko Tsunetsugu, The University of Tokyo, Japan
10:30-10:45	COFFEE

Noyori Lab
Timber Engineering

Session Chairs:
Matthew Schwarzkopf, InnoRenew CoE, Slovenia
Xiping Wang, U.S. Forest Products Laboratory, United States
Takashi Takeda, Shishu University, Japan

8:30-8:45	**Joining of Wood-Based Multi-Material Components with Screws and Bolts: Experimental Study of Double-Lap Joints** Cedou Kumpenza, University of Natural Resources and Live Sciences Vienna (BOKU), Austria
8:45-9:00	**The Application of Microphone Array Method in Violin Soundboard** Way Long, National Pingtung University of Science and Technology, Taiwan
9:00-9:15	**Fatigue Behavior of Bamboo-Based Products** Xinxin Ma, International Center for Bamboo and Rattan, China
9:15-9:30	**Bending Strength and Fracture Behavior of Moso Bamboo Culms** Huanrong Liu, International Center for Bamboo and Rattan, China
9:30-9:45	**Service Life Performance of Bio-based Facade Materials–Modelling and Simulation of Appearance and Environmental Impact** Anna Sandak, InnoRenew CoE, Slovenia
9:45-10:00	**A New Method for Exploring and Explaining Dimensional Stability of Commercial and Lesser-Used Wood Species from the Congo Basin** Victor Deklerck, Ghent University, Belgium
10:00-10:15	**Colour Modification of Conifer Timbers by Steaming for Getting Attractive Brown Colour** Laszlo Tolvaj, University of Sopron, Hungary
10:15-10:30	**Assessment of Existing Timber Structures for ISO13822** Nobuyoshi Yamaguchi, Building Research Institute Japan
10:30-10:45	COFFEE

Noyori Conference Upper Room with Broadcast to Lower Room

11:00-11:30	SWST Annual Business Meeting
11:30-12:15	Closing Ceremony & Awards
12:15-13:45	LUNCH
14:00-17:30	Visit to Kōshō-ji Temple

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Friday, November 9

Convention Tour - Additional Fee of $100	
8:00-18:30	Nagoya Castle
	Toyota Commemorative Museum
	Lunch at Museum Café
	Atsuta Shrine
	Toganji Temple

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