



SOCIETY OF  
WOOD SCIENCE &  
TECHNOLOGY



# MARY ADU-SARPONG

## TIMBER INDUSTRY DEVELOPMENT DIVISION (TIDD) OF FORESTRY COMMISSION (FC)-GHANA

### COUNTRY OF ORIGIN

Ghana

### RESEARCH TOPIC

Analysing the Sources of Wood Supply to Sustain Domestic Wood Demand: A Case Study of Selected Wood Markets in Kumasi-Ghana.; Understanding Worker Motivation along the timber production value Chain; Improving the production of viable seedlings for sustainable wood utilization

### DEGREES

MSc, Natural Resources Management and Development, TH Köln, Germany, 2015-2017; BBA, Business Administration Management Option, Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development, 2008-2012; Professional Certificate in Forestry, University of Energy and Natural Resources, 1998-2000

### CURRENT POSITION

Area Manager

Wood science has traditionally retained the military posture, hence being perceived as a man's field. However, persistent women have carved a niche by showing that they are capable of accomplishing wood-related research and working in wood-related professions. Women must continuously push the envelope and be resilient to realize their dreams.

Mary Adu-Sarpong has 23 years of professional experience filling the gap between knowledge and practice in Ghana's timber trade and wood industry. As an accredited ISO IEC 17020 - 2012 wood products inspector with the Forestry Commission of Ghana, Mary's work focuses on interpreting international standards to reflect local context whilst prioritizing value-addition, sustainable, and eco-friendly manufacturing. She has built the entrepreneurial capacities of several domestic and international traders along the timber value chain by providing technical, advisory, and specialized services for ensuring efficient and effective timber resource utilization, whilst safeguarding compliance with environmental as well as trade rules and standards.



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# SUSAN E. ANAGNOST

→ SUNY ENVIRONMENTAL SCIENCE AND FORESTRY, SYRACUSE, NY

## COUNTRY

United States Of America

## RESEARCH TOPIC

Wood Anatomy, Wood Decay,  
Wood Identification

## DEGREES

PhD, 1990, Wood Products Engineering,  
SUNY-ESF, Syracuse, NY  
MS, 1982, Wood Products Engineering,  
SUNY-ESF, Syracuse, NY  
BA, 1977, Biology, Gettysburg College,  
Gettysburg, PA

## CURRENT POSITION

Professor Emeritus

Dr. Susan Anagnost, Professor Emeritus, received her PhD from SUNY Environmental Science and Forestry, Syracuse, NY. Her research is focused on evaluating decay in wood products, wood anatomy, and wood identification methods. She is the Director of the Tropical Timber Information Center at SUNY-ESF with current projects on identifying tropical and domestic timbers and evaluating wood products for government agencies and wood-based industries. She taught courses on Decay of Wood Products, Microtechnique, Wood Anatomy, Light Microscopy, Scanning Electron Microscopy, and Transmission Electron Microscopy. She is a Fellow and Past President of the Society of Wood Science and Technology.

To study wood is to be trained across many disciplines and combine that knowledge to understand wood behavior and performance. Be prepared to educate others on the value of using wood for renewable, sustainable products. Being involved in professional organizations, especially SWST will provide a multitude of opportunities for growth.



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# BALKIS FATOMER A. BAKAR

## UNIVERSITI PUTRA MALAYSIA

### COUNTRY OF ORIGIN

Malaysia

### RESEARCH TOPIC

Biocomposite, biobased polymer composite, non-wood, biobased polymer

### DEGREES

Doctor of Philosophy in Wood Science, Oregon State University (OSU, United States), 2019; Master of Science (Bio-composite Technology), Universiti Putra Malaysia (UPM, Malaysia), 2014; Honors Degree Bachelor of Science (Bio-composite Technology), Universiti Teknologi Mara (UiTM, Malaysia), 2009.

### CURRENT POSITION

Senior Lecturer

Both wood and non-wood materials are complex and terrific. Understand the material, exploit its benefits, and apply it globally. Be persistent, driven, and resilient while integrating multidisciplinary research and connecting with people!

Balkis is a senior lecturer at the Department of Wood and Fiber Industry, Faculty of Forestry and Environment, Universiti Putra Malaysia, Malaysia. She received her PhD in Wood Science from Oregon State University, USA in 2019. Her research interests cover several aspects in biobased composites, mainly in non-wood materials, agricultural waste, and biobased adhesives. In 2021, she received the George Marra First Place for Excellence in Writing from the Society of Wood Science and Technology for one of her PhD dissertation articles. And now, she is looking forward to future collaborations!



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# VANESA BAÑO

## → INNOVAWOOD, UNIVERSIDAD DE LA REPÚBLICA

### COUNTRY

Spain, Belgium, Uruguay

### RESEARCH TOPIC

Wood grading, engineered wood products for structural applications, and design of timber structures

### DEGREES

Dr. Forest Engineering, Structural Timber, 2009, Spain

### CURRENT POSITION

Senior Project Manager  
Associate Professor (honorary)

With over 20 years of both scientific and professional experience in timber construction, Vanesa Baño currently works at InnoVAWood (Belgium), the European network for wood research, innovation, and education. She has been an associate professor in timber structures at Universidad de la República (Uruguay), and coordinated two research groups in technological centres in Spain. Her work involved experimental and numerical analysis of wood as a structural material. Some of her main goals were the wood species grading for updating national and European standards, innovation in engineered wood products, and structural design and assessment of timber buildings and bridges.

An engineering approach can help to be successful in wood science. In my case, identifying and observing the gaps in the wood construction sector motivated me to define the research needed to solve them. Professionalism and enthusiasm fosters people to join in finding new uses of wood.



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# IRIS BRÉMAUD

→ **CNRS — FRENCH NATIONAL CENTER FOR SCIENTIFIC RESEARCH**

## COUNTRY

France

## RESEARCH TOPIC

Wood diversity. Wood physics and mechanics. Wood science and craftsmanship. “Ethno-bio-mechanical” vision of wood.

## DEGREES

HDR (Habilitation to supervise research), 2016, University of Montpellier. PhD, Wood Mechanics, 2006, University Montpellier 2. MSc, Wood Science, 2001, ENGREF (National School of Forestry), Nancy. BSc, Plant Physiology, 1998, University Montpellier 2.

## CURRENT POSITION

CNRS Research Scientist

Dr. Iris Brémaud is a CNRS Research Scientist in Wood group of Laboratory of Mechanics and Civil Engineering, Montpellier. Raised in mountain nature, she trained in plant biology and in musical instruments making before specializing in wood science and mechanics. For 25 years, Iris’s research has aimed at reconnecting craftsmanship and scientific knowledge in the joint analysis of biodiversity and of physical complexity of wood. Results bridge vibromechanical and colorimetric properties, extensive databases, with issues of threatened or lesser-known species, and cultural dimensions of the relation between humans and wood. Involved in projects, conferences, and students’ supervision, Iris particularly enjoys collaborating with wood artisans and scientists beyond disciplinary and geographical borders.

Wood is fascinating by its diversity, its complexity, and by the long and continuing relation between humans and wood. I believe wood science needs passion for wood, along with creative thinking to bridge scientific and hands-on knowledge. We aim to care for the cultural and natural heritage of wood and trees for a sustainable future.



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# CECILIA BUSTOS

## UNIVERSIDAD DEL BÍO-BÍO

### COUNTRY OF ORIGIN

Chile

### RESEARCH TOPIC

Engineered wood products,  
wood composites, and  
nanocomposites

### DEGREES

M.Sc. 2000 and PhD 2003, es  
sciences du bois, Département  
des sciences du bois et de la forêt,  
Université Laval, Canada.

### CURRENT POSITION

Full Professor

I think that partnership between industry and academia is fundamental to carry out scientific and technological development in a short time, and to achieve results that allow us to obtain new products, processes, or methods. I also believe that to advance in wood science we need to work in an interdisciplinary manner, considering different points of view such as techno-economic, environmental, and social aspects.

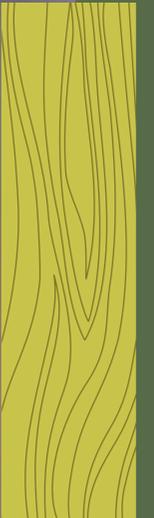
Cecilia developed undergraduate and graduate courses and performs research in wood technology, wood mechanical properties, wood engineering products, composite materials. She has supervised about 19 graduate students and authored or coauthored about 26 papers in peer-reviewed journals. She is a member of the Biomaterials and Nanotechnology Center at Universidad del Bío-Bío and member of the “Renewable Materials Research Centre,” Université Laval, Québec, Canada. Cecilia is a member of the editorial board of the journal Maderas: Ciencia y tecnología, Universidad del Bío Bío, Concepción, Chile, and has been reviewer for several international scientific journals. She is member of the Society of Wood Science and Technology and was the Chair of SWST Education Committee, 2010-2013. She was a Board Member of the Society of Wood Science and Technology as a Director, 2011-2013 and she received a Municipal Applied Research Award from Ilustre Municipalidad de Concepción, Chile in October 2017.



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# LILI CAI

## UNIVERSITY OF IDAHO

### COUNTRY OF ORIGIN

Currently in United States,  
originally from China

### RESEARCH TOPIC

Durability & fire performance of wood products  
Biomass to biocomposites

### DEGREES

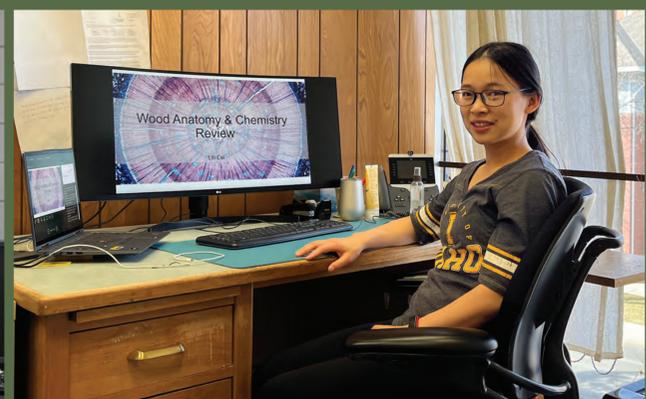
PhD, Natural preservatives for wood and wood composites protection, Mississippi State University, Starkville, MS, USA, 2019; MS, Fire performance and water resistance improvement of lignocellulosic insulation/packaging materials, Fujian Agriculture and Forestry University, Fuzhou, China, 2015; BS, Wood Science and Engineering with an emphasis in Furniture and Interior Design, Fujian Agriculture and Forestry University, Fuzhou, China, 2012

### CURRENT POSITION

Assistant Professor

Welcome to the world of wood! I hope you enjoy what you do and do what you enjoy in this wonderland! Keep learning from the past and also from the best! I firmly believe that all the footprints you have left and all the dots you are touching will eventually connect.

Lili Cai is an Assistant Professor of Forest and Sustainable Products at the University of Idaho in Moscow, Idaho, since 2019. Her research focuses on durability and fire performance of wood products. Lili has been awarded nearly 5 million in grants as principal and co-principal investigator, and she teaches three courses at both undergraduate and graduate levels. Lili likes sharing her research work with the classes to spark their interest in the wood science field. She is also dedicated to promoting the diversity of the field by recruiting and mentoring students from minority and underserved groups and hosting high school teachers from rural areas.



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# JINZHEN CAO

## → BEIJING FORESTRY UNIVERSITY

### COUNTRY OF ORIGIN

China

### RESEARCH TOPIC

Wood physics, wood preservation and modification, wood composites

### DEGREES

PhD, Interaction Between Water and Wood During Adsorption and Desorption Processes, Beijing Forestry University, China, 2001

### CURRENT POSITION

Professor

I always believe that if you want to be successful in something, you have to love doing it first. Wood is a beautiful material. It comes from ancient times, and is continuing to be used in the future. It is complicated as well. That's the charm of studying it.

Jinzhen Cao was awarded a PhD degree in Wood Science and Technology in Beijing Forestry University and was offered a position of assistant professor in 2001. Her doctoral thesis on wood-water relations at non-equilibrium state was awarded as the Excellent doctoral thesis in China. During the past 20 years, she dedicated herself to teaching wood science and trying to develop technologies to ensure the efficient utilization of wood. She has published more than 200 peer-reviewed papers, and mentored 18 PhD and 21 master students. She was awarded the Excellent Teacher Award of China and Outstanding People Award in Wood Protection Area, respectively.



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# TAMARA FRANCA

## MISSISSIPPI STATE UNIVERSITY

### COUNTRY OF ORIGIN

United States  
Brazil (home country)

### RESEARCH TOPIC

Degradation and protection of wood  
and its effect on wood properties

### DEGREES

PhD, Forest Resources, Mississippi State University, 2014-2017; M.S., Forest Science, Federal University of Espírito Santo, 2012-2014; MBA, Strategic Business Management, Luiz Flavio Gomes, 2011-2012; B.S., Technology in Agribusiness - Wood, State University of Para, 2008-2011; B.S., Business Administration, Metropolitana College of Marabá, 2008-2011

### CURRENT POSITION

Assistant Professor

To succeed not only in wood science but in life, you must endure. Be persistent, perseverant, and open to the opportunities that life gives to you. Be surrounded by good. And last, but not least, do everything with love. Be passionate about everything you do.

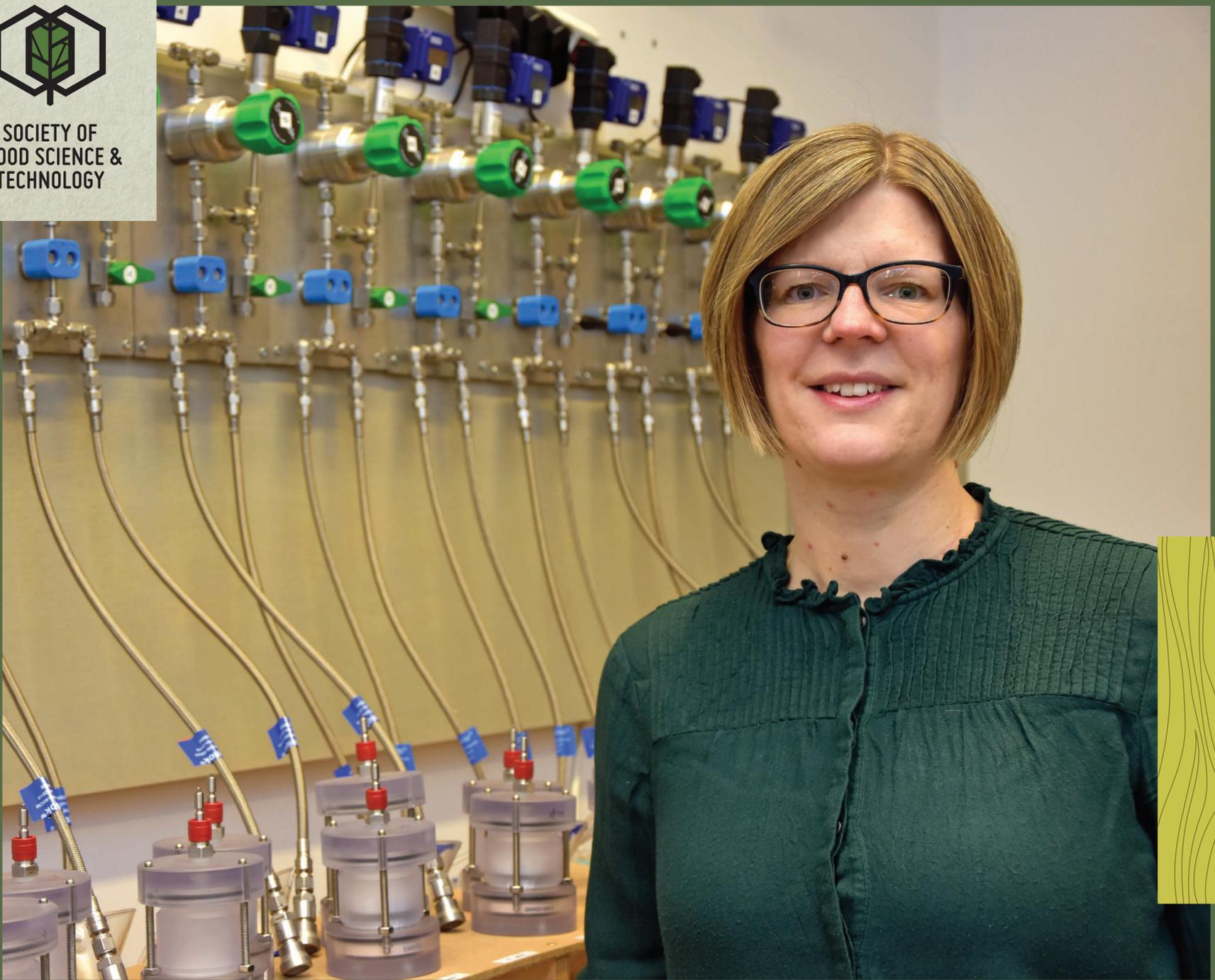
Tâmara França is an Assistant Professor at the Department of Sustainable Bioproducts, Mississippi State University. She teaches three courses, and is serving as Director of Society of Wood Science and Technology (SWST), mid-south regional board member of Forest Products Society, and advisor of the FPS/SWST student chapter. Her research areas include durability and protection of wood and physical and mechanical properties of wood. Her research has been presented orally in several national and international conferences. She has published and served as a reviewer in several peer-reviewed journals such as *Wood Fiber Science*, *Holzforschung*, *Forest Products Journal*, and *BioResources*.



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# MARIA FREDRIKSSON

## → LUND UNIVERSITY

### COUNTRY OF ORIGIN

Sweden

### RESEARCH TOPIC

Wood and water, durability

### DEGREES

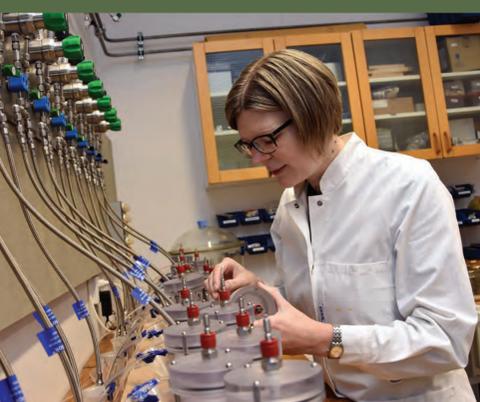
PhD in Building Materials, Lund University, Lund, Sweden, 2013; MSc in Civil Engineering, Lund University, Lund, Sweden, 2008

### CURRENT POSITION

Senior Lecturer

It is key to address knowledge gaps by using inventive choice of methodology and be able to motivate why the knowledge is needed to meet the challenges of today's society. Additionally, it is vital to work with people who challenge your views - critical scientific discussion pushes the research forward!

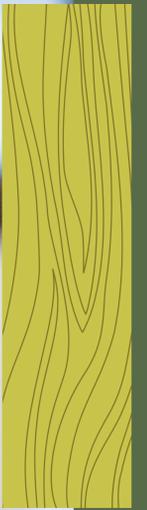
Maria Fredriksson received her PhD from Lund University, Sweden, in 2013, focusing on moisture conditions in outdoor wood structures. After her PhD, she started as Associate Senior Lecturer at Building Materials, Lund University, and also spent two years as a postdoc at University of Copenhagen, Denmark. In 2017, when returning to Lund University, she was promoted to her current position as Senior Lecturer in Building Materials. Her research concerns the interaction between wood and water with focus on durability applications, as well as method development within this field. She also teaches civil engineering and architecture students and has developed a new course in bio-based materials given at master level.



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# HONGMEI GU

## → USDA FOREST SERVICE FOREST PRODUCTS LABORATORY

### COUNTRY

United States

### RESEARCH TOPIC

Life cycle assessment for wood and wood-based emerging products; LCA and life cycle cost analysis for mass timber buildings; Sustainability assessment for biobased packaging material

### DEGREES

PhD, Wood Science and Forest Products, 2001, Virginia Tech, USA; Master, Wood Science and Forest Products, 1998, Virginia Tech, USA; BS, Timber Engineering, 1991, Beijing Forestry University, China

### CURRENT POSITION

Research Scientist

Dr. Hongmei Gu is a Research Scientist working in the Economic, Statistic and Life Cycle Analysis (LCA) Work Unit at the USDA Forest Products Laboratory (FPL) in Madison, WI, USA. She has actively engaged in advancing forest biomass utilization and greenhouse gas emission reduction using the life cycle assessment tool, bolstering innovation of wood use in green building designs and nanocellulose in value-added applications.

Be prepared to learn new things and bring new ideas to wood science.



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# EVA HAVIROVA

## → PURDUE UNIVERSITY

### COUNTRY OF ORIGIN

United States

### RESEARCH TOPIC

Adding value to hardwoods, sustainable product development and circular economy, furniture strength design, and design of wooden school furniture

### DEGREES

PhD, Wood Science and Technology, Purdue University, IN, 2000; B.S., Wood Products & Furniture Design, Technical University of Zvolen, Slovakia, 1992

### CURRENT POSITION

Professor of Wood Science

To be successful in the field of Wood Science you should:  
**1. Develop a passion for wood because it is the most interesting sustainable material. 2. Receive education in school with a strong Wood Science program. 3. Find a mentor and a role model within the desired area of expertise. 4. Stay engaged with wood science associations.**

Dr. Eva Havirova is the Professor of Wood Science in The Department of Forestry and Natural Resources at Purdue University. Her research expertise is in adding value to hardwoods, sustainable product development, circular economy, furniture strength design, design of wooden school furniture, and product lifecycle. She has published over 70 peer-reviewed publications and delivered over 200 professional presentations. Currently she is responsible for the teaching of World Forest and Society, Global Sustainability Issues, Wood ID, and several Wood Products Development courses. She is working with the forest products industry and she is the Past President of the Society of Wood Science and Technology.



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# VICTORIA L. HERIAN

## EXECUTIVE DIRECTOR, SOCIETY OF WOOD SCIENCE & TECHNOLOGY

### COUNTRY OF ORIGIN

United States

### RESEARCH TOPIC

Managing a nonprofit society

### DEGREES

Associate Degree in Science, Madison College, 1994

### CURRENT POSITION

Executive Director, SWST, retiring in 2023

Wood science is an amazingly diverse field that can make a difference in the world we leave for our children. Don't be afraid to donate your time and efforts to SWST, because a nonprofit can only succeed with the help of its members.

Victoria began her work at USDA Forest Products Laboratory in Madison, Wisconsin, first as a secretary, then as a statistical assistant, and finally as a statistician. As a statistician she was involved with many aspects of wood science while working with scientists at FPL. She retired from this position in 2011. At the same time, Victoria began working for SWST as the assistant to the Execw



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# ANDREJA KUTNAR

→ **INNORENEW COE & UNIVERSITY OF PRIMORSKA**

## COUNTRY OF ORIGIN

Slovenia

## RESEARCH TOPIC

Her areas of expertise include wood composites, therm- hydro-mechanical treatment of wood, and adhesive bonding. Her work focuses on research projects in the fields of natural science, technology, sustainable development of the wood industry, environmental impact assessment of new materials, products, and technologies from origin, manufacturing, use/alteration to reuse or recycle.

## DEGREES

Doctor of Philosophy, Biotechnical Faculty, Department of Wood Science and Technology, University of Ljubljana, Slovenia, 2008; Bachelor of Science, Biotechnical Faculty, Department of Wood Science and Technology, University of Ljubljana, Slovenia, 2003

## CURRENT POSITION

Professor in wood science and director of InnoRenew CoE

**In wood science or in any other field, the most important thing is that there is a bit of heart involved. Be curious, professional, ambitious, and never give up. Success is around the corner!**

Dr. Andreja Kutnar is a full professor in the field of wood science at the University of Primorska, Slovenia and director of the InnoRenew CoE. She was president of the Society of Wood Science and Technology Executive Board from 2020-2021. In 2018, she received the distinguished Zois Certificate of Recognition for important scientific achievements in the field of wood science. And in 2020, she was included in the prestigious European Commission campaign #EUwomen4future that draws attention to outstanding women working in research, innovation, education, culture and sport. She is currently a member of the Advisory Committee on Climate Policy for the President of the Republic of Slovenia.



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# MANJA KITEK KUZMAN

## UNIVERSITY OF LJUBLJANA

### COUNTRY OF ORIGIN

Slovenia

### RESEARCH TOPIC

Her areas of expertise include energy-efficient timber construction, sustainable wood product design and circular economy, digitalization, 3D printing, and healthy-living environments

### DEGREES

PhD, Architecture, Ljubljana University Faculty of Architecture, Ljubljana, Slovenia, 2007

### CURRENT POSITION

Professor

Promote the use of wood in different shapes based on high-level technology and technical know-how that needs creative thinking, a comprehensive vision, and a philosophical view, for achieving excellence in timber design research and education. The use of wood presents the bridge between wood science, structural engineering, architecture, and design.

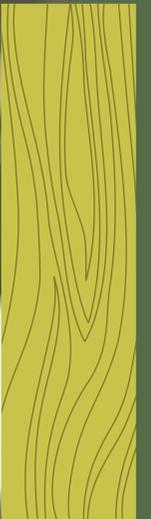
Manja Kitek Kuzman is a Professor of Architecture at the Biotechnical Faculty, Department of Wood Science and Technology, University of Ljubljana. Manja's research and teaching interests focus on developing timber construction, innovative use of wood, and sustainable wood product design. She has published over 70 peer-reviewed publications and delivered over 150 professional presentations. Currently, she is responsible for the teaching of construction, and design in wood. She is working with the forest products industry, designers, and architects, and she is the deputy of vice-dean at Department of Wood Science and Technology.



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# VÉRONIC LANDRY

## UNIVERSITÉ LAVAL

### COUNTRY OF ORIGIN

Canada

### RESEARCH TOPIC

Green and stimuli-sensitive wood coatings, wood modification, biobased adhesives

### DEGREES

BSc in Chemistry, 2002; MSc in Chemistry, 2005; PhD in Wood science, 2009

### CURRENT POSITION

Full professor, director of the Renewable Materials Research Center

Never hesitate to make contacts and exchange ideas with researchers in the field of wood science, but also in other sectors. Wood is such a complex material with incredible potential; interdisciplinarity will be a guarantee of success in the coming decades! Getting out of your comfort zone pays off!

After completing a bachelor's (1999) and a master's degree (2002) in chemistry at Laval University, Véronic Landry went on to complete a PhD in wood science (2009). She was an industrial researcher from 2008 to 2017 at FPIInnovations. Since 2017, she holds the NSERC-Canlak Research Chair in Interior Product Finishing at Laval University. Her research activities focus on the development of environmentally responsible finishing products, modified wood, and biobased adhesives. Since 2022, she is now the director of the Renewable Materials Research Center at the Faculty of Forestry, Geography and Geomatics at Laval University.



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# PIPIET LARASATIE

## UNIVERSITY OF ARKANSAS AT MONTICELLO

### COUNTRY

USA, Indonesia

### RESEARCH TOPIC

Women in Forest Sector Leadership:  
A Multi-country Study

### DEGREES

PhD, Forest Products Marketing/  
Business, 2021, Corvallis, Oregon,  
USA

### CURRENT POSITION

Assistant Professor

Dr. Larasatie is an Assistant Professor of Forest Products Marketing at University of Arkansas at Monticello. She is an interdisciplinary scholar and social scientist researching forest sector competitiveness and sustainable business management of natural resources. Currently, she is the BioProducts Business Journal Editor, managed by Society of Wood Science and Technology (SWST), as well as the Coordinator of International Union of Forest Research Organizations (IUFRO) Division 5.10 Forest Products Marketing and Business Administration.

Believe in your science, especially when you encounter some people who doubt your research. Most of the time, a short break is necessary. Do what you want to do. Then take a deep breath and go back to your study with a fresh perspective.



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# SUSAN LEVAN-GREEN

## → SOCIETY OF WOOD SCIENCE & TECHNOLOGY

### COUNTRY OF ORIGIN

United States

### RESEARCH TOPIC

Chemistry of fire retardants

### DEGREES

BS Engineering Science,  
University of Virginia, 1973;  
BS Chemical Engineering,  
polymer science, University  
of Wisconsin, 1980;  
MS Chemical Engineering,  
polymer science, University  
of Wisconsin, 1992

### CURRENT POSITION

Editor

Work hard, learn something new every day, be curious, and believe in the sustainability of wood products, which is critical for future generations. Help others by being a mentor and enjoy life.

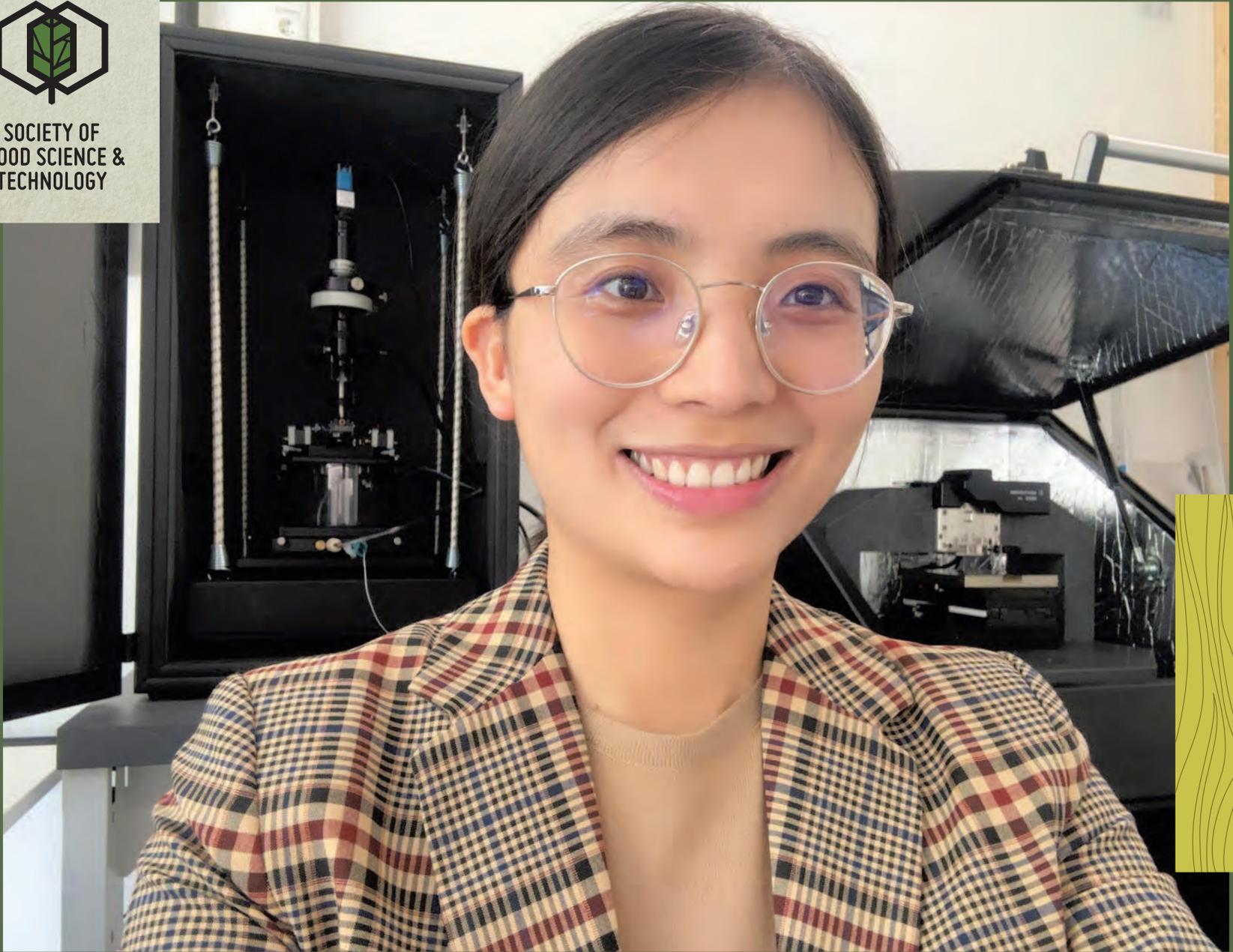
Before becoming editor, I worked for the USDA, Forest Service at the Forest Products Laboratory in Madison, Wisconsin, where I conducted research on fire retardants, fire growth, and wildland urban wildfires. After 12 years in research, I moved into research management and technology transfer. My role in technology transfer involved working with rural communities to develop valued-added products from trees removed to reduce the fire hazard. The cost of removing overstocked forests to reduce fire hazard is expensive and without use for the material, it becomes prohibitive. Often these trees are suppressed growth, but of small diameter.



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# JUAN LI

## FRAUNHOFER INSTITUTE FOR WOOD RESEARCH WKI

### COUNTRY

Germany

### RESEARCH TOPIC

Sustainable building material,  
nanoscale measurements,  
lignocellulosic material,  
seismic engineering

### DEGREES

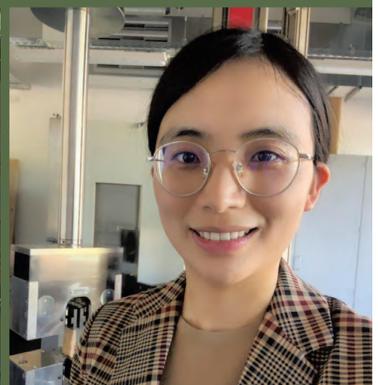
Doctoral degree in Civil  
Engineering, Aging of wood as  
a construction material measured  
by atomic force microscopy  
TU Braunschweig, Germany

### CURRENT POSITION

Scientist

Dr.-Ing Juan Li works a scientist in Fraunhofer Institute for Wood Research and her research focus is structural materials from renewable resources. She obtained her doctoral degree with Summa cum laude from TU Braunschweig, and has received the 2023 International Academy of Wood Science (IAWS) PhD Dissertation Award, the 2023 Karl-Kordina Prize Dissertation Award, and the 2022 George G. Marra Award for Excellence in Research and Writing.

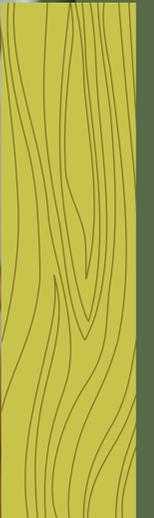
Curiosity and passion to dive into wood science, and persistence and resistance to uncertainty and failure.



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# GLORIA S. OPORTO-VELASQUEZ

## WEST VIRGINIA UNIVERSITY

### COUNTRY OF ORIGIN

Currently in United States, originally from Chile

### RESEARCH TOPIC

Biomaterials from lignocellulosic sources, novel composites, nano-biocomposites, and engineered wood-based composites

### DEGREES

BS Chemical Engineering, Concepcion, Chile, 1994; PhD Forest Resources Certificate Adv., Maine, USA, 2009; Engineered Wood Composites, Maine, USA, 2009

### CURRENT POSITION

Associate Professor

Being knowledgeable about wood properties and utilization is a very good way to be successful in this field. Develop a strong research background and stay up to date with the latest research and technology in the field; build up a network with other professionals in your field and promote synergic collaboration.

Dr. Gloria S. Oporto-Velasquez is a faculty member in the School of Forestry and Natural Resources at West Virginia University. She received her bachelor's degree in Chemical Engineering at the University of Concepcion in Chile, and her PhD in Forest Resources at the University of Maine. Her main research interests are in the field of biomaterials from lignocellulosic sources, novel composites, nano-biocomposites, and engineered wood-based composites.



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# ANDREJA PIRC BARČIĆ

UNIVERSITY OF ZAGREB FACULTY OF FORESTRY AND WOOD TECHNOLOGY

## COUNTRY

Croatia

## RESEARCH TOPIC

Marketing and trade in wood-based industry, international wood markets; business innovation; circular economy, sustainable development, and LCA

## DEGREES

Doctor of Biotechnical Sciences, University of Zagreb, Faculty of Forestry, Zagreb, Croatia, 2011; BSc Wood Technology, University of Zagreb, Faculty of Forestry, Zagreb, Croatia, 2005

## CURRENT POSITION

Associate Professor

Dr. Andreja Pirc Barčić is an associate professor at University of Zagreb Faculty of Forestry and Wood Technology. Her research interests are focused on marketing, trade, and international wood markets. She is interested in wood-based industry business innovations, circular economy, sustainable development, and LCA. She was a president of International Association for Economics, Management, Marketing, Quality and Human Resources in Forestry and Forest Based Industry. Internationally she is focused on the popularization of the wood-based sector and circular economy as two promising domains which require to be thought of together in order to play an important role in achieving sustainability goals.

Wood is a very desirable material today, as the wood science is! Be curious, be brave, be diligent, set yourself high challenges and then work hard to achieve them. Always be yourself and never, never stop dreaming!



WOMEN AMBASSADORS CREATING THE FUTURE OF WOOD SCIENCE



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# TAHIANA RAMANANTOANDRO

## SCHOOL OF AGRONOMY, UNIVERSITY OF ANTANANARIVO

### COUNTRY OF ORIGIN

Madagascar

### RESEARCH TOPIC

Wood sciences, tropical wood identification

### DEGREES

HDR in Wood Science, University of Toulouse France, 2022; PhD in Process Engineering, Ecole des Mines de Saint Etienne France, 2005; Master in Wood Science, University of Bordeaux France, 2001; Engineering degree in Water and Forests, University of Antananarivo Madagascar, 2000

### CURRENT POSITION

Head of the Forestry and Environment Department

To succeed in the field of wood science, it is essential to possess a passion for the wood material and its remarkable properties. Additionally, it is important to demonstrate a strong commitment to environmental conservation. Finally, a continuous improvement of one's skills is crucial for success in this field.

Dr. Tahiana Ramanantoandro is Head of the Department of Forestry and Environment at the University of Antananarivo, Madagascar. She is also a Guest Professor at École Supérieure du Bois Nantes, France. Her research focuses on identifying tropical wood using wood anatomy techniques and near infrared spectroscopy, and on the influence of the environment on wood properties. She has provided consulting services to numerous African countries, including Benin, DR Congo, Madagascar, Mozambique, South Africa, Zambia, and Zimbabwe. Her activities have significantly contributed to the promotion of sustainable forest resource utilization in tropical regions, and to the fight against illegal logging. She was the Chair of the SWST Membership Committee, 2021-2022.



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# MARIAPAOLA RIGGIO

→ WOOD SCIENCE AND ENGINEERING DEP. OREGON STATE UNIVERSITY

## COUNTRY OF ORIGIN

United States

## RESEARCH TOPIC

Timber structural assessment and monitoring, life cycle management

## DEGREES

PhD in Modelling, Conservation and Control of Materials and Structures, Faculty of Engineering, Dep. of Mechanical and Structural Engineering, University of Trento, Italy, 2007. PhD dissertation "Morphological modelling of timber elements. An application of digital technologies for the assessment of timber structures." M.S. magna cum laude in Architecture, 1997. Faculty of Architecture, University of Florence, Italy. MS thesis "Analysis and Restoration of Historical Timber Vaults"

## CURRENT POSITION

Associate Professor

Innovation in wood science can come from different and nontraditional fields. My contribution, for instance, is based on my perspective as an architect and engineer, by holistically considering the interconnected parameters that determine a wooden building quality.

Dr. Riggio has an established reputation among the international scientific community, as an expert in timber buildings assessment. This reputation is built upon more than 15 years of involvement in international projects and organizations, such as ISCARSAH-ICOMOS and RILEM, to advance scientific knowledge related to the use of wood in the built environment and encourage transfer and application of this knowledge. Her projects aim to define integrated metrics for the life cycle performance of timber buildings and construction systems. In her most recently funded research, she has additionally focused on upstream sustainability factors such as material sourcing and fabrication.



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# TRIPTI SINGH

→ **THE NATIONAL CENTRE FOR TIMBER DURABILITY AND DESIGN LIFE,  
UNIVERSITY OF SUNSHINE COAST**

## COUNTRY

Australia

## RESEARCH TOPIC

Timber Durability; Service life prediction, Circular Economy

## DEGREES

PhD (Wood Mycology), Lincoln University, New Zealand, 2006

## CURRENT POSITION

Director and Professor

Professor Tripti Singh, recently appointed as the Centre Director of Timber Durability and Design Life at the University of the Sunshine Coast, Australia, has an extensive background in timber durability and a global reputation for research excellence. With over 20 years at Scion Research in New Zealand, where she remains affiliated part time, she has published extensively on timber durability and waste valorization. She collaborates closely with industry through her roles in the joint Australia/New Zealand Committee TM-012 and the Australasian Wood Preservation. Additionally, she has held leadership positions in the International Research Group on Wood Protection (IRG/WP) and currently serves on its Executive Committee.

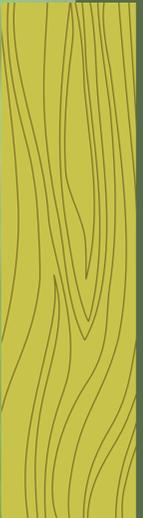
Success in the field of wood science requires practical experience, and a proactive approach to collaboration. Working closely with industry partners to understand practical challenges and contribute to real-world solutions is key to a successful career. Keeping abreast of the latest research, technologies, and industry developments is important. Sharing the research findings through publications in scientific journals and presentations at conferences contributes to the advancement of wood science.



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# ANNE TOPPINEN

## UNIVERSITY OF HELSINKI

### COUNTRY OF ORIGIN

Finland

### RESEARCH TOPIC

Business economics of wooden construction, consumer acceptance of wood products, sustainability transition in wood industry

### DEGREES

Doctorate Forestry, University of Helsinki, 1998

### CURRENT POSITION

Professor, Vice Dean of Research Affairs

Be bold and follow your instinct in what interests you in the field of research. Envision what you would like to do in the future. Active social engagement and networking helps you to learn new things, especially at the early stages of your career.

Has been a professor in forest economics and business at University of Helsinki since 2008. She also served as director of the Helsinki Institute of Sustainability Science from 2018-2021, and prior to joining the University of Helsinki, as a research program manager at the European Forest Institute. Anne's research interests focus on sustainability pathways and resilience of forest-based value networks and emergence of new low-carbon business models. She currently coordinates the interdisciplinary DECARBON-HOME consortium funded by the Strategic Research Council.



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# BARBARA WADE

## WEYERHAEUSER COMPANY

### COUNTRY OF ORIGIN

United States

### RESEARCH TOPIC

Oriented strandboard

### DEGREES

Michigan Technological  
University, 1978

### CURRENT POSITION

Retired

I was the first woman to graduate from the wood science program at Michigan Technological University, and even though I was interested in research, there was no clear path for this in 1978 and I did not have the financial resources. My ultimate choice was to work in the industry. I was involved in the infancy and growth of oriented strandboard. During my 30 years with Weyerhaeuser I was involved with nine OSB mills across the U.S. and Canada. I worked on the start-up of several of these facilities and unfortunately the closure of too many of them. Late in my career I gained technical responsibility for three Timberstrand Facilities. Involvement in the manufacturing facilities was always an adventure with the only constants being hard hats and steel-toed boots. While I did not work in a traditional laboratory, these facilities were my labs. Over the course of my 30-year career I designed and ran countless trials. No publications resulted from this, however, I left behind many internal reports that are still referenced 10 years after my retirement. While I did not have close contact with students, I did, however, ensure that facilities hired technical staff with wood science degrees, and I was a constant proponent of women in the workforce; not just in technical, but also in manufacturing. In my early years with the US Forest Service I was subjected to gender discrimination, sexual harassment, and, based on current definitions, sexual assault. I made it my mission to ensure a workplace that was free of all forms of discrimination and harassment. I feel that this was one of my best contributions to the wood products industry.



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# ANNE WEKESA

## SCHOOL OF FORESTRY, UNIVERSITY OF CANTERBURY

### COUNTRY OF ORIGIN

New Zealand

### RESEARCH TOPIC

The estimation and modelling of carbon stocks from harvested wood products in New Zealand.

### DEGREES

PhD in Forestry, University of Canterbury, New Zealand (expected April 2022). Thesis title: The estimation and modelling of carbon stocks from harvested wood products in New Zealand. MSc. Forestry, University of Canterbury, New Zealand (2013); Thesis title: Using GIS to assess the potential of crop residues for energy generation in Kenya. Graduate Certificate in Forest Carbon Science, Policy and Management, Michigan State University, USA (2020). Diploma in Sales and Marketing, Kenya Polytechnic, Kenya (2005). BSc. Wood Science and Technology, Moi University, Kenya (2004).

### CURRENT POSITION

PhD Candidate

To succeed, work hard, find role models, and mentor others. Also, be a life-long learner. Explore and make use of any opportunities that come your way: short courses, conferences, seminars, and guest lectures. This will help you to share your ideas, build confidence, learn from experts, and build connections.

Growing up in a small village in Kenya didn't quell Anne's wishes to be a scientist. While walking 20kms every day carrying a bucket of water on her head, Anne knew that only education could lift her out of poverty. A lecturer at the University of Kabianga in Kenya, Anne is just a step away from having a forestry PhD. Enrolled at the University of Canterbury in New Zealand, Anne's research estimates harvested wood products carbon stocks in New Zealand using country-specific service life values. Anne's research is supported by the Greenhouse Gas Inventory Research Fund, a competitive government funding scheme.



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# KYRA WOOD

## UNIVERSITY OF TASMANIA

### COUNTRY OF ORIGIN

Australia

### RESEARCH TOPIC

Durability of Tasmanian hardwoods and accelerated testing time frames for novel durability treatments

### DEGREES

Doctor of Philosophy, University of South Australia, Architecture, 2018; Bachelor of Architecture, University of Adelaide, 2007; Bachelor of Design Studies (1st class Hons), University of Adelaide/University of Waseda, Tokyo, 2005

### CURRENT POSITION

Postdoctoral Fellow

Curiosity and collaboration are key to success! I draw on the expertise and generosity of colleagues all over the world in wood sciences, engineering, chemistry and design disciplines. I hope this role allows me to pay forward some of the wonderful knowledge-sharing, kindness, and support that has been shown to me.

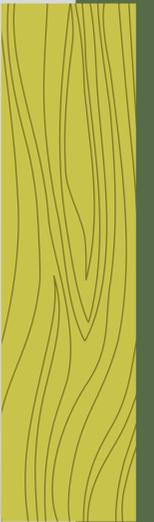
I only began working in wood science-related research in 2019. Prior to that I worked as an architect focused on heritage conservation, collaboration and community engagement through design. As principal researcher on two National Institute for Forest Products Innovation (NIFPI) projects, I'm now investigating how to improve the durability and other material characteristics of Tasmanian hardwoods for use in the built environment. My research topics are as varied as supercritical carbon fluid treatment of Eucalyptus, non-pressure preservative treatment methods, thermal modification, and various pre-treatment approaches like the use of adjuvant additives or compression rolling combined with pressure treatments.



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# MARIKO YAMASAKI

## → NAGOYA UNIVERSITY

### COUNTRY OF ORIGIN

Japan

### RESEARCH TOPIC

Static and dynamic mechanical behavior under various loading modes  
Mechanical performance and nondestructive evaluation of full-scale wooden materials  
Mechanical behavior of aged wood,  
Sustainability of Building Use of Planted Forest Resources

### DEGREES

Dr. Agriculture, Nagoya University, 2001,  
Mechanical behavior of wood under combined stress/Timber engineering;  
Dr. Engineering, Nagoya Institute of Technology, 2007, Basic Research on the Construction of a Reuse System for Deconstructed Wood/Architecture and Design

### CURRENT POSITION

Associate Professor

Wood science is fascinating! I am always excited to discover the truth about wood, a material that is both orthodox and still mysterious. Furthermore, the use of wood will surely make the human society living on Earth richer forever. There is no end to what I want to research!

Mariko engaged in the research and education of materials engineering at Osaka University and National Institute of Technology, Gifu College. She is currently leading the timber engineering laboratory at her alma mater, and her research topic is, “Sustainable use of wood in architecture and civil engineering” based on wood mechanics and wood structures. In addition to this research, She manages “Wood Utilization in Urban Project” with various stakeholders, continuing to practice wood use in the community and experiment with companies and supporting inter-university clubs.



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# AUDREY ZINK-SHARP

→ VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

## COUNTRY OF ORIGIN

United States

## RESEARCH TOPIC

Quantitative wood anatomy;  
ecological disturbance and wood  
quality, correlated microscopy

## DEGREES

PhD, Wood Products Engineering,  
State University of New York, Syracuse,  
NY, 1992; M.S., Wood Anatomy,  
Colorado State University, Fort Collins,  
CO, 1986; B.S., Forestry and Forest  
Products, Colorado State University,  
Fort Collins, CO, 1982

## CURRENT POSITION

Professor and Associate  
Department Head

Persevere, persist, and resist when you face obstacles. Wood and forest products (and those who study them) offer tremendous opportunities. By recognizing that bias and negative assumptions will be encountered, you have taken the first step in preventing yourself and others from succumbing to that negativity. Be creative and pioneer the positive changes needed in our world.

Audrey is a professor and associate department head in the Department of Sustainable Biomaterials at Virginia Tech. She was the first woman to be hired into a tenure-track position and achieve the rank of professor in her college. She was also the first woman department head and president of SWST. Her research encompasses wood anatomy and the impacts of ecological disturbance on wood properties and quality. She teaches graduate and undergraduate courses in quantitative wood anatomy and wood structure and properties. She also developed SWST and 4-H curriculum units in wood science and created InsideTrees, a summer camp for women and underrepresented high school students.



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