ISSUE

01

IAWS Bulletin



June 2025

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Dear Academy Fellows:

We find ourselves today at a pivotal moment



marked by considerable political and economic uncertainty. The issues we face—tariffs affecting forest the products industry, reduced research budgets, the dismantling of wellestablished research organizations, and the slowdown in wood

products commerce—are formidable, yet they also present us with opportunities to shape a better future.

While designed to protect, tariffs often create barriers that fracture the interconnectedness vital to global trade. These measures have precipitated increased costs and restricted market access in the forest products industry, challenging our sector's resilience. As an academy of specialized scientists in this area, we stand at the forefront of advocating for policies that foster equitable trade, seeking to alleviate the ensuing burdens and promote prosperity through cooperation and mutual understanding.

Inflation, which has resurged in recent months, compounds our challenges by increasing operational costs and eroding consumer purchasing power. The ripple effects are felt across the wood products sector, emphasizing the need for innovation and efficiency. Our collective expertise must focus on sustainable practices that curb costs while safeguarding our environment. Through these actions, we can create products that are not only economically viable but also environmentally sound.

As we experience a slowdown in wood products commerce, we must seize the opportunity to rethink and revitalize our approach. We can overcome these hurdles by fostering collaboration across sectors and investing in cutting-edge research and development. Embracing technology and innovative solutions will enable us to adapt to changes and improve the livelihoods of communities reliant on this industry. In addressing these challenges, let us draw inspiration from a vision of a better world where economic growth goes hand in hand with environmental stewardship. Our industry has the unique potential to contribute to a more sustainable planet. By ensuring responsible forest management and promoting renewable materials, we can help combat climate change and preserve biodiversity, leaving a legacy for which future generations will thank us.

Our mission at the International Academy of Wood Science goes beyond responding to today's uncertainties. It is rooted in a long-term commitment to wisdom, balance, and common sense. We are deeply grateful to all who have devoted themselves to the Academy's service – among them Ken Kirk, who served as our 11th President. It is with great sadness that we have learned of his passing (see page 37).

At the same time, we look to the future. Our role is to guide current and future generations of wood scientists with integrity and foresight, ensuring that our field not only weathers today's challenges but continues to evolve in ways that contribute meaningfully to society.

Howard Rosen recently demonstrated such foresight by entrusting the Academy's financial stewardship to Robert Ross (see page 4). Howard has been active in the Academy since 2005 – a full two decades, representing a quarter of our institution's history. We extend our sincere thanks to him for his tireless dedication and for maintaining the Academy's finances in such capable order.

Let us now move forward with courage and purpose. By working together, we can help shape an industry that not only prospers but also strengthens the bond between community, industry, and the environment – building a more sustainable and thriving future for all.

Your Stavros Avramidis

Message from the Editor

Dear Fellows and Friends of the IAWS,



The Academy will celebrate its 60th anniversary in 2026 (see page 6). As we approach this exciting new chapter in the life of the International Academy of Wood Science, I would like to take a moment to reflect on the importance of fostering a lively, active, and engaged community.

At its core, the IAWS thrives on the collective strength, insight, and dedication of its Fellows. Our shared mission—to advance wood science globally—relies not only on individual excellence but also on collaboration, open dialogue, and active participation. Whether through award nominations, contributions to the Bulletin, regional events, or mentoring the next generation, every act of involvement helps keep the Academy dynamic and relevant. In this spirit, I would like to thank all those who contributed stories, news, and updates for this issue of the Bulletin!

Our <u>LinkedIn page</u> continues to grow, with over 562 followers from around the world (as of June 5). I encourage you to visit it regularly, share it within your networks, and invite others to follow. If you would like to post announcements—such as upcoming conferences, new publications, or notable achievements—please feel free to send me the details. With that in mind, I warmly encourage all Fellows to take a more active role. Your perspectives, experiences, ideas, and critical input are vital to ensuring that the IAWS continues to lead with innovation, purpose, and integrity—particularly in a world that increasingly depends on sustainable solutions based on wood and forest resources.

Let us continue building a strong, connected IAWS one where every Fellow feels part of the conversation and of the future we are creating together.

With kind regards,

Rupert Wimmer, Secretary and Bulletin Editor



Outgoing—Dr. Howard Rosen

After twenty years of dedicated service, Howard Rosen is stepping down from his role as Treasurer of the International Academy of Wood Science (IAWS).



Howard's commitment, reliability, and care in managing the Academy's finances have been invaluable, and we extend our heartfelt thanks for his outstanding contributions. Howard has been a steadfast advocate for financial integrity and transparency, ensuring the Academy's resources were utilized effectively to support its mission. His expertise and leadership have left a lasting impact, fostering financial growth and sustainability within the organization.



We wish him all the best in his future endeavors and hope he enjoys this new chapter with the same enthusiasm he brought to his role at IAWS ! Thank You Howard !

Incoming—Dr. Robert Ross

The responsibilities of Treasurer have now been successfully transferred to Dr. Robert Ross, who recently retired from the USDA Forest Products Laboratory (FPL) in Madison, WI.

During his 35-year career at FPL, Bob held numerous leadership positions and made significant contributions to the field through his research on nondestructive evaluation technologies for wood products and structures.



He also continues to serve as long-standing co-chair of the International Nondestructive Testing and Evaluation of Wood Symposia series. We warmly welcome Bob as the new Treasurer of the IAWS and wish him great success—and much enjoyment—in his new role. Bob Ross can be (still) reached under his FPL email address: robert.j.ross@usda.gov



IAWS Treasurer's Report, 2 June 2025

Hello Fellows! My name is Robert (Bob) Ross. At the request President Avramidis, the Executive Board and recommendation of Fellow Howard Rosen, I will replace Dr. Rosen as the Academy's Treasurer.

I have the following to report:

1. Status of Holding

- IAWS now has two accounts with U.S. *Bancorp*—a <u>money market account</u> and a <u>checking account</u>. In addition to our PayPal option, we now also have an active <u>debit card</u>
- Our contact Information at U.S. Bancorp:

Tyler Wood , registered Wealth Management Associate | U.S. Bancorp Investments, Pronouns: He / Him / His, p. 608.827.3275 | m. 608.358.1362 | f. 833.368.0026 | tyler.wood@usbank.com, U.S. Bancorp Wealth Management , West Towne | 402 Gammon Place | Madison, WI 53719 | MK-WI-2014

2. <u>Apologies</u>: I have not been able to prepare a detailed budget summary for this Bulletin issue. Please accept my apologies.

3. <u>Accounts status</u>: I am happy to report that our investments are doing well: Net value (2 June 2025) of money market and checking accounts is \$142,663.24. An additional \$144k is in a Certificate of Deposit that will be transferred to U.S. Bancorp upon its maturity later this year.

3. <u>To continue</u>: I will continue to work with Howard, Rupert and Stavros—they have been patient as I come up-to speed.

4. <u>Thanks</u>: Special thanks to Howard—he has done an outstanding job as Treasurer.

Bob Ross



60 Years Academy in 2026



Dear Esteemed Fellows of the International Academy of Wood Science,

With boundless enthusiasm, I share with you the thrilling news of our upcoming 6oth-anniversary celebration! Founded on June 2nd, 1966, our Academy has been at the forefront of innovation and excellence in wood science for six remarkable decades. To commemorate this momentous occasion, we invite you to join us in the stunning city of **Zurich, Switzerland, from June 1-4, 2026**.

This grand celebratory conference is not just an event; it's an opportunity to forge lasting connections with fellow experts, rejuvenate our collective passion for wood and fiber science, and delve into the groundbreaking discoveries shaping the future of our field. Prepare to be inspired by captivating presentations and dynamic discussions that will expand your horizons and reignite your curiosity.

With breathtaking landscapes and a rich cultural tapestry, Zurich provides the perfect backdrop for our memorable gathering. From vibrant urban life to serene natural beauty, this city offers an experience you won't want to miss.

Mark your calendars and ensure your participation in what promises to be an unforgettable milestone in our Academy's journey. Together, let us celebrate our shared achievements and pave the way for a brighter future in wood science and technology.

We can't wait to see you there. Please expect more details about the conference in the fall of 2025.



Warm regards,

Stavros Avramidis IAWS President

Election of New Fellows 2024

Thirteen new Fellows were elected in 2024. We welcome to the academy the following Fellows:

Prof. Marius BARBU, Salzburg University of Applied Sciences , Austria
Prof. Alan CRIVELLARO, University of Torino, Italy
Prof. Notburga GIERLINGER, BOKU University, Austria
Prof. Lidia GURAU, Transilvania University of Brasov, Romania
Dr. Hoon KIM, USDA Forest Products Laboratory, Madison, USA
Prof. Fangong KONG, Qilu University of Technology, China
Prof. Ahmed KOUBAA, University of Quebec in Abitibi-Témiscamingue, Canada
Prof. Meng-Zhu LU, Zhejiang Agriculture and Forestry University, China
Prof. Roger MEDER, University of Sunshine Coast & Meder Consulting, Australia
Prof. Fidel Alejandro ROIG, CONICET & National University of Cuyo, Argentina
Prof. Zhaohui (Julene) TONG, Georgia Institute of Technology, USA
Prof. Wenji YU, Chinese Academy of Forestry, China





Professor Marius Catalin Barbu is a renowned expert in wood science and technology, with a distinguished dual career in academia and industry. His contributions include designing wood panels, developing prototypes, and optimizing manufacturing processes. Leading projects from lab research to industrial applications, he has pioneered innovations like advanced wood composite technologies, first production runs, and patents. He has taught in four languages at leading European universities.

Barbu's academic journey began at the Faculty of Furniture Design and Wood Engineering at "Transilvania" University of Braşov, Romania, where he earned his first PhD. He later earned another doctorate at BOKU University, graduating with honors under Professor Resch, and achieved habilitation at Transilvania University.

Professionally, he has held significant roles, including positions at BOKU University, a professorship in Braşov, and Head of R&D for BinderHolz Group in Austria. He served as a professor at the University Hamburg for five years and, since 2011, has been a professor at Salzburg University of Applied Sciences, leading the Forest Products Technology area. His work combines teaching,

research, and industry collaboration, focusing on innovative wood processing and composite development.

Barbu pioneered the use of Miscanthus chips and reinforcing fabrics in high-performance panels, optimized light MDF production, and patented HPL processes using resinated wood fibers. His innovations include preheating fiber mats, steam injection technologies, and sustainable wood panel applications. Internationally, he has been an adjunct professor at the University of Tennessee, an extraordinary professor at Stellenbosch University, and a visiting professor in Japan. He has contributed to numerous international projects and influenced global advancements in wood science through IUFRO. Barbu has supervised over 150 theses at bachelor's, master's, and doctoral levels, mentoring students from more than 10 countries, and has designed over 20 courses and led field trips across Europe, Asia, and the Americas.

Professor Barbu's career reflects his commitment to innovation, sustainability, and education. His work continues to shape the future of wood science and technology. He has authored over 70 articles in peer-reviewed journals, 6 books, 9 book-chapters, and filed 9 patents.



In recent research, **Prof. Marius Catalin Barbu** has focued with his team on porous panels made from alpine tree bark -fibre bundles.

Gößwald et al. (2025) https:// doi.org/10.1080/17480272.2025.2453013



Alan Crivellaro, Professor of Wood Science, Department of Agricultural, Forest and Food Sciences, University of Torino, Italy.

Alan is a a distinguished wood scientist, and has made significant contributions to wood anatomy, wood identification, and dendrochronology. After earning his PhD from the University of Padova in 2012, he conducted extensive research on wood, bark, and pith anatomy of Mediterranean trees and shrubs.

He has held academic and research positions in Italy, the USA, Switzerland, and the UK, culminating in his current role as a professor at the University of Torino. Crivellaro's seminal works include the "Atlas of Wood, Bark and Pith Anatomy of Eastern Mediterranean Trees and Shrubs" and "Stem Anatomical Features of Dicotyledons", advancing archaeological wood identification and ecological interpretation of wood anatomy.

His contributions to wood identification, including a new character list for macroscopic analysis, have been widely recognized. Additionally, he pioneered the Presenting Scientist initiative to mentor young researchers in effective scientific communication. He further published over 50 papers in refereed journals, which got cited so far over 3000 times.



Prof. Alan Crivellaro focuses on globally significant topics such as vegetation dynamics, adaptation to climate change, wood degradation, or archaeobotany.



Professor Notburga Gierlinger, Institute of Biophysics, BOKU University, Austria, has studied Biology with a focus on Plant Physiology at the Paris Lodron University of Salzburg, graduating in 1995. She continued her education in Environmental Science and Engineering at the Technical University Vienna and BOKU Vienna, followed by a PhD at BOKU Vienna , graduating with distinction. In 2017, she earned her Venia Docendi (Habilitation) in "Physical and Chemical Biology" from BOKU Vienna.

Her academic career includes roles as Research Associate at BOKU Vienna (1999–2004), Postdoc at the Max Planck Institute in Potsdam, Germany (2004–2006), and Independent Researcher supported by the APART Fellowship (2006–2009). She subsequently held positions at Johannes Kepler University Linz, ETH Zurich, and BOKU Vienna, where she has been an Associate Professor at the Institute of Biophysics since 2018.

Over the past 20 years, her research has focused on developing and applying spectroscopic techniques in wood sciences. These include near-infrared spectroscopy (NIR) for predicting wood properties, FT-IR microscopy, and Confocal Raman microscopy for chemical and structural analysis at the microscale. Her work has advanced understanding of wood chemistry, heartwood formation, environmental adaptations, and wood modifications.

Dr. Gierlinger has received several prestigious awards, including the START Award (2013) and an ERC Consolidator Grant (2015). She founded the International Plant Spectroscopy Society in 2016, serves on its scientific board, and is organizing its 4th conference in Vienna in 2024. She has published over 115 papers in refereed journals, with her work cited so far over 7000 times.





Prof. Notburga Gierlinger pioneered the use of confocal Raman microscopy for the chemical and structural analysis of wood and other plant materials, including walnut shells, which she explored as a model for biomimetic design.

New Fellows 2024



Lidia Gurău, a Professor in Wood Science and Technology at the Faculty of Furniture Design and Wood Engineering, Transilvania University of Braşov, Romania, holds a Bachelor's degree in Wood Engineering from Transilvania University (1987) and a Doctorate from Brunel University, UK (2004), focusing on wood surface roughness.

She habilitated in 2020 and became a PhD supervisor in 2021. Her expertise includes wood surface metrology, wood science, properties, and furniture design. With over 25 years of experience in R&D and teaching, she has contributed to 13 research projects, supervised numerous undergraduates and PhD students, and participated in international collaborations.

Her notable work involves developing methodologies for accurately evaluating wood surface quality, addressing the limitations of standard metrology in assessing heterogeneous wood materials. This includes creating a novel software package to

objectively separate surface quality from wood anatomy.

Her research also explores the value addition to secondary wood resources, physical and mechanical properties, and advanced surface treatments, leading to three patents. Professor Gurău has served as Vice Dean of Research, Erasmus Coordinator, visiting professor, and editor of prominent journals, and she remains active in academic leadership, conference organization, and scientific committees.

Professor Gurău has published over 70 refereed journal publications, and 48 papers in international proceedings. She authored seven refereed books and issued two book chapters. She holds currently three patents and her entire scientific work has received so far over 1200 citations



Prof. Lidia Gurau delivering an engaging lecture on her special field of expertise, which is the influence of wood structure on standardized surface roughness parameters.



Hoon Kim is a leading scientist in wood and plant cell wall chemistry with over 30 years of research experience. He earned his Ph.D. in Forestry/Chemistry from the University of Wisconsin-Madison in 2001, following an M.S. in Forest Utilization (1991) and a B.S. in Forestry (1989), both from Kon-Kuk University in South Korea. Currently serving as a Research Chemist at the USDA Forest Products Laboratory (FPL) in Madison, Wisconsin, since 2023, Kim previously held prestigious roles as a Distinguished Scientist, Senior Scientist, and Co-Principal Investigator at the DOE Great Lake Bioenergy Research Center (GLBRC) and Wisconsin Energy Institute (WEI) from 2008 to 2023. Earlier in his career, he worked as a Research Associate and Postdoctoral Fellow at the USDA-ARS Dairy Forage Research Center and the Department of Horticulture at UW-Madison.

Kim's innovative contributions to wood science have earned him numerous accolades, including the University of Seville-Bruker Award in 2019, a Certificate of Merit from USDA-ARS in 2001, and the Distinguished Prefix Title from UW-Madison in 2020. He has also served as an Associate Editor for Frontiers in Chemistry since 2021 and is an active member of the American Chemical Society (ACS) and the American Association for the Advancement of Science (AAAS). His leadership extended to representing the GLBRC NMR Center during a U.S. Government Accountability Office visit in 2016.

Kim's groundbreaking work in lignin chemistry includes co-developing the pioneering 'Gel-state NMR' technique, which provides high-quality NMR signals from whole cell wall samples without fractionation. This technique, published in Bioenergy Research (2008), Organic & Biomolecular Chemistry (2010), and Nature Protocols (2012), has garnered over 1,600 combined citations and is widely adopted in the field. His research on transgenic and mutant lignins, particularly those with downregulated cinnamyl alcohol dehydrogenase (CAD), has advanced the understanding of their NMR spectra and synthetic strategies. Kim also contributed to the discovery of the CSE gene in collaboration with Wout Boerjan's group in Belgium and identified new lignin structures, such as hydroxystilbenes, with José Carlos' team in Spain.

His contributions have significantly advanced lignin chemistry, sustainable biomass conversion, and the structural analysis of lignocellulosic materials, solidifying his reputation as a leader in the field. Dr. Kim holds over 100 refereed publications, and his work has been cited 15000 times, with a h-factor of 56.



Dr. Hoon Kim recently published —with many coauthors— a paper about lignin and cell wall characteristics in transgenic hybrid aspen.

From: Wang et al. (2025)

https://doi.org/10.3389/fpls.2025.1543168

New Fellows 2024



Fangong Kong is a Professor and Deputy Director at the State Key Laboratory of Bio-based Materials and Green Papermaking, as well as the Dean of the College of Paper & Plant Resources Engineering at Qilu University of Technology (QLUT). He earned his B.Sc. (2000) and M.Sc. (2003) in Pulp and Paper from Shandong Institute of Light Industry (now QLUT) and completed his Ph.D. (2006) at South China University of Technology. His academic career at QLUT began in 2006 as a lecturer, progressing to associate professor in 2007 and full professor in 2010.

Kong has received numerous awards, including the National Technological Invention Award (2015) and multiple Science and Technology Progress Awards. He has held leadership roles such as Deputy Dean of the College of Paper & Plant Resources Engineering and Deputy Director of the State Key Laboratory of Bio-based Materials & Green Papermaking. His visiting

positions include postdoctoral research at the University of New Brunswick (2007–2009) and a senior visiting scholarship at Lakehead University (2013–2015).

A member of various professional organizations, including the China Technical Association of Paper Industry and the Shandong Papermaking Society, Kong has also served as a reviewer for over 30 journals. His research focuses on pulp and paper technology and the efficient utilization of wood fibers. He has led 18 research projects, proposed innovative pulping theories, and developed low-energy refining technologies widely applied in the industry. With 341 published papers, 73 granted patents, and 36 supervised postgraduates, his contributions have had significant economic and social impacts. Dr. Kong's work has been cited so far over 6600 times, with a h-factor of 43.



Prof. Fangong Kong was recently involved in research on the preparation of highly smooth nanofiltration membranes based on lignin Nanoparticle hydrogels and study of interfacial mechanisms.

From: Wang et al. (2025) https://dx.doi.org/10.2139/ssrn.5170105



Ahmed Koubaa, Professor at the University of Quebec in Abitibi-Témiscamingue (UQAT), has made significant contributions to wood science and engineering. He holds a Ph.D. in Pulp & Paper Engineering from the University of Quebec at Trois-Rivières (UQTR) and has extensive academic and research experience. His career includes roles as a professor, research scientist, and group leader at institutions such as Laval University, UQAT, and SEREX. Since joining UQAT in 2004, Koubaa has established advanced research infrastructure for wood characterization, biomaterials manufacturing, and biocomposites' 3D printing.

His interdisciplinary research focuses on wood assessment, value-added processing, and bioproducts development. His work on wood-polymer composites has led to materials with mechanical and thermal properties comparable to structural wood products. He has also advanced the utilization of wood residues for biochar, biocomposites, and environmental applications.

Koubaa has supervised 20 Ph.D. and 65 MS students, mentored 25 postdoctoral fellows, and secured important research funding. He has held leadership roles in the Forest Products Society and FAO working groups and served on editorial boards, including the Canadian Journal of Forest Research. Recognized as a Tier I Canada Research Chair (2014-2028), he has received multiple awards for research excellence and graduate student supervision.

His efforts in education include creating a Sustainable Materials Master Engineering Program at UQAT and developing international collaborations. Through his work, Koubaa has significantly contributed to advancing wood science, fostering innovation, and training future experts in the field. Professor Ahmed Koubaa holds over 155 publications, which got cited 7200 times, delivering a h-factor of 49 (Google Scholar).



Prof. Ahmed Koubaa research has been focusing on mechanical and morphological properties of cellulose biocomposites.

From: Khouaja et al. (2025)

https://doi.org/10.1016/ j.chemosphere.2025.144415

New Fellows 2024



Professor **Meng-Zhu Lu**, a specialist in forest genetics, earned his Ph.D. from the Swedish University of Agricultural Sciences (1997) and holds MSc and BSc degrees from China Agricultural University. Currently a professor at Zhejiang Agriculture and Forestry University since 2019, he previously served as Vice Director of the Research Institute of Forestry at the Chinese Academy of Forestry (CAF). His research focuses on the molecular mechanisms of wood formation in poplar and genetic modifications to improve wood properties.

As principal investigator, he has led major national and international research projects, including China's Key R&D Program and

National Natural Science Foundation projects. His work has identified critical pathways regulating cambium activity, xylem differentiation, and cell wall deposition. Key discoveries include jasmonate-cytokinin crosstalk in cambium regulation, transcription factor involvement in lignin and cellulose biosynthesis, and genetic modifications to enhance biomass accumulation. His team has developed CRISPR-edited poplar lines with reduced lignin and altered wood structures, currently in field trials.

Recognized with numerous honors, he received the 2004 China Youth Prize in Science and Technology and has held leadership roles in national talent programs. He was Director of China's State Key Lab of Tree Genetics (2010-2016) and has been an executive member of the FAO's International Poplar Commission since 2008. His contributions provide valuable insights into tree breeding for optimized wood properties. His work was cited over 3600 times, which has a h-factor of 30.



Prof. Meng-Zhu Lu, working on Engineering transgenic Populus with enhanced biomass, wood quality and pest resistance through dual gene expression.

From: Wang et al. (2025) https://doi.org/10.1111/pbi.14590



Roger Meder, is a distinguished scientist and industry leader with a deep background in chemistry, physics, and technology management. He holds a BSc and MSc in chemistry from Otago University, NZ (1984, 1989), a PhD in physics from Massey University, NZ (2001), and a Graduate Diploma in Technology Management from the University of Queensland, Australia (2007). Meder has had a significant career in academia and industry, currently serving as the Managing Director of Meder Consulting (since 2014) and as an Adjunct Professor at the University of the Sunshine Coast, Australia (2008–present). His previous roles include Research Group Leader and Principal Research Scientist at CSIRO, Australia (2005–2014), Senior Research Fellow at Queensland University of Technology (2001–2005), and Senior Scientist at the New Zealand Forest Research Institute (1986–2000).

Meder has been honored with several prestigious awards, including the Tomas Hirschfeld Award for his contributions to NIR spectroscopy (2023) and the Lynsey Welsh Award for innovation in NIR science (2012). He has held key leadership roles in international organizations, including as Editor-in-Chief of the Journal of Near Infrared Spectroscopy (since 2018), Chair of the Australian Near Infrared Spectroscopy Group (since 2016), and Convenor of the IUFRO

Research Group 5.06 (2011–2017) and is currently the joint-coordinator of IUFRO Division 5 (Forest Products). He is also the recipient of the JW Gottstein Travel Fellowship (2011).

His pioneering work in near-infrared (NIR) spectroscopy, particularly in wood science, includes advancements in characterizing Pinus radiata and Eucalyptus wood properties, developing lab-based and field-based NIR applications for pulp and paper industries, and exploring magnetic resonance imaging to study moisture in wood. Meder has also expanded NIR spectroscopy to non-wood applications, such as foliar nutrient determination and soil analysis. His research has resulted in 88 refereed publications, one patent, three book chapters, and numerous conference proceedings, with over 1,800 citations and an H-index of 25.



Prof. Roger Meder and his team have been involved in the development of rapid phenotyping and characterisation techniques of wood and wood products for more than 25 years.



Fidel Alejandro Roig is a Senior Researcher at CONICET and the National University of Cuyo, Argentina. He holds a PhD in Philosophy and Natural Sciences from Basel University, Switzerland, and a PhD in Natural Forest Sciences from the University of São Paulo, Brazil. His expertise spans wood anatomy, dendroecology, palaeoclimatology, and climate change. Roig has secured 35 research grants from prestigious institutions, supervised 23 PhD and master theses, and taught 24 postgraduate courses. He has organized 13 workshops, symposiums, and congresses related to wood science.

As a recognized expert, he is a member of Argentina's National Academy of Agronomy and Veterinary and has received the COP25-Spain "Louis Lliboutry" award for leading the Argentina National Glacier Inventory program. He has held key positions, including Director of IANIGLA-CONICET, the CONICET-Mendoza Research Center, and President of INTA's Regional Council. He has served as an invited professor and researcher at institutions in Bolivia, Chile, Germany, Italy, and Austria. Roig has contributed significantly to scientific publishing as an associate editor of the IAWA Journal, Dendrochronologia, and Revista Floresta e Ambiente, and is an active member of various international scientific committees.

His research focuses on xylem formation and its biophysical regulation, incorporating wood structure, ecological and numerical anatomy, stable isotope analysis, dendroecology, and dendroclimatology. His work has advanced knowledge of Patagonian, subtropical, and tropical woods, reconstructing paleoenvironmental conditions from the present to 50,000 years ago. His studies have contributed to optimizing climate models, including those of the IPCC. Currently, he is finalizing an atlas on wood anatomy of the Monte biome's desert region. Roig has authored 177 peer-reviewed papers, four books, and 14 book chapters, accumulating 5,471 citations with an H-index of 36.



A major research interest of Dr. Fidel Alejandro Roig are (sub-) tropical tree-rings, as they indicate global change.

From: Groenendijk et al. (2025)

https://doi.org/10.1016/ j.quascirev.2025.109233

New Fellows 2024



Zhaohui (Julene) Tong is an Associate Professor at the School of Chemical & Biomolecular Engineering at Georgia Institute of Technology. She earned her Ph.D. and M.S. in Chemical & Biomolecular Engineering from Georgia Tech and a B.S. in Chemical and Environmental Engineering from Changsha University of Science and Technology. Her career spans both academia and industry, including roles as an Associate and Assistant Professor at the University of Florida, a chemical process engineer, and managerial positions in packaging and paper manufacturing companies in China.

Her research focuses on biomass conversion, forest bioproducts, and biowaste valorization, leading to 73 peer-reviewed journal publications, four patents, and over 2,875 citations, with an H-index of 28. Her work has been published in leading journals such as

ChemSusChem, Bioresource Technology, and ACS Sustainable Chemistry & Engineering. She has secured significant funding from agencies such as the USDA, NSF, and DOE, supporting a strong and innovative research program. She has mentored over eight Ph.D. students, four master's students, five postdoctoral fellows, about 10 visiting scholars, and 15 undergraduate students at the University of Florida and Georgia Tech.

Recognized with prestigious awards, including the James C. Barber Faculty Fellowship and multiple ASABE honors, she plays key leadership roles in AICHE and TAPPI, serving as Vice Chair, Treasurer, and Secretary in the Forestry Bioproduct Division. Additionally, she contributes as an editor for multiple scientific journals, including Bioenergy Research and Journal of Biobased Materials and Bioenergy. Her contributions continue to impact sustainable biomaterials and bioresource engineering.



Zhaohui (Julene) Tong's research focuses on the development and optimization of sustainable products derived from renewable resources as alternatives to fossil fuel-based products.

Catalytic Waste Valorization Nanoscale Self-Assembly



Functional Material Design





AI-Based Control & Catalyst Design



New Fellows 2024



Pradeep Verma, a Professor in the Department of Microbiology at the Central University of Rajasthan, India, has held numerous prestigious positions and received significant awards. He has been a Japan Society for Promotion of Science (JSPS) Fellow at Kyoto University (2007 -2009, 2022) and was recognized as a Top Scholar in Bioprocess Engineering by Scholar GPS (2023). His accolades include the AMI Fellowship (2022), the Young Scientist Award for Sustainable Bioprocessing (2022), and fellowships from BRSI (2021), MSI (2020), and DFG (2004-2007). He has served as a visiting scientist at institutions such as UFZ, Germany, and Charles University, Prague, Prof. Verma is a life member of multiple professional societies and currently serves as Director of Research and Development at CURai, having previously held leadership roles such as Dean of Life Sciences and Head of Microbiology.

He is actively engaged in editorial roles, serving as a guest editor for MDPI journals and an editorial board member for Biotechnology and Genetic Engineering Reviews. Additionally, he consults for institutions like the European Science Foundation and King Fahd University. His research focuses on wood utilization and biomass valorization, particularly microwave-based pretreatment methods to enhance enzymatic efficiency for bioethanol production.

He has collaborated with renowned scientists like IAWS Fellow Prof. Takashi Watanabe at Kyoto University and IAWS Fellow Prof. Holger Militz at Göttingen University. With 94 peer-reviewed publications, 13 patents, 25 books, and over 7,285 citations (H-index: 45), Prof. Verma has significantly contributed to the advancement of wood science, promoting circular economy concepts and zero-waste approaches in biomass biorefineries.



Dr. Pradeep Verma recently co-edited the book <u>"Biotechnological Applications in Industrial Waste Valori-</u> <u>zation</u>" (2025).



Professor Yu Wenji is the Chief Scientist of the Chinese Academy of Forestry (CAF), President of the National Bamboo Industry Research Institute, and Director of the Wood-based Panel and Adhesive Research Department at the Research Institute of Wood Industry, CAF.

Born in Liaoning, China, he earned his B.S. in Wood Machinery Processing from Northeast Forestry University (1986), followed by an M.S. in Wood Science and Technology from Beijing Forestry University (1989). He completed his Ph.D. in Wood Science and Technology at CAF in 2001. Since joining CAF in 1989, he has advanced from Assistant Professor (1992) to Associate Professor (1997) and became a full Professor and Department Director in 2003.

Dr. Wenji has received three National Science and Technology Progress Awards and a China Patent Excellence Award. He has led the development of three national and nine industry standards. He holds key leadership roles, including Chairman of the Biomass Materials Branch of the Chinese Forestry Society and multiple innovation alliances.

He is a visiting professor and doctoral supervisor at several universities and serves on editorial boards of prestigious journals. He has also collaborated with the USDA-Forest Service and INBAR. His research focuses on wood and bamboo composite materials, pioneering reconstituted materials manufacturing, including "Bamboo steel" and "Wood steel." He has contributed to the development of green, low-carbon materials and international technology transfer. With 286 refereed publications, 112 patents, three books, and an H-index of 28, his work has had a global impact, with reconstituted material products exported to 44 countries.



Professor Yu Wenji has e.g. a research focus on non-adhesive bamboo-based material with high bonding strength and recyclability, offering a sustainable alternative to synthetic resin composites and advancing circular economy goals through reduced carbon emissions and improved material reuse.

From: Fu et al. (2025) Link

2025 Nominations for Election of Fellows



The nomination process is straightforward: simply complete the <u>Nomination form</u> (see next page) and send it to me. To be considered for the upcoming election, **nominations** must be received by **14 August 2025**.

Afterward, I will contact the nominee to confirm their **willingness to stand for election**. The nominee will then complete a more **detailed application form**. The Executive Committee reviews all applications to ensure they are complete and, in early September, submits the finalized nominations to the **membership for a online-vote**.

Typically, nominees are mid-career scientists showing great promise and achievements or scientists nearing the end of their careers, recognized for significant and ongoing contributions throughout their professional lives. Certain areas within IAWS are underrepresented, notably Fellows from developing countries. Due to challenges in publishing in leading journals and language barriers, their number of peer-reviewed contributions may be lower. Additionally, some scientific disciplines are less represented; if you belong to such fields, you are likely aware of this situation.

The Executive Committee is also interested in electing wood science managers who have made substantial impacts through their oversight of research activities, even if their number of refereed publications is not typical. Furthermore, the Academy currently has a lower representation of female researchers, and we strongly encourage nominations of qualified female colleagues.

Please consider **potential nominees**, perhaps by reviewing the Directory and the list of Fellows by country. Since we do not actively promote ourselves to gain members, it is the responsibility of the Fellows within the Academy to help provide candidates for this recognition.



Stavros Avramidis, IAWS President

2025 Nominations for Election of Fellows

Nomination for Fellowship of the International Academy of Wood Science

Name of Candidate: Position of Candidate:

Candidate Mailing Address:

Candidate email address (required!):

Candidate's Background (maximum 100 words):

Reasons for the candidate's nomination (outstanding in his/her field; substantial contributions to wood science; major results in the management of research; etc):

Date: Nominator name: Email address: Telephone:

Please return to: Stavros Avramidis <u>stavros.avramidis@ubc.ca</u> and Rupert Wimmer <u>rupert.wimmer@boku.ac.at</u> by 14th August 2025



Call for nominations

IAWS recognizes outstanding doctoral research through three award categories

- ♦ 1st Place Medal and a cheque of USD 1,000
- **2nd Place** Certificate of Achievement signed by the IAWS President
- **3rd Place** Certificate of Achievement signed by the IAWS President

• Presentation Opportunity:

All awardees will be invited to **present their research** at the **IAWS 60th Anniversary Celebration Event and Symposium**, taking place on **June 1–4**, **2026**, in **Zurich, Switzerland**.

- Eligibility Criteria— Nominations are open to candidates who meet the following requirements:
 - 1. International PhD Degree The nominee must have earned their PhD from a university or institution outside their home country, in line with IAWS's aim to foster and recognize international academic collaboration.
 - 2. Recent Graduation The PhD thesis/dissertation must have been defended between August 15, 2024, and August 14, 2025 (i.e., within one year before the submission deadline).
 - 3. Relevant Research Field The nominee's doctoral research must be directly related to wood science, wood technologies, or wood-based bioproducts.
- **Submission Guidelines:** All nomination materials must be submitted in **English** and include the following:

1. Curriculum Vitae (max. 2 pages)

- The nominee's CV should include:
- Full name and email address
- Home country
- Country where the PhD degree was obtained
- Title of the PhD thesis/dissertation and date of defense (if applicable)
- Name, institution, and email address of the PhD supervisor
- List of published or in-press papers related to the PhD research

2. **Extended Abstract (1 page):** A concise summary of the PhD thesis/dissertation outlining the main objectives, methods, and key findings.

3. **Recommendation Letter:** A signed letter from the nominee's PhD supervisor, supporting the nomination and briefly describing the significance of the research.

The nomination documents can be submitted by the nominee student or the student's supervisor, and these nomination documents should be sent by email to **The Academy Board Chair**, Professor Shusheng Pang (<u>shusheng.pang@canterbury.ac.nz</u>), and the **IAWS Secretary**, Professor Rupert Wimmer (<u>rupert.wimmer@boku.ac.at</u>).

Science Meets Industry

A Powerful Story of Innovation: When Science Meets Industry

In France, a remarkable partnership has been flourishing—one that perfectly illustrates how science and industry can join forces to build a greener future. For several years, **Professor Alain Celzard**, a senior researcher at the **Institut Jean Lamour (IJL)** and Fellow of the IAWS, has been working closely with **Groupe Bordet**, one of France's oldest charcoal producers and now a pioneer in biochar and bio-oil innovation.

Together, they've established a joint laboratory focused on transforming wood waste into highperformance activated carbons. These carbons have two main goals: to clean sulfur compounds from biogas, and to create carbon materials for supercapacitors—a promising alternative to lithium-ion batteries in electric vehicles.

This collaboration is more than just a research project. It's a shining example of how **wood** science, clean technology, and sustainable industry can intersect. And now, it's gaining national recognition.

Groupe Bordet recently launched **PyroBiOil 4.0**, a groundbreaking project that has been awarded by the French government under the **"France 2030 – Première Usine" initiative**. Supported by **BPI France**, this project will build a new industrial-scale plant to produce **biochar and bio-oils**—turning research into real-world impact.

With deep roots going back to 1860 in Leuglay, Bourgogne-Franche-Comté, Groupe Bordet has evolved into a **leader in industrial decarbonization**, using locally sourced, PEFC-certified wood and a slow, continuous pyrolysis process to create renewable materials. Their work now spans **water purification**, **biogas treatment**, **energy storage**, **coatings**, and specialty chemicals.



The PyroBiOil 4.0 project strengthens Groupe Bordet's mission:

- To cut CO₂ emissions,
- To replace fossil-based materials, and
- To contribute meaningfully to the UN Sustainable Development Goals.

This story is a powerful reminder that innovation thrives where research meets industry—especially when wood is at the heart of the solution.





Retirement of IAWS Fellow Professor Bohumil Kasal - marked with High Honors

At the beginning of 2025, Professor Bohumil Kasal was formally honored at TU Braunschweig. The ceremony not only marked his retirement from the university but also celebrated his distinguished leadership as former director of the Fraunhofer Institute for Wood Research, Wilhelm-Klauditz-Institut (WKI).

In recognition of his exceptional contributions, Professor Kasal was awarded the Wilhelm Klauditz Medal, named after the renowned German wood scientist Wilhelm Klauditz—an influential pioneer in wood science, wood technology, and forestry, and the founder of the Fraunhofer WKI in 1946.

Professor Kasal's departure from Fraunhofer WKI on September 30, 2024, marked the end of a significant era. His career began in Slovakia, continued with a remarkable tenure in the United States, and ultimately led him back to Europe to take the helm at WKI. His leadership was widely praised for advancing wood research and elevating the institute's reputation nationally and internationally. Although retired from his role at WKI, Professor Kasal remains academically active, holding positions at the University of Primorska in Koper, the Czech Technical University in Prague, and as an Adjunct Professor at North Carolina State.

Reflecting on this new chapter, he recently remarked: "Being retired feels good on one hand you have freedom. On the other hand, one must be prepared to become unimportant!" Now that you're retired, we hope you'll have even more time to enjoy your bike rides!





Fellow Peter Biely retires after a Pioneering Career in Enzyme Research

Fellow of the IAWS, Dr. **Peter Biely**, retired on May 1, 2024, from the Institute of Chemistry at the Slovak Academy of Sciences, concluding a remarkable career dedicated to the study of microbial enzymes involved in the degradation of plant biomass, particularly xylan, a key component of hemicellulose. His research, including recent collaborations with Novozymes in Denmark, significantly advanced our understanding of enzyme systems in biomass conversion.



Among his major scientific contributions are groundbreaking insights into the mechanisms of endoxylanases, the discovery of acetylxylan esterases which opened up the field of carbohydrate esterases, and the definition of new enzyme families

such as CE16 (acetyl esterases), GH115 (αglucuronidases), and CE15 (glucuronoyl esterases). He was also the first to describe the 3D structures of key enzymes, including glucuronoxylan-specific endoxylanases and glucuronoyl esterases, and he introduced innovative chromogenic and fluorogenic substrates for glycan-degrading enzymes. His work on the spontaneous migration of acetyl groups on xylopyranosyl residues provided valuable insight into how these chemical shifts affect enzymatic degradation.

Dr. Biely authored or co-authored over 200 scientific papers, around 30 book chapters and reviews, and held 31 patents, including 5 international ones. His research has been cited nearly 11.000 times according to Web of Science (h -index 50), and 16,700 times on Google Scholar (hindex 63), placing him among Slovakia's most highly cited scientists. Throughout his career, he was invited to take part in numerous PhD defenses abroad, delivered over 60 invited lectures at international conferences, and gave more than 65 academic presentations at and industrial institutions across the globe.

He served as Visiting Professor in several countries, including Chile, Brazil, and Japan, and spent research stays in Australia and New Zealand. He also contributed as a lecturer to international biotechnology courses in South Africa, Spain, and Sweden. His outstanding achievements earned him numerous honors, such as the title Meritorious Inventor of Czechoslovakia (1984), the Gold Medal of the Slovak Academy of Sciences (2001), Scientist of the Year in Slovakia (2003), the František Patočka Medal from the Czechoslovak Society for Microbiology (2006), the Order of Ľudovít Štúr (2011), and the Charles D. Scott Award at the Symposium on Biotechnology for Fuels and Chemicals in San Diego (2015).

Dr. Biely's legacy leaves a lasting mark on the fields of enzyme science, wood biotechnology, and the global scientific community. **The Academy wishes a enjoyable retirement!**



News from Fellows

AcadeMY NEWS





Fellow Dick Sandberg has recently taken up а Professors Chair for Design and Fabrication of Timber Construction at the Department of Manufacturing and Civil Engineering at the Norwegian

University of Science and Technology (NTNU). From 2015 to 2024, he served as Professor and Head of the Division of Wood Science and Engineering at Luleå University of Technology, where he had previously led the Division of Wood Technology from 2013 to 2014. Between 2008 and 2013, he held the position of Professor of Forest Products at Linnaeus University, while simultaneously managing a sawmill. Earlier in his career, he worked as Assistant Professor in Wood Products and Mechanical Engineering at Växjö University, and held technical management roles at PrimWood AB and Nova Wood AB. He also contributed as a researcher at the Royal Institute of Technology (KTH), where he completed his PhD. In addition to his academic and industry accomplishments, Professor Sandberg has made significant contributions to the field as Editor-in-Chief of the scientific journal Wood Material Science & Engineering. Congratulations to Dick Sandberg on this exciting new chapter!



Fellow and Professor Jeff Morrell has commenced as the first Director of the Forestry Centre of Excellence at the University of South Australia, ready to lead the centre into its next chapter as an inter-

national leader in forest industries for research, education, product and market development. Globally renowned for his distinguished career in wood durability, Professor Morrell was selected following an international search. Professor Morrell has spent more than three decades leading the durability program at Oregon State University in the United States. He was then director for the Centre for Timber Durability and Design Life based at the University of the Sunshine Coast in Queensland from 2018 to 2023. **Congratulations !**





Our Fellow, Professor Philip Evans, has informed us that he will be stepping from down the Department of Wood Science UBC and at returning to Australia in 2026 to take up a new position.

We wish him all the best for this next chapter!





Art Ragauskas Honored with Global Lithuanian Award for Scientific Achievement

Art Ragauskas, Acting Department Head of Chemical and Biomolecular Engineering and UT– ORNL Governor's Chair of Biorefining, has been named a **Laureate of the 2024 Global Lithuanian Awards** in the category of *International Scientific Achievements*. The award is presented by the Diaspora Professional Network, *Global Lithuanian Leaders*, and celebrates Lithuanians whose work contributes to the country's global reputation in science, culture, and the economy.

Ragauskas has long maintained professional ties to Lithuania, collaborating with colleagues there on projects in biofuels, bioengineering, biomaterials, and biorefineries. These international partnerships reflect his deep commitment to advancing science through global cooperation. The award carries profound personal meaning for Ragauskas. His father emigrated from Lithuania to Canada after World War II to build a better life for his family. His parents instilled in their children strong values—hard work, independence, academic excellence, and the pursuit of higher education.

"As academics, we face many challenges, but my purpose is clear: I have dedicated my life to instilling in students the values of excellence, respect, and collaboration—both at UT and around the world," Ragauskas said. "Receiving the Global Lithuanian Award is not just a personal honor; it's a tribute to my family and to the students and colleagues who have inspired and supported me throughout my career."

The **Global Lithuanian Awards ceremony** took place on **December 20**, **2024**, at the **Vilnius Philharmonic Hall** in Vilnius, Lithuania, and was also broadcasted by a national Lithuanian TV station.

Congratulations !





The "Ninghai Bamboo Tower" project by Prof. Y. Xiao receives the ASCE AEI Award

Our Fellow Prof. **Yan Xiao** and his team at Zhejiang University have been recognized with several 2025 awards from the American Society of Civil Engineers – Architectural Engineering Institute (ASCE AEI) for their pioneering work on the "Ninghai Bamboo Tower," the world's tallest engineered bamboo building. The project received the 2025 AEI Most Innovative Project Award (under \$100 million), the Award of Excellence for Structural Design, and two Awards of Merit—for Architectural Engineering Integration and for Sustainability and Life-Cycle Performance.

Located in Zhejiang Province, near the major port city of Ningbo, the Ninghai Bamboo Tower stands 20.3 meters tall and comprises seven stories, including six standard floors and an attic. It is built using glued laminated bamboo (glubam) frames, with lateral load resistance provided by either steel or glubam braces, as well as lightweight bamboo and timber shear walls. The floor slabs are constructed with glubam joists and OSB or bamboo sheathing panels. Designed as an international research platform, the building will support a variety of experimental studies, including vibration monitoring and control, thermal and acoustic performance testing, and more. The project showcases the growing potential of engineered bamboo as a sustainable, highperformance material in modern construction. **Congratulations !**





Ninghai Bamboo Tower - First tall engineered mass bamboo building

Fellow Alain Celzard was elected Member of the European Academy of Sciences

Our Fellow **Alain Celzard** is professor at the University of Lorraine and researcher at the Jean Lamour Institute, and he was recently elected to the European Academy of Sciences. Alain has an interesting career: Initially uncertain about his path, he developed a strong interest in science during his studies in Nancy. A passion for solid-



state chemistry led him to materials science, which he describes as a revelation for its blend of chemistry, physics, engineering, and modeling. This turning point sparked a dynamic and successful academic career.

Professor Alain Celzard focuses on porous materials, leveraging their tunable properties— combined with tailored chemical composition—for applications in diverse fields.

EUROPEAN ACADEMY OF SCIENCES IN SUPPORT OF EXCELLENCE IN SCIENCE AND TECHNOLOGY

His work spans water and air purification, gas separation and capture, hydrogen storage, catalysis (including electro- and photocatalysis), energy storage and conversion, thermal and acoustic insulation, and electro-magnetic wave manipulation. He is actively involved in all these areas, depending on available research funding.

We congratulate !





Dual Celebration for Holger Militz



Prof. Holger Militz, Head of the Institute of Wood Biology and Wood Products at Göttingen University, recently celebrated two remarkable

milestones: his 65th birthday and the 25th anniversary of his professorship at the university.

To mark the occasion, the total number of 110 PhD graduates and postdoctoral researchers from the past 25 years were invited—and 95 of them returned to Göttingen, making it a truly special and memorable celebration. What a remarkable harvest of academic legacy and lasting connections! **Congratulations!**





News from Fellows

AcadeMY NEWS



Wood-Material and Processing Data – Key Facts and Figures

Editors: Peter Niemz, Alfred Teischinger, Dick Sandberg

This new Springer Nature handbook, edited by three IAWS Fellows, compiles essential material and processing data for wood and wood-based products. It serves as a practical reference for estimating material properties and production parameters. Based on Chapter 38 of the *Springer Handbook of Wood Science and Technology* (2023), this standalone volume presents the full, updated dataset that was previously available only online in abridged form.

Structured across eight chapters, it covers solid wood, modified timber, wood-based materials, pulp and paper, energy and material use, and relevant standards. Contributions from sixteen international authors ensure global relevance. The aim is to provide a well-organized, printed resource to support both research and practice in wood science.





Fellow Sabine Rosner, Professor at BOKU University, Austria, has co-authored two consecutive manuscripts on the hydraulic conduc-

tivity in conifer wood, higlighting the importance of functional wood anatomy.

Lundqvist S, Rosner S. *Towards efficient models for hydrau*lic conductivity in conifer wood. **Part 1**: estimation of sizes and numbers of bordered pits. Holzforschung. 2025;79(1):30-45. https://doi.org/10.1515/hf-2024-0059

Lundqvist S, Holmqvist C, Rosner S. *Towards* efficient models for hydraulic conductivity in conifer wood. **Part 2**: estimation of variation in hydraulic conductivity within and between annual rings from anatomical data. Holzforschung. 2025;79(1):46-63. https://doi.org/10.1515/hf-2024-0060



Researchers at Northeast Forestry University at Harbin, China, and many collaborators, around Fellow **Jian Li**, have developed fully bio-based thin films that exhibit circularly polarized roomtemperature phosphorescence—a rare and sustainable innovation. Made from lignosulfonate and cellulose nanocrystals, these films combine long phosphorescence lifetimes with high stability and biodegradability. The materials show promise for applications in information processing and anticounterfeiting.



Nature Communications https://doi.org/10.1038/ s41467-025-57712-x

Nature Communications https://doi.org/10.1038/ s41467-024-45622-3

Securing the Future of Wood Science Education at Göttingen

An informal yet insightful meeting was recently held at the University of Göttingen to discuss the future direction of its renowned wood science program. Hosted by Fellow Prof. Holger Militz, the gathering brought together five IAWS Fellows — Klaus Richter, Stergios Adamopoulos, Ingo Burgert, and Andreas Krause—who engaged in strategic discussions aimed at strengthening and evolving wood science education at the university.

Recognizing the essential role Göttingen has historically played in this field, the group emphasized the urgent need to ensure its continuation and development. With Germany's strong and innovation-driven wood industry, the demand for a well-educated next generation of wood scientists and engineers is more critical than ever. The meeting underlined the importance of maintaining Göttingen as a leading academic hub for wood science, serving both national industry needs and international research excellence !





Fellows from left to right: Prof. Adamopolous, Prof. Richter, Prof. Burgert, Prof. Militz—after tasting a few glasses of redwine (Prof. Krause is missing on the picture)

Online Master Degree at Oregon State

Fellow Eric Hansen, Professor of Forest Products Marketing and Department Head, informed us that the Oregon State University Department of Wood Science & Engineering introduces a **new fully online Professional Science Master's Degree in Wood Innovation for Sustainability**. The new



degree is launching in tandem with two graduate certificates in Mass Timber and Timber Circular Economy. The programs are the first of their kind, with a focus on leadership, communication and technical skills, making them ideal career advancement pathways for working professionals. Requiring 45 credits, the master's degree is a nonthesis program that can be completed in two years. Each certificate is 20 credits, fully stackable toward the master's degree, and can be completed in under a year.





Earn your master's degree online in WOOD INNOVATION FOR SUSTAINABILITY

Lead sustainable, wood-based solutions

In a world increasingly focused on sustainable solutions, expertise in wood science and engineering has never been more valuable. Take your career to the next level — and learn how to make a positive, lasting environmental impact — when you enroll in Oregon State University's **online master's in Wood Innovation for Sustainability program, the only program of its kind.** With two specialized options, mass timber and timber circular economy, you'll develop skills related to technical, management, communication, and leadership skills as well as project management and ethical decision-making that will prepare you to lead in a rapidly evolving industry.

This is a non-thesis, 45 quarter credit program that opens pathways to leadership roles in the wood products industry, sustainable construction, and other fields driving the future of responsible innovation.

For more information, email allison.culver@oregonstate.edu

40th Anniversary of ENSTIB



ENSTIB <u>https://www.enstib.univ-lorraine.fr/en/</u> was founded by **Xavier DEGLISE**, after a very calm beginning in 1978, when the first students were welcomed in Nancy University, for a preparatory program of a master curriculum in wood materials. In 1994, this curriculum was upgraded in a Wood Engineering School. The three ENSTIB objectives are (1) Education, (2) Research and (3) Technology transfer.

From the Bachelor in Wood Trades to the Doctorate, including a Master study in Wood Architecture and Construction, the Wood Engineering degree, and the Specialised Engineering degree, ENSTIB is the benchmark of Education in the wood professions. There are specialised courses in all sectors of wood processing, from the forest-wood interface to the recovery of by-products and waste.



Educational and scientific cooperation agreements have been established by ENSTIB around the world to facilitate the mobility of students, and academic staff. to develop research collaborations, namely with Argentina, Austria, Belgium, Brazil, Canada, Chile, China, Spain, Finland. Poland. Portugal, Czech Republic. Romania, Russia, Slovakia, Sweden, and Switzerland.

Current ENSTIB research focuses are:

 Wood-based Materials and Sustainability, to improve mechanical and functional properties of wood and derived materials, and develop new bio-based composites, and molecules.





- Energy and Environmental Efficiency, to develop innovative solutions improving the energy efficiency of wooden buildings and promote renewable energy.
- Technological Innovation and Industrial Processes, with cutting-edge technologies to optimise wood transformation processes.
- Wood Engineering and Architecture, with integrating concepts of sustainability and aesthetics, to design high-performance and durable wooden structures.

IAWS Fellows linked to ENSTIB: ENSTIB Academic Staff:

Prof. Nicolas Brosse, Wood Chemistry
Prof. Alain Celzard, Bio-based Carbons
Prof. Xavier Deglise, Wood Chemical Physics and a former President of IAWS (2005 -2008)
Prof. Philippe Gerardin, Wood protection
Prof. Antonio Pizzi, Wood adhesives
Prof. Yann Rogaume, Wood for Energy

ENSTIB Engineers, former graduates:

Dr. Henri Bailleres (ScionResearch NZ) Prof. Marie-Pierre Laborie (Univ Freiburg) Prof. Frédéric Pichelin (Berner FH Switzerland) ENSTIB PhD:

Prof. Rubén Ananias (UBio-Bio Chili) Dr. Alfredo Aguilera(Universidad Austral de Chile) ENSTIB Post-Docs:

Dr. Voichita Bucur (Australia) former researcher Prof. Wang Siqun (USA) former post-Doc Prof. Guanben Du (SWFU, Kunming, China) Associated to ENSTIB:

Prof. Anatoly Chubinsky (St Petersburg, Russia) Prof. Galina Gorbacheva (Moscow, Russia)

Deep gratitudes for their committement go to our deceased IAWS fellows Dr. Hubert Polge, Dr. W.G. Kauman, Dr. R.L. Youngs, and Prof. Daniel Guitard. The 12th IAWA-China Group Annual Conference & the 16th China- Korea-Japan Joint Seminar on Wood Quality and Utilization, Harbin, China on August 15th to 17th, 2025

Topics covered: 1) Development trends in wood anatomy; 2) Construction of digital platforms for wood specimens; 3) Wood formation and structurefunction relationships; 4) Identification and preservation of archaeological wooden remains; 5) Bamboo and wood anatomy enabling efficient utilization; 6) Advanced research on novel wood-based materials; 7) Research on tree-ring climate relationships; 8) Identification and protection of endangered woody plants

For detailed information, please visit https:// cailiao.nefu.edu.cn/clkxeng/info/1124/1201.htm or contact Dr. Xinjie Cui cuixinjie_1212@126.com.



Kerala will host the **5th World Teak Conference**, entitled 'Sustainable Development of the Global Teak Sector – Adapting to Future Markets and Environments'. This event will take place at Grand Hyatt, Cochin, Kerala during **17-20 September 2025** and will be hosted by Kerala Forest Research Institute and coordinated by the International Teak Information Network (TEAKNET) India.

https://worldteakconference2025.com



14th International Conference "Wood Science and Engineering in the Third Millennium", Romania on November 6th-8th, 2025

Welcome to join in the upcoming international conference ICWSE 2025, which is intended to bring together professionals from universities and industry, to present and discuss the most recent advances in wood science and engineering, to stimulate technical and scientific innovations on sustainable development of designing and manufacturing wood products, and to provide a focus for the exchange of latest ideas on wood products engineering and circular economy in the wood sector.

https://www.proligno.ro/en/ icwse_home_2025.htm





https://spbftu.ru/RR2025

Upcoming Conferences

The **7th edition of International Conference on Structural Health Assessment of Timber Structures (SHATIS'25)** will be held from **3.—6. September 2025** in Zagreb, Croatia. <u>https://shatis25.com/</u>







The **Woodrise International Congress** promotes mid- and high-rise timber construction and supports sustainable, resilient building practices worldwide. It serves as a hub for collaboration and knowledge exchange among architects, engineers, developers, researchers, policy-makers, and government officials. Takes place between **22.-25. September 2025** in Vancouver, BC, Canada. https://woodrise2025.com/





Network for Wood Science and Engineering (WSE 2025). The conferences is between **7.—9. October** 2025). We look forward to welcoming you to Växjö This year, the theme is: *"Green Buildings with renewable structural elements and adhesives"*.







FOCUSING ON THE INTERSECTION OF SUSTAINABILITY & AI

The **International Conference on Wood Adhesives** is the premier technical conference on advances in the adhesion of wood and biomass. The conference is between **22.-24. October 2025**. Industry representatives were the majority of the nearly 300 attendees in 2017 and 2022, evenly split between the U.S. and the rest of the world. <u>https://</u> www.woodadhesives.org/



Obituary T. Kent Kirk, 1940–2025



We regret to announce that T. Kent Kirk, a luminary in the field of wood biodegradation, passed away on February 23, 2025 at the age of 84. The research done by Kent and his many collaborators made seminal contributions to our knowledge of how fungi degrade ligno-cellulose.

It also resulted in the development of successful biological processes for wood pulping and the remediation of pulp mill effluents.

As a Fellow of the Academy, Kent served as the **11th President of the IAWS** from 1999 to 2002. His legacy in wood science and his service to the Academy will be remembered with great respect and gratitude.

Kent, who grew up in in a small town of Louisiana, early developed an interest in forestry and in wood as a material. After earning a Bachelor's degree in forestry, he attended North Carolina State University, where he studied tree diseases and obtained a Ph.D. in plant pathology under Arthur Kelman. Becoming interested in a more quantitative approach to forest science, he then continued at the same university to earn a second Ph.D. in biochemistry in the laboratory of Ellis Cowling, where he began his research into biological mechanisms for breakdown of the recalcitrant wood polymer lignin.

Although he occasionally ruffled the feathers of some, he was a man genuinely without pretense. Endowed with a self-deprecating sense of humor, he would sometimes walk into the lab during an experiment and remark, "What quackery do we have here today?" On at least one occasion, he dispensed with the use of English, and came in quacking like a duck. At social gatherings, he was a fount of humorous anecdotes that reflected his rural Louisiana origins.

Kent met his second wife, Celeste, at the FPL, and together they spent many rewarding years, including a sabbatical in Japan. Her untimely illness contributed to his early retirement, and he was deeply affected when she passed away. A skilled woodworker, Kent made elegant furniture before and after his retirement. His longterm interest in forestry also led him to write and publish a field guide to tropical trees. He is survived by four daughters, five grandchildren, and two greatgrandchildren. Long may he be remembered !

Kenneth E. Hammel, Ming Tien & Thomas W. Jeffries

Journal Ranking—Wood Science & Technology (Google Scholar, by June 3, 2025)

- **h5-index** is the h-index for articles published in the last 5 complete years. It is the largest number h such that h articles published in 2019-2023 have at least h citations each
- **h5-median** for a publication is the median number of citations for the articles that make up its h5-index.

	Publication	h5-index	<u>h5-median</u>
1.	Cellulose	<u>81</u>	107
2.	Journal of Bioresources and Bioproducts	<u>44</u>	139
3.	BioResources	<u>41</u>	51
4.	European Journal of Wood and Wood Products	<u>32</u>	41
5.	Journal of Renewable Materials	<u>31</u>	50
6.	Wood Science and Technology	<u>29</u>	40
7.	Wood Material Science & Engineering	<u>28</u>	39
8.	Holzforschung	27	32
9.	Journal of Wood Science	<u>26</u>	40
10.	International Association of Wood Anatomists Journal	<u>21</u>	31
11.	Journal of Textiles, Coloration and Polymer Science	<u>21</u>	30
12.	Nordic Pulp & Paper Research Journal	<u>20</u>	24
13.	Journal of Wood Chemistry and Technology	<u>19</u>	26
14.	Maderas. Ciencia y Tecnología	<u>19</u>	25
15.	Floresta e Ambiente	<u>17</u>	26
16.	Wood Research	<u>17</u>	22
17.	Cellulose Chemistry and Technology	<u>16</u>	24
18.	Acta Facultatis Xylologiae Zvolen res Publica Slovaca	<u>14</u>	15
19.	Wood and Fiber Science	<u>13</u>	18
20.	Forest Products Journal	<u>12</u>	20

Country	Fellows	Females	Country	Fellows	Females
Australia	17	1	Slovakia 3		0
Austria	17	3	Slovenia	3	3
Bangladesh	1	0	South Africa 5		1
Belgium	2	0	Spain	2	2
Brazil	5	1	Sweden	34	3
Canada	45	4	Switzerland	13	2
Chile	4	0	Taiwan	5	1
China	37	5	Turkey	1	0
Costa Rica	1	0	Ukraine	1	0
Czechia	2	0	United Kingdom	9	0
Denmark	5	0	USA	155	8
Egypt	1	0			
Ethiopia	1	1	Some statistics		
Finland	17	3	Total	617	100%
France	37	7	Deceased fellows	208	34%
Georgia	1	0	Fellows alive	409	66%/100%
Germany	44	1	Active Fellows	266	65%
Greece	3	0	Lifetime Fellows	174	43%
Hungary	1	0	Retired Fellows	234	57%
India	10	0	Male Fellows	355	87%
Indonesia	1	0	Eemale Fellows	5/	12%
Ireland	0	0	Terrate renows	54	1378
Israel	4	0			
Italy	5	2			
Japan	58	1	Average age		Years
Kenya	0	0	All Fellows		72
Korea, South	8	0	Male Fellows		74
Latvia	2	0	Female Fellows		65
Malaysia	2	1			4
Mexico	2	1			
Netherlands	2	1			
New Zealand	15	1			
Norway	4	0			
Philippines	3	0			
Poland	7	0			
Portugal	1	0			
Romania	5	1			
Russia	16	2			

IAWS Statistics

Affiliated Members elected in 2021

BioProducts Institute, UBC Zhejiang Agricultural & Forestry University

Affiliated Members elected in 2020

International Association of Wood Anatomists Korean Society of Wood Science & Technology, Korea South West Forestry University, China National Institute of Forest Science, Korea

Affiliated Members elected in 2017

International Wood Culture Society, USA Department of Wood Science – UBC, Canada



Fellows elected in 2024

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Fellows elected in 2023

Stergios ADAMOPOULOS, Sweden Dilpreet BAJWA, USA Charlotte Gjelstrup BJORDAL, Sweden Andreas KRAUSE, Germany Kecheng LI, USA Shengquan LIU, China Lee Ann NEWSOM, USA Yann ROGAUME, France Markus RUEGGEBERG, Germany Ge WANG, China

Fellows elected in 2022

Pavlo BEKHTA, Ukraine Rowland BURDON, New Zealand Laurent MATUANA, USA Nicole STARK, USA Yan XIAO, China

Fellows elected in 2021

Menandro ACDA Philippines Henri BAILLERES, Australia Mikhail BALAKSHIN, Finland Warren GRIGSBY, New Zealand Minjuan HE, China George MANTANIS, Greece Aji MATHEW, Sweden Frédéric PICHELIN, Switzerland Dick SANDBERG, Sweden Rubin SHMULSKY, USA Taraneh SOWLATI, Canada Yuki TOBIMATSU, Japan Aleksander VASILYEV, Russia Ning YAN, Canada



Fellows deceased in 2025 T. Kent Kirk, USA

Fellows deceased in 2024

Pieter Baas, The Netherlands Olaf Schmitt, Germany

Fellows deceased in 2023

Walter LIESE Germany Benhua FEI, China

Fellows deceased in 2022

Frank BEALL, USA Günter SCHULTZE-DEWITZ, Germany

Fellows deceased in 2021

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• The Academy derives direct contact with organizations and individuals actively engaged in the utilization of wood and wood products.

• The Academy receives financial support for its activities from these members. Contact details are available on the IAWS website.

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