ISSUE
02
December 2025

IAWS Bulletin

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Message from the President

Dear Fellows,

as we approached the end of another year of remarkable achievements in wood science research and development, I am filled with pride and gratitude for the incredible work we have collectively accomplished. Our dedication to advancing the field of wood science has led to groundbreaking discoveries, innovative applications, and sustainable solutions that continue to shape the future of our industry. From developing new wood-based materials with enhanced properties to pioneering cutting-edge preservation techniques, we have once again demonstrated the immense potential of wood as a versatile and renewable resource.

Looking ahead, I am filled with optimism for the coming year and the exciting opportunities that await us. As we continue to push the boundaries, I am confident that our collaborative efforts will yield even greater breakthroughs and contributions to global sustainability. With the growing emphasis on eco-friendly materials and carbon-neutral technologies, our expertise in wood science has never been more crucial.

Let us embrace the challenges ahead with enthusiasm and creativity, knowing that our work has the power to make a lasting positive impact on both the environment and society. Here's to another year of innovation, discovery, and shared success in the wonderful world of wood science!

Your Stavros Avramidis

IAWS President

Message from the Editor

Dear Fellows and Friends of the IAWS,

As Bulletin editor, I would like to warmly thank all IAWS Fellows who have already contributed news, updates, and ideas, your support has been essential in getting the Bulletin up and running. At the same time, the Bulletin can only become a truly strong vehicle for connecting Fellows around the globe if more of us actively share what is happening in our labs, institutions, projects, awards, retirements, new appointments, and community activities. Even short notes, a few lines and a photo, help create a richer picture of our Academy and strengthen our network. I therefore encourage every Fellow to consider sending regular updates and suggestions so that engagement increases and the Bulletin continues to grow into a lively, relevant platform for our international community.

Our LinkedIn page continues to grow, with over 688 followers from around the world. I encourage you to visit our LinkedIn Page, share it within your networks, and invite others to follow. If you like to post something —such as upcoming conferences, new publications, or notable achievements—please send me the details!

With kind regards,

Rupert Wimmer

Secretary and Bulletin Editor

Please send correspondence to **Rupert Wimmer**

Treasurer's Report

The transition to U.S. Bank for all of our holdings is being finalized. The former treasurer Howard Rosen and I have worked closely on the transition, which will be finalized by late December 2025. Holdings are as follows—Certificate of Deposit--$41,433.33, Savings and Checking--$115,094.95. Total holdings are $156,527.95. All bills have been paid in a timely manner, with no late fees required.

Please take a look at the current website and check out the payment options for you annual dues. Specifically, check out the address change for sending checks via surface mail. It has been changed and is:

IAWS
Attention : Dr. Robert Ross
Forest Service Volunteer
Forest Products Laboratory
Email: robert.j.ross@usda.gov
One Gifford Pinchot Drive
Madison, WI 53726-2398 USA
US phone: 608-231-9221

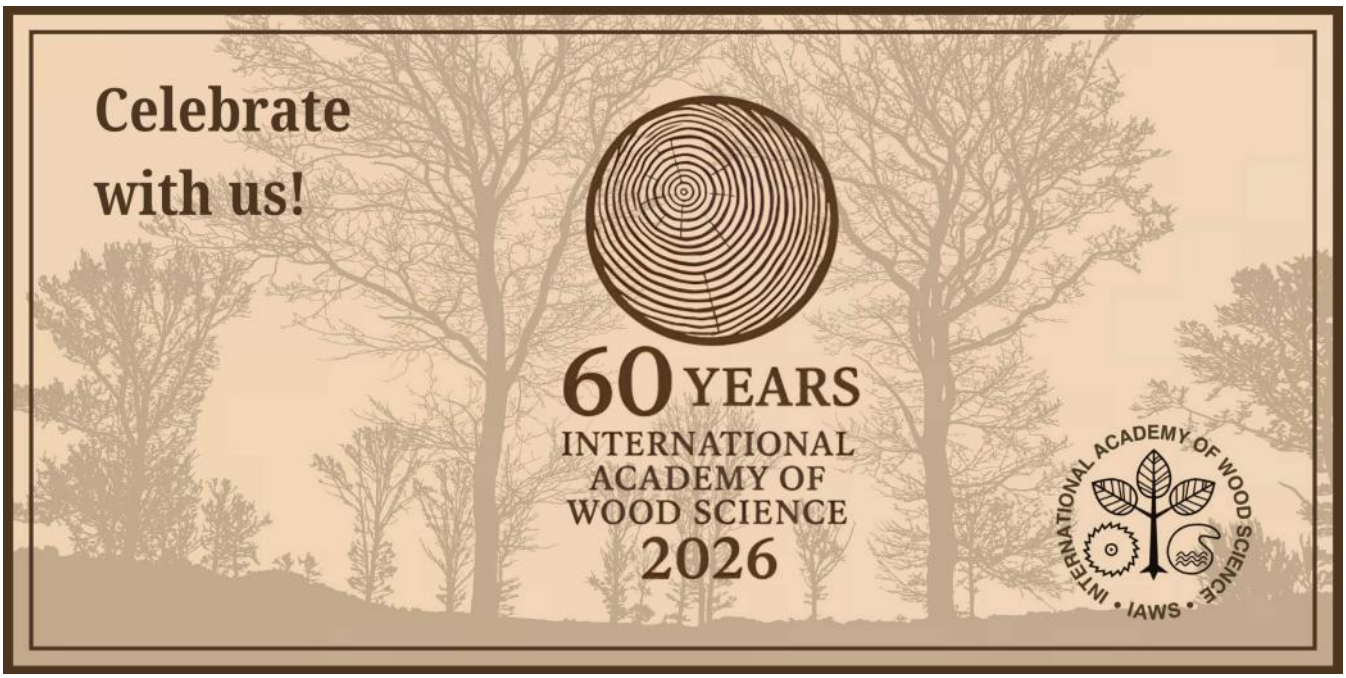
I have started to receive checks at this address—and deposit them as received.

A request to YOU dear Fellows, from your Treasurer: Please send me a brief email message when you submit your dues payment…it will help us in recording and tracking membership!

An example—

„Hi Bob. I submitted my dues via (PayPal, check, etc) on (date). Thanks, name and email/contact information."

Bob Ross, Treasurer



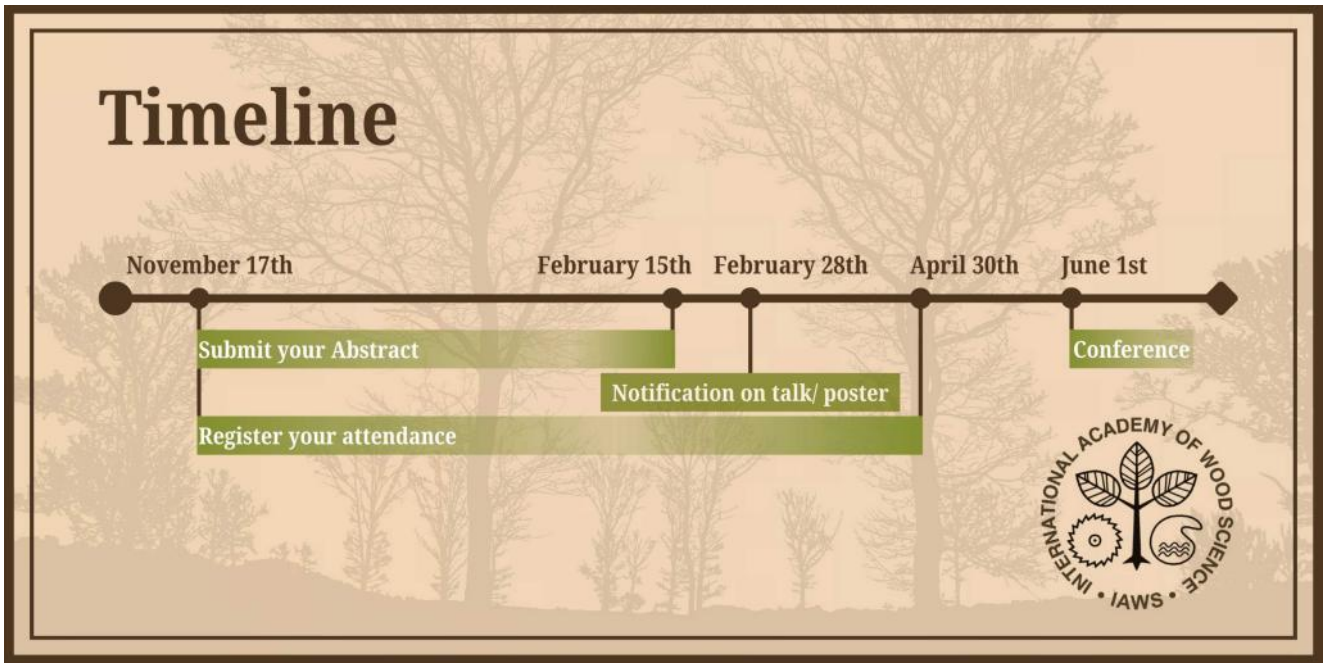
We are thrilled to invite YOU to the 60th **Anniversary of the Academy**, celebrating six decades of excellence and innovation in wood science!

The International Academy of Wood Science (IAWS) celebrates its 60th anniversary with an international conference on June **1–4, 2026, in Zurich, Switzerland, hosted by ETH Zurich**.

Research on wood and wood-based products has been highly relevant over the years, but it is particularly significant today, facing climate change, resource depletion, and biodiversity loss.

Join us for this exceptional occasion and contribute to a timely,groundbreaking event! Check out the conference homepage !

The future of wood science—together in Zurich!



Participation is open to all ! PhD students, postdocs, senior scientists, professors and participants from industry are all invited to apply for a talk or poster presentation !

Abstract submission is already running since November 17, and the submission due date is **February 15, 2026.**

Programme highlights:

- Welcome Apero
- Academy Lecture
- Ten plenary Lectures
- Voluntary Lectures
- Poster Session
- Company and Lab visits
- Conference Dinner on the Zürich lake

Please note the **registration** deadline, which is **April 30, 2026.**

The **full programme** and the **book of abstracts** will be available by **April 1, 2026**.

If you have any questions, please conduct Ingo Burgert (ETH Zürich & Empa).

Let's celebrate the past, energize the present, and shape the future of wood science—together in Zurich!

Conference Sponsors

Zürich, Switzerland.

KUONI TUMLARE Congress

ERNE wir bauen vorwärts

Blumer Lehmann

2025 Election of New Fellows

We are delighted to welcome the fourteen Fellows elected in 2025:

Jinzhen CAO, China

Lihui CHEN, China

Stephen J. EICHHORN, Great Britain

Mark HUGHES, Finland

Joseph JAKES, USA

Jan-William VAN DE KUILEN, Germany

Carsten MAI, Germany

Orlando ROJAS, Canada

Yan YU, China

Kenji UMEMURA, Japan

Feng JIANG, Canada

Clemens ALTANER, New Zealand

Dennis JONES, Sweden

Zhaoyang XU, China

We will introduce the new Fellows to our community in the first Bulletin issue of 2026 (around June), as well as feature them on our LinkedIn page.

2025 Vice-President Election

The International Academy of Wood Science has concluded its recent election for Vice President, and with 81 Fellows voting **Prof. Andreja Kutnar** has been elected. The Academy looks forward to welcoming her into the role on **June 2, 2026**, following a thorough election process with two highly regarded candidates identified through an extensive search by the Executive Committee among actively participating Fellows.

The Academy warmly thanks **both candidates** for their willingness to serve. In particular, we appreciate Fellow Professor **Pradeep Verma** for highlighting the value of a globally representative leadership.

This election also underscored the importance of active participation by Fellows in shaping the Academy's leadership. While the final ballot included two candidates, the process reaffirmed the depth of expertise and commitment within the Academy, and it provides a timely reminder of the benefit of broad engagement in future nominations.

On **June 2, 2026**, the current President, **Prof. Stavros Avramidis**, will conclude his three-year term. The current Vice President, **Prof. Ingo Burgert**, will assume the Presidency for the next three years, and **Prof. Andreja Kutnar** will begin her term as Vice President. As the Academy transitions to this new leadership team, we are confident the incoming Vice President will make a strong contribution to advancing wood science, fostering collaboration, and supporting innovation across our global community.

The IAWS provides recognition to outstanding thesis/dissertation research at the PhD level by students throughout the world. The PhD Award was again opened to receive nominations and/or applications.

The award is open to anyone—not limited to IAWS Fellows.

The rules for PhD award competition are:

- The competition is limited to students receiving their degrees in other than their native country.
- The purpose is to foster and recognize cross-national interaction.
- The submission shall be no more than 2 pages of an extended abstract (in English) of the dissertation, a one-page CV of the student, and a recommendation letter from the student's supervisor.
- The submission can be by the student and/or the student's supervisor.
- The thesis/dissertation must have been completed within one year prior to the yearly announcement.
- The documentation shall be sent by email to the Chair of the IAWS Academy Board

As soon the nomination period was closed the IAWS board members (https://www.iaws-web.org/organisation/academy-board/) started with the process of evaluation to select the this years awardees. In 2025 call has received twelve applications. The IAWS Executive Board confirmed the ranking presented by the IAWS Academy Board members. The final ranking was as followed:

Dr. Lukas Fliri was selected as this year's first place, while Dr. Zhou and Dr. Sun shared second place **ex aequo**.

Name	**Evaluation**
Dr. Lukas Fliri	1st place
Dr Zhongjin Zhou	2nd place
Dr Xia Sun	2nd place

Dr. Lukas Fliri, Doctor of Science (D.Sc.) in Chemical Engineering, Aalto University, Finland

Current workplace: Postdoctoral researcher at University of Natural Resources and Life Sciences (BOKU University), Email

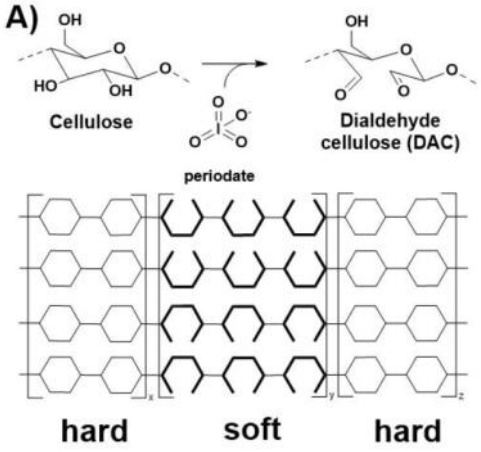
Supervisor: Prof. Michael Hummel

Thesis Title: Carbonyls in Cellulose: An Investigation into Formation Mechanisms, Analytical Methods, and their Consequential Properties for Fiber Engineering Applications

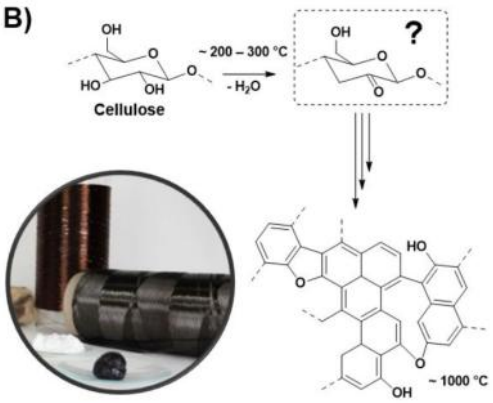
This thesis investigates oxidative modification of cellulose to enable advanced fiber engineering and improved routes toward bio-based carbon fibers, leveraging Ioncell®-related materials and high-resolution solution-state NMR in an ionic-liquid electrolyte as the central analytical tool. Two questions were addressed: **(A)** whether periodate-driven ring opening can increase cellulosic fiber flexibility, and **(B)** which reactions dominate cellulose dehydration below 300 °C and how they affect subsequent carbonization.

Periodate oxidation was found to be strongly limited by degradative side reactions, causing chain scission and crosslinking and yielding brittle fibers; improved purification and an indirect SEC approach were developed, and borohydride reduction enabled Ioncell® fibers containing up to ~15% ring-opened structures, albeit with only minor wet-state flexibility gains and pronounced irregularities after drying. For dehydration, NMR contradicts common elimination/crosslinking schemes at glucopyranose units; instead, partial depolymerization, reducing-end-group transformations, and formation of a dehydrated intermediate phase were observed, consistent with polyfuranic structures derived from 5-HMF and polycondensation, informing ongoing optimization of cellulose-to-carbon-fiber processing.

In a nutshell: Using solution-state NMR in an ionic-liquid electrolyte, the thesis shows that periodate ring-opening of cellulose is fundamentally constrained by degradative side reactions (yielding only limited flexibility gains), and that cellulose dehydration below 300 °C proceeds mainly via depolymerization and reducing-end transformations into a dehydrated, likely polyfuranic intermediate that governs downstream carbonization.



Cellulose → (periodate) → **dialdehyde cellulose (DAC)** via ring opening, conceptually aiming at a **hard–soft–hard** fiber architecture; experimentally, side reactions drive brittleness.



Cellulose → **200–300 °C dehydration** (unknown intermediate) → **~1000 °C carbonization** toward carbon-fiber-like structures; the work identifies the likely dehydrated intermediate chemistry (polyfuranic / hydrochar-like).

Dr Zhongjin Zhou, Ph.D. in Natural Resources, Center for Renewable Carbon, The University of Tennessee, USA

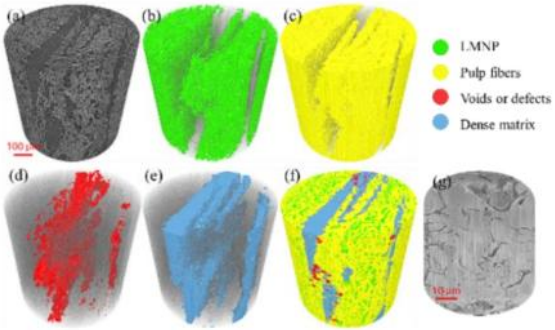
Current workplace: Post-doctoral Researcher Associate, School of Natural Resources, University of Tennessee, Knoxville, USA, Email

Supervisor: Prof. Siqun Wang

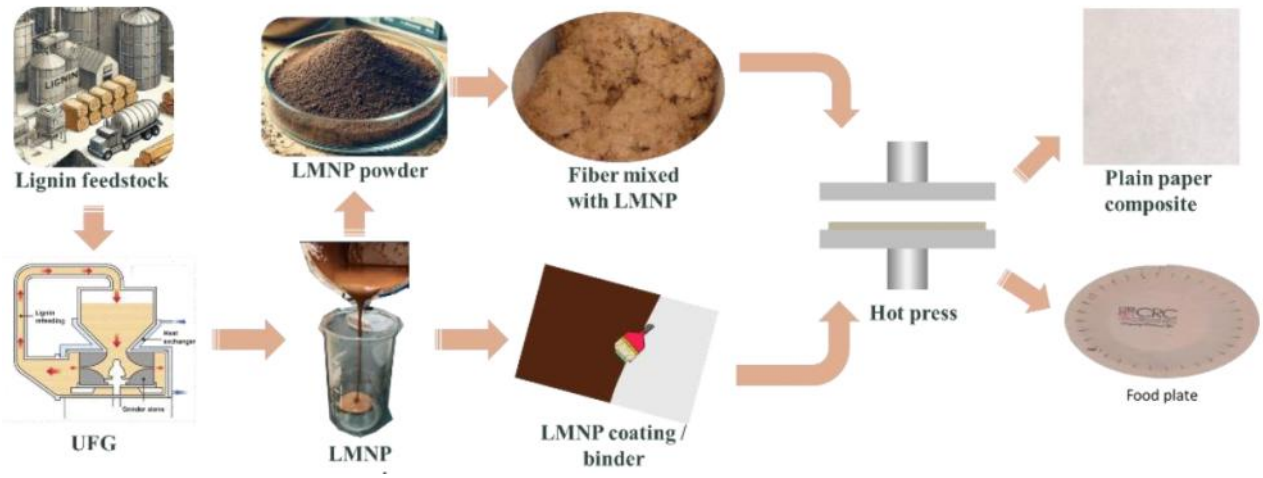
Thesis Title: Innovative Lignin Nanoparticle Manufacturing and Applications in Sustainable Packaging Solutions

Zhongjin Zhou's PhD develops scalable lignin micro/nanoparticle (LMNP) production and translates it into PFAS-free barrier packaging for molded fiber products: Figure 1 summarizes the end-to-end pathway from lignin feedstock through ultrafine friction grinding (UFG) to coatings/binders and hot-pressed tableware; Figure 2 quantifies the key processing tradeoff, showing that colder grinding (0 °C) drives the median particle size (D50) down toward ~100 nm with increasing cycles, while higher temperatures run faster but level off at larger particle sizes; these advances are paired with high-solid grinding (≥20 wt%) that cuts energy demand by ~90% versus conventional low-solid processing. Barrier performance is then engineered via (i) a continuous LMNP film created by hot-pressing a 40 g/m² coating at 3 MPa and 160 °C and (ii) an appearance-preserving "sandwich" design optimized in the ternary plot (Figure 3), achieving >100 min water and >60 min oil resistance at ~65% LMNP / 25% PVA / 10% PLA. Finally, The figure shows a 3D reconstruction of LMNPs filling voids and fiber lumens to act as a dry-forming binder, enabling water- and energy-lean manufacturing with barrier properties comparable to commercial fluorinated papers.

In a nutshell: The thesis demonstrates a scalable, low-energy route to lignin micro/nanoparticles (via high-solids ultrafine grinding) and uses them to create PFAS-free molded-fiber barriers exceeding 100 min water and 60 min oil resistance through optimized LMNP/PVA/PLA "sandwich" coatings.



3D reconstruction of pulp-LMNP composite



Dr Xia Sun, PhD in Wood Science (Forestry), University of British Columbia, Canada, Email

Current workplace: Research Associate at the University of Wisconsin-Madison

Supervisor: Prof. Feng Jiang

Thesis title: Synthesis and applications of dialcohol nanocellulose

This thesis develops **dialcohol nanocellulose (DANC)**, a wood-pulp-derived, chemically tailored nanocellulose made by periodate oxidation followed by borohydride reduction, as a versatile platform to replace petroleum-based plastics with high-performance, biodegradable materials. By tuning the oxidation degree and mapping structure–property links via solid-state and 2D-WISE NMR and XRD, the work shows that partial loss of cellulose crystallinity and the formation of **mobile amorphous domains** are key to improved flexibility and interfacial adhesion.

Leveraging these insights, four DANC-enabled systems are demonstrated: (i) transparent, stretchable cellulose film adhesives with >120% elongation and heat-/water-activated bonding; (ii) high-solids all-cellulose colloidal adhesives (>20 wt%) delivering >3 MPa adhesion across diverse substrates; (iii) a closed-loop recyclable "celluplastic" built from DANC and microfibrillated cellulose, matching commercial plastic toughness and retaining performance over 100 recycling cycles; and (iv) DANC-reinforced deep-eutectic gels forming self-healing ion conductors with >3800% stretchability and high sensing sensitivity. Overall, the thesis shows how controlled cellulose modification can unlock plastic-like performance across adhesives, circular bioplastics, and soft electronics while advancing renewable-material pathways for a circular bioeconomy.

In a nutshell: The thesis shows that chemically tuning wood-pulp nanocellulose into dialcohol nanocellulose (DANC) creates mobile amorphous domains that boost flexibility and adhesion, enabling high-performance biodegradable adhesives, recyclable "celluplastics," and ultra-stretchable self-healing ion-conducting gels as plastic alternatives.

Wood Science and Technology
Journal of the International Academy of Wood Science

Springer

Here is a report for our *Wood Science and Tecnology* (WST) Journal, covering the concluded year 2025:

The table below summarizes key submission-handling figures for 2025 and shows trends in manuscript submissions and published articles across 2023–2025. Overall, the data indicate that the attractiveness of *Wood Science and Technology* within the scientific community continues to grow.

In 2025, we have witnessed a constant increase of submissions by over 40%, compared to 2023. While it is difficult cap submission numbers, capacity constraints are a daily reality: the editorial office workload, the peer-review system depending on voluntary contributions from the scientific community, and the maximum number of pages and articles that can be accommodated per volume. We will therefore discuss with SpringerNature how to best manage these specific developments.

For several years, WST operates as a hybrid journal: **a)** Subscription publishing model – published articles are made available to institutions and individuals who are subscribed to „Wood Science and Technology“ or who pay by view of specific articles. **b)** Open access – when an article is accepted the author(s) or funder(s) pay an article processing charge (APC). The final version of the published article is then free to read for everyone.

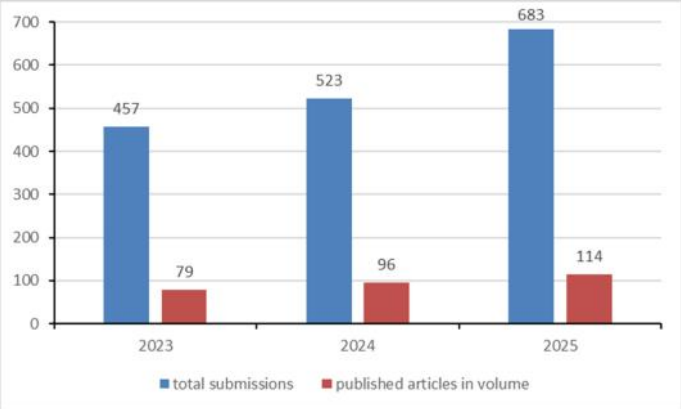
Over the last three years the open access option was granted to 25% (2023), 40% (2024) and 31% (2025) of the published articles.

2025 figures for WST	Number	days
Total submissions	683	
Number of submissions rejected by editors-in-chief / editorial board without going to peer review (Desk reject)	443	
Number of accepted submissions	70	
Number of rejected submissions after peer review	35	
Number of submissions in actual editorial process	135	
Average turnaround time (days) from initial submission to final production decision for accepted submissions		128
Average turnaround time (days) from initial submission to first editorial decision made		19
Average turnaround time (days) from initial submission to reject-decision after peer review		109
Average turnaround time (days) from initial submission to reject-decision based on pre peer review (Desk reject)		20

Wood Science and Technology
Journal of the International Academy of Wood Science

Springer

Performance metrics



WST Journal metrics 2024:

- Journal Impact Factor : 3,0
- 5 years Impact Factor 2024: 3,2
- Journal citation indicator: 1,6

JCR Category Rank Q1 in categories Forestry (16/92) and Material Sci., Paper &Wood (4/24)

Number of Downloads: 270,2 k

Upcoming WST Best Paper Award

The IAWS Executive committee has decided to establish an award recognizing two excellent, outstanding research papers published in a volume of the Academy journal *Wood Science and Technology*. This is intended to reinforce and express the long-standing relationship between the Academy and the SpringerNature journal WST (see Bulletin 2024/2). The first award will honor papers published in volume 59 (January – November 2025) of the journal. The first-place award includes a prize of $2000, and the second-place award includes a prize of $1000 to be shared by the author(s). All authors will receive a certificate signed by the IAWS president.

The awards will be presented at the annual IAWS meetings, beginning with the IAWS 60th Anniversary Conference in Zurich in June 2026. The guidelines for the selection process are currently being discussed by the IAWS Executive Committee will be soon published on the IAWS website and in the next Bulletin.

Klaus Richter, Editor in Chief and IAWS Fellow

Professor Audrey Zink-Sharp retired from Virginia Tech

Our Fellow Audrey Zink-Sharp has retired from Virginia Tech after more than 32 years as a professor of wood science in the College of Natural Resources and Environment. In recognition of her exemplary service, the Virginia Tech Board of Visitors conferred on her the title of professor emerita.

During her career, Zink-Sharp made major research contributions to wood science, including advancing understanding of wood anatomy and supporting the development of more sustainable wood and forest products. At Virginia Tech, she also held key leadership roles in the Department of Sustainable Biomaterials as associate department head, interim department head, and graduate program director, and served as director of the Sustainable Engineered Materials Institute, an interdisciplinary research center.

About 25 years ago, Audrey adapted a popular Wood Magic program initiated by Mississippi State University and created a three-hour program at Virginia Tech for local fourth- and fifth-graders:

„The Wood Magic program ran for 11 years and was focused on the amazing uses of wood, its properties, characteristics, how we use it every day, and how much we use" .

Beyond the university, she served professional societies including SWST, FPS, SEM, and the European Society of Wood Mechanics in elected roles, and was named one of SWST's "Women Ambassadors Creating the Future of Wood Science." She mentored numerous master's and doctoral students as well as postdoctoral researchers.

Zink-Sharp taught a wide range of undergraduate and graduate courses in material structure, wood chemistry and anatomy, quantitative wood anatomy, and wood material science. She earned a BS in Forest and Wood Science and an MS in wood anatomy from Colorado State University, and a PhD in wood products engineering from the State University of New York.

The Academy wishes an enjoyable retirement!

Professor Rupert Wimmer retired from BOKU University

IAWS Secretary Rupert Wimmer is stepping into retirement from BOKU University (Vienna, Austria) at 65, but “slowing down” has never really been his style. Over the years he has built a reputation as a widely respected and internationally connected wood scientist whose work has ranged from the fine details of wood anatomy and how trees react to environmental stress, to much broader questions of how we can turn renewable resources into the materials of the future.

His scientific journey reads like a tour through the modern bioeconomy: from establishing dendrochronology expertise at BOKU University, to exploring natural fibres in high-performance composites, and later diving into biopolymers and novel material concepts based on side streams and residual resources. Whether it involved tailoring fibre properties, developing new processing approaches, or translating ideas into industry-relevant solutions, he consistently kept one foot in solid fundamentals and the other in practical innovation.

A hallmark of his career has been bridging worlds: universities and companies, laboratory insight and industrial reality, established methods and fresh curiosity. Along the way, he became known not only for a strong scientific output, but also for something harder to measure and easy to recognize: he energizes people. Students, colleagues, and young researchers often describe him as a motivator and mentor, someone who can turn a good idea into a research plan and a research plan into a shared adventure.

And retirement? More like a change of rhythm. With new tasks already lined up at Mendel University in Brno and the continued engagement in the International Academy of Wood Science, Rupert Wimmer remains very much in the game, still building bridges and still nudging wood science a little further into the future.

The Academy wishes him prospersous years ahead!

Retirement of our former Secretary Dr. Lloyd Donaldson

After an extraordinary 45-year career, Dr Lloyd Donaldson retired from Scion by end of June 2025, leaving a legacy that combines scientific innovation with an artist's eye. Internationally recognised as a microscopist and wood anatomist, he has changed how researchers see and understand plant materials, revealing both their structure and their beauty.

Lloyd began his career in 1980 with a BSc (Botany) from the University of Auckland and joined the Forest Research Institute (now Scion) that same year. He continued studying while working, completing a Master's in Plant and Microbial Science and a PhD in wood science at the University of Canterbury.

"I haven't spent 45 years looking at the same thing, as you're always doing something new. Once I started microscopy, I was hooked!"

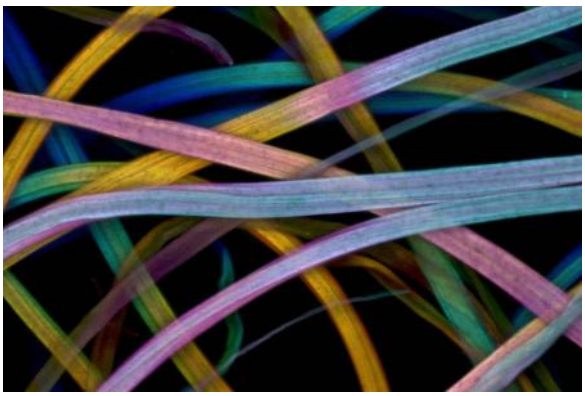
At Scion, access to world-class equipment helped him push the boundaries of imaging. He was among the first to use confocal microscopy in a wood science lab, and in 2010 he pioneered fluorescence lifetime imaging (FLIM) to study lignin. Rather than simply showing where lignin is, FLIM revealed how it interacts within the cell wall, offering a clearer view of wood's internal chemistry. The approach has since been adopted widely across plant and biomaterials research.

Scion team lead Mathias Sorieul credits Lloyd's microscopy with underpinning major advances, including the characterisation of the first CRISPR gene-edited conifers. Over decades, Lloyd also refined sample preparation to produce images that are both scientifically powerful and visually striking. His work has appeared in hundreds of publications, on journal covers, and earned international recognition, including eighth place in the Nikon Small World Photomicrography Competition for an image of cotton fibres.

Lloyd's career has been global, with work and collaborations spanning Europe and Asia, and he remains a strong advocate for travel as a way to sharpen focus and broaden thinking. He has also built a specialist reputation in wood identification, helping trace the timber used in historic canoes from Tahiti and Hawaii.

His contributions have been recognised with numerous honours, including the Science New Zealand Individual Lifetime Achievement Award (2021) and, most recently, Emeritus Scientist status. In retirement, Lloyd will stay active as co-editor-in-chief of the *IAWA Journal* and will continue offering wood identification advice voluntarily. Away from the microscope, he'll likely be found in the forest or garden, still observing the patterns of nature that shaped his remarkable career.

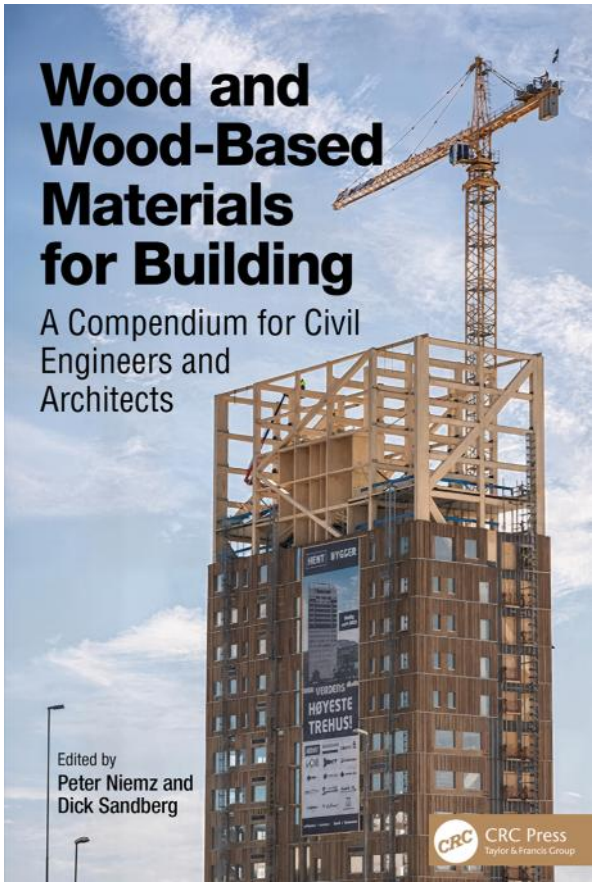
Dear Lloyd, the Academy wishes you an enjoyable retirement!



Lloyd's entry into the 2009 Nikon Small World Photomicrography Competition.

By October of this year, Fellow and IAWS Secretary Rupert Wimmer has taken up a new professorship at Mendel University in Brno, marking an exciting next chapter after his long-standing career at BOKU University in Vienna.

Building on decades of internationally recognized work across wood science, natural-fiber composites, and circular bio-based materials, he now brings his research vision and mentoring experience to strengthen Mendel's profile in developing the Digital Wood Twin Hub. Here, his focus will be on translating fundamental insight into practical digital twin innovations, fostering industry partnerships, and developing new opportunities for students and early-career researchers in the growing bioeconomy. **Congratulations !**



Our Fellows Peter Niemz and Dick Sandberg published another significant book. Wood and wood-based materials are taking centre stage in contemporary architecture - from striking multi-storey structures to innovative urban designs. Understanding their properties is essential to avoid costly mistakes and to apply standards such as Eurocode 5 with confidence. This book offers a clear, practical overview of the key physical and mechanical characteristics of major wood species and wood-based products - including moisture behaviour, elasticity, creep, and strength.

The book also addresses crucial topics such as protection, fire performance, bonding, and non-destructive monitoring of timber structures. Whether you are an architect, civil engineer, or a professional in the wood industry, this is your go-to reference for designing and building with timber. It is equally valuable as an introduction for mechanical engineers, chemists, automation specialists, and vocational students entering the field.

The Editors Peter Niemz (l.) and Dick Sandberg (r.)

IAWS at the 7th International Symposium "Wood Structure, Properties and Quality – 2025"

*In honour of **Boris Ugolev** (Russia, 2025)*

IAWS was represented at the 7th RCCWS International Symposium "**Wood Structure, Properties and Quality – 2025**", held in honour of the 100th anniversary of Professor Boris Ugolev (1925–2015), an outstanding Russian wood scientist, IAWS Fellow and former Academy Board member, and long-standing professor at Moscow State Forest University (now the Mytishchi Branch of Bauman Moscow State Technical University).

The symposium was organised by the Regional Coordinating Council of Wood Science (RCCWS), operating under the aegis of IAWS. It took place in a hybrid format as part of the III International Congress "Russian Engineer" (29–31 October 2025) at Bauman Moscow State Technical University, Russia.

Organisation involved IAWS Fellows and colleagues, including former IAWS President Prof. Xavier Deglise (France) and Fellows Prof. Peter Niemz (Switzerland), Prof. Alfred Teischinger (Austria), Prof. Dick Sandberg (Norway), Profs. Galina Gorbacheva, Victor Sanaev, Sergei Loskutov, and Anatoly Chubinsky (Russia).

The programme covered fundamental and applied wood science, including: morphology, anatomy and physiology; chemical, physical and technological properties of wood; biodeterioration and protection; quality of wood, wood-based materials, products and structures; and standardisation and certification. More than 100 participants attended from Austria, Belarus, Bulgaria, Hungary, Canada, China, Cuba, Norway, Russia, Sudan, France and Switzerland.

Fellows Gorbacheva, Niemz, Deglise, Teischinger, Sandberg and Sanaev reviewed and synthesised Ugolev's extensive scientific and teaching legacy and the impact of his school on wood science and wood physics. Key areas included rheology, drying stresses, non-destructive testing, and broader questions in wood physics and mechanics. In later years, he focused on deformative transformations of wood, particularly the "memory effect" he identified in the 1980s.

Over his career, Ugolev published more than 440 works, including widely used textbooks, monographs on wood deformability and internal stresses, and a wood handbook. Many were republished abroad and remain referenced in wood science and wood physics literature across several countries.

Ugolev was elected an IAWS Fellow in 1991 and served on the IAWS Academy Board from 1998 to 2004. He lectured and presented internationally, maintained scientific contacts with research centres in more than 25 countries, and contributed actively to professional organisations, journal editorial boards, and standardisation efforts. In 2009, he helped organise the first IAWS Plenary Meeting in Russia (with an associated conference) in St. Petersburg and Moscow, where he delivered an Academy lecture titled "Wood as a Natural Smart Material". In recognition of his contributions to wood science, international collaboration and Academy activities, he received the IAWS Distinguished Service Award in 2014.

The 7th RCCWS Symposium in honour of Boris Ugolev was a significant event for the wood-science community. By sustaining tradition, strengthening continuity, and deepening international links, such meetings help expand both fundamental and applied research on wood as a unique natural smart material.

Galina Gorbacheva, Peter Niemz, Xavier Deglise, Alfred Teischinger, Dick Sandberg and Victor Sanaev

Honorable IAWS Fellow Boris Ugolev in 2014

The 8th PTFBPI Conference 2025 in Kuchl, Austria

Founded in Kuchl near Salzburg 15 years ago, the 8th PTFBPI Conference took place on 18–19 September 2025 at the Salzburg University of Applied Sciences campus in Kuchl (https://ptfbpi.fh-salzburg.ac.at/). More than 80 participants from 16 countries across four continents gathered for one and a half days to attend over 50 presentations in six sessions and four keynote lectures, view a poster exhibition featuring 15 contributions, and exchange insights with colleagues from academia and industry.

The conference was organized by the Salzburg University of Applied Sciences, Department of Design and Green Engineering (Kuchl), and received scientific support from the Salzburg Center for Smart Materials 2.0 (SCSM), the University of Tennessee, Knoxville (UT), the Forest Products Society (FPS), the International Union of Forest Research Organizations (IUFRO), and the **International Academy of Wood Science**— with the active Fellows Marius Barbu and Timothy Young. The event continues a well-established series of successful editions in St. Simons Island, Georgia, USA, Freising, Germany, and Kuchl/ Salzburg, Austria.

Key topics included:
- Functionalization of wood & wood-based materials
- Advanced characterization of wood & biomass
- Adhesion and adhesives
- Circular bio-based materials

The program emphasized innovative methods, analytical approaches, and practices supporting process optimization, product development, and circularity in the wood sector. The high scientific standard of the conference was ensured through the oversight of an internationally composed program committee.

Four keynote lectures showcased major advances and pressing challenges for forestry and wood processing. Highlights included efforts to scale technologies for MDF waste valorization and improve recycling pathways, as well as ongoing work on durable fire protection systems for exterior wood applications to enhance safety and service life. Another keynote explored how artificial intelligence, supported by the University of Tennessee's Data Science Institute, can enable smarter and more efficient processing strategies. Finally, speakers addressed the persistent log supply gap and discussed approaches for sustainable resource management amid rising demand and environmental constraints. Taken together, these contributions pointed toward a more sustainable, innovative, and resilient future for the sector.

Overall, PTFBPI 2025 reflected the breadth of expertise across universities, institutes, and specialist communities working on forest products, wood-based composites, circular bio-based materials, and wood-derived renewable energy.

Marius Barbu

Participants of the 8th PTFBPI Conference 2025 in wonderful Kuchl, Salzburg

Wallenberg Wood Science Center (WWSC) International Conference, Stockholm, 2025.

The WWSC international conference took place at the Royal Institute of Technology (KTH) in Stockholm, Sweden. The conference covered wood science and engineering, spanning a wide range of biomass utilization, from lignocellulosic biocomposites to paper electronics. More than 400 scientists attended the conference, and the highlights included excellent plenary talks from, e.g., John Ralph, Craig Hawke, and Murugappan Muthukumar, as well as keynote talks by renowned scientists. The social dinner at Djurgården and the mingle in the city hall were also memorable events from the conference.

Materials Research Society (MRS), Boston, 2025

The MRS was held in Boston, Massachusetts, at their recurring venue, the Hynes Convention Center. The MRS is a significant scientific gathering for materials scientists, and the meeting features leading interdisciplinary research across fundamental and applied areas. There were symposia aimed at the field of cellulose and wood science. The symposium on "Advancements and Applications of Extreme Aspect Ratio Nanomaterials" featured many talks by prominent scientists in the field of cellulose. Wood and cellulose science was also present in the "Advances in Bioinspired and Biohybrid Materials—Design, Manufacturing and Applications", with an aim at more applied materials. This conference hosts over 5000 scientists covering a wide range of scientific topics.

Materials Research Society (MRS), Seattle, 2025

MRS MATERIALS RESEARCH SOCIETY®
Advancing materials. Improving the quality of life.

The conference gathers several thousand researchers across materials science, hosting parallel symposia spanning emerging technologies, sustainability, and advanced functional materials. The Symposium SU02 on sustainable polymers focused on functional wood materials for energy-efficient smart building applications. The session brought together experts in nanocellulose and bio-based materials, offering high-level exchanges on sustainability, circularity, and scalable engineering solutions. The Symposium EL16 compiled presentations on nanogenerators, piezotronics, bio-derived energy devices, and wood-based functional materials for electronic applications.

EPNOE Conference, Sundsvall, 2025

The European Polysaccharides Network of Excellence organised its biannual conference in Sundsvall, Sweden, this year. The small city was the perfect host for the wide range of talks on polysaccharides, which covered everything from bacterial cellulose to lignin research and using wood for new purposes. Highlights included the talks by Prof. Björn Lindman and Prof. Lars Berglund, and the gala at Sundsvall Town Hall. All in all, it was a wonderful experience!

International Conference on Wood Adhesives (ICWA), Vancouver, 2025

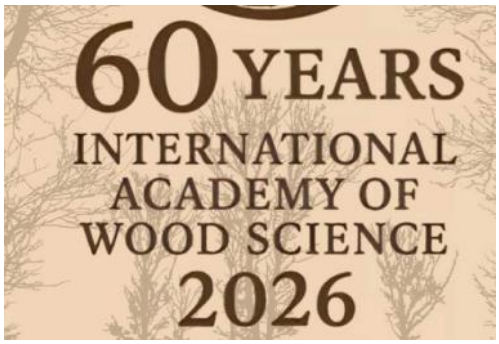
The 2025 International Conference on Wood Adhesives, organized by the Forest Products Society (FPS), was held in October on the scenic campus of the University of British Columbia in Vancouver, Canada. The event brought together over 200 participants from industry, academia, and government, featuring more than 50 technical presentations and panel discussions. The conference covered a broad range of topics related to wood bonding, such as the latest advances in bio -based adhesives, cutting-edge processing and testing methods, digitalisation in the wood sector, and innovations in engineered wood products.

17th International Conference on Materials Chemistry (MC17), Edinburgh, 2025

The 17th International Conference on Materials Chemistry (MC17), organised by the Royal Society of Chemistry, took place in Edinburgh in July 2025. The Edinburgh International Conference Centre hosted around 600 participants (mainly from UK universities) and featured around 150 oral presentations across four parallel sessions, as well as more than 400 posters in a continuously accessible exhibition. Lignocellulosic materials were well represented in several talks and posters, although they were not the primary focus of the conference.

Upcoming Conferences

IAWS 60th Anniversary Conference on 1-4 June, 2026, Zürich, Switzerland



https://iaws60.ethz.ch/

2026 SWST International Convention on 7-12 June 2026, Seoul, South Korea

https://www.2026-swst-kswst.org/

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12th Hardwood Conference on 18-19 June 2026, Sopron, Hungary

http://www.hardwood.uni-sopron.hu/

24th International Drying Symposium on 25-28 August 2026, Paris-Saclay, France

https://ids2026.org/

12th European Conference on Wood Modification, ECWM12 Dresden, Germany, on 26-27 October 2026

https://www.ecwm12.eu/

9th International Scientific Conference on Hardwood Products and Wood Quality Modelling Working Party (IUFRO 5.01.04), on 8—11 September 2026, Stellenbosch, South Africa

https://ischp26.co.za/

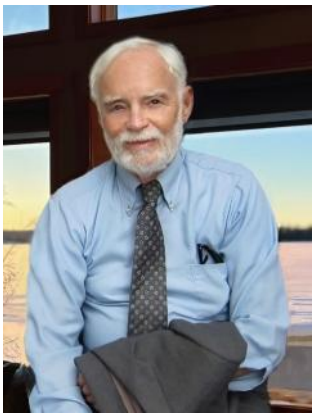
2nd International Conference on Bio-joining (BJ2026), on 29-30 October 2026, Feup, Porto, Portugal

https://www.engeduconferences.com/BJ2026/

Afro-European Wood and Bark Anatomy Conference 2026 on 17-21 November 2026, Johannesburg, South Africa

https://conferences.uj.ac.za/AFEWBA2026/

Obituary Robert M. Kellogg, 1931 – 2025



Robert Macallan "Bob" Kellogg, pioneering wood scientist died peacefully in North Vancouver, British Columbia, on May 7, 2025, at the age of 93. Born on June 7, 1931, Bob devoted his professional life to understanding how trees become timber and how wood quality connects silviculture, processing, and performance in service.

Bob built a distinguished research career with Forintek Canada Corp.'s Western Laboratory in Vancouver, where he served as Research Manager. Early work such as *Variation in the Cell-Wall Density of Wood* (1969) helped establish him as a leading authority on the physical properties of wood cell walls and their implications for lumber and fibre utilization. His influential article *Coming to Grips with Wood Quality* (1982) guided foresters and tree breeders to consider wood density and quality traits alongside growth and volume, shaping how "wood quality" is used as a unifying concept in forest management.

He led Forintek's Douglas-fir Task Force and edited the widely cited volume *Second-growth Douglas-fir: Its Management and Conversion for Value (SP-32)*, which integrated knowledge on silviculture, juvenile–mature wood transition, yields, pulp properties, and structural performance. His work on forest management and end-product quality, and his co-editing of *Structural Use of Wood in Adverse Environments*, helped bridge fundamental wood science with practical engineering and product development.

In recognition of his lasting contributions, Bob was elected a Fellow of the International Academy of Wood Science and served as President of the Society of Wood Science and Technology (1974–75). Colleagues remember him as analytically rigorous yet modest, a clear thinker who could explain complex relationships—between juvenile and mature wood, density and performance, forest practices and product value—and a generous mentor to younger scientists.

Bob's scientific achievements were matched by his devotion to his family. He is lovingly remembered by his wife Betty, his daughters Kim, Kerry, Chris, and Julie, his five grandchildren, and his ten great-grandchildren. For all his professional recognition, he considered his family his greatest accomplishment.

At his request, no formal service was held for Bob. Those wishing to honour his memory are invited to do something he cherished: plant a tree, tend a garden, walk in the woods, or continue the work of using wood wisely and responsibly.

Rupert Wimmer

Journal Ranking—Wood Science & Technology (Google Scholar, by December 31, 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	h5-median
1.	Cellulose	80	99
2.	Journal of Bioresources and Bioproducts	50	122
3.	BioResources	40	54
4.	Wood Science and Technology	33	42
5.	Journal of Renewable Materials	32	56
6.	European Journal of Wood and Wood Products	31	45
7.	Journal of Wood Science	28	41
8.	Wood Material Science & Engineering	28	38
9.	Holzforschung	26	34
10.	Journal of Textiles, Coloration and Polymer Science	24	38
11.	Maderas. Ciencia y Tecnología	19	25
12.	International Association of Wood Anatomists Journal	18	29
13.	Wood Research	17	24
14.	Nordic Pulp & Paper Research Journal	17	23
15.	Journal of Wood Chemistry and Technology	16	25
16.	Cellulose Chemistry and Technology	16	20
17.	Floresta e Ambiente	15	18
18.	Advances in Bamboo Science	14	25
19.	Forest Products Journal	14	20
20.	International Wood Products Journal	13	18

Country	Fellows	Females
Australia	17	1
Austria	17	3
Bangladesh	1	0
Belgium	2	0
Brazil	5	1
Canada	47	4
Chile	4	0
China	41	6
Costa Rica	1	0
Czechia	2	0
Denmark	5	0
Egypt	1	0
Ethiopia	1	1
Finland	18	3
France	37	7
Georgia	1	0
Germany	46	1
Greece	3	0
Hungary	1	0
India	10	0
Indonesia	1	0
Ireland	0	0
Israel	4	0
Italy	5	2
Japan	59	1
Kenya	0	0
Korea, South	8	0
Latvia	2	0
Malaysia	2	1
Mexico	2	1
Netherlands	2	1
New Zealand	16	1
Norway	4	0
Philippines	3	0
Poland	7	0
Portugal	1	0
Romania	5	1
Russia	16	2

Country	Fellows	Females
Slovakia	3	0
Slovenia	3	3
South Africa	5	1
Spain	2	2
Sweden	35	3
Switzerland	13	2
Taiwan	5	1
Turkey	1	0
Ukraine	1	0
United Kingdom	9	0
USA	156	8
Some statistics		
Total	630	100%
Deceased Fellows	211	33%
Fellows alive	**421**	67%/100%
Active Fellows	283	67%
Lifetime Fellows	173	41%
Retired Fellows	234	56%
Male Fellows	365	87%
Female Fellows	55	13%

Average age	Years
All Fellows	73
Male Fellows	74
Female Fellows	66

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 2025
Jinzhen CAO, China
Lihui CHEN, China
Stephen J. EICHHORN, Great Britain
Mark HUGHES, Finland
Joseph JAKES, USA
Jan-William VAN DE KUILEN, Germany
Carsten MAI, Germany
Orlando ROJAS, Canada
Yan YU, China
Kenji UMEMURA, Japan
Feng JIANG, Canada
Clemens ALTANER, New Zealand
Dennis JONES, Sweden
Zhaoyang XU, China

Fellows elected in 2024
Marius BARBU, Austria
Alan CRIVELLARO, Italy
Notburga GIERLINGER, Austria
Lidia GURAU, Romania
Hoon KIM, USA
Fangong KONG, China
Ahmed KOUBAA, Canada
Meng-Zhu LU, China
Roger MEDER, Australia
Fidel Alejandro ROIG, Argentina
Zhaohui (Julene) TONG, USA
Pradeep VERMA, India
Wenji YU, China

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 deceased in 2025
T. Kent Kirk, USA
Robert M. Kellogg, Canada

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

Affiliate Members

Affiliate Members shall be educational, research, industrial, or governmental organizations and individuals, who are actively engaged in carrying out or promoting research in wood science or the enhanced utilization of wood on the basis of scientific or technological principles and practices. The importance of Affiliates to the Academy is two-fold:

• 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.

AFFILIATE MEMBERS LIST

- BAUMAN MOSCOW STATE TECHNICAL UNIVERSITY/MYTISHCHI BRANCH , Russia, www.bmstu.ru/en
- BIOPRODUCTS INSTITUTE, UBC, Canada, https://bpi.ubc.ca/
- CHINESE ACADEMY of FORESTRY (CAF), China, www.caf.ac.cn
- CIRAD FORETS (French Agricultural Research Center for International Development), France, www.ur-bois-tropicaux.cirad.fr
- DEPARTMENT OF WOOD SCIENCE – UBC, Canada, www.wood.ubc.ca/
- ESB- ECOLE SUPÉRIEURE DU BOIS, France, www.ecoledubois.com
- FRAUNHOFER-INSTITUTE OF WOOD RESEARCH, Germany, www.wki.fraunhofer.de
- HOLZFORSCHUNG MÜNCHEN, Germany, www.holz.wzw.tum.de
- INTERNATIONAL ASSOCIATION OF WOOD ANATOMISTS, www.iawa-website.org
- INTERNATIONAL CENTRE OF BAMBOO AND RATTAN, China, www.icbr.ac.cn/en
- INTERNATIONAL WOOD CULTURE SOCIETY, USA, www.iwcs.com
- JOHANN HEINRICH VON THÜNEN INSTITUTE, Germany, https://www.thuenen.de/new/
- KOREAN SOCIETY OF WOOD SCIENCE & TECHNOLOGY, Korea
- KYOTO UNIVERSITY, Japan, www.rish.kyoto-u.ac.jp
- MISSISSIPPI STATE UNIVERSITY, USA, www.cfr.msstate.edu/forestp
- NATIONAL INSTITUTE OF FOREST SCIENCE, Korea,
- OREGON STATE UNIVERSITY, USA, www.woodscience.oregonstate.edu
- RISE - RESEARCH INSTITUTES OF SWEDEN, Sweden, www.ri.se/en
- SCION, New Zealand, www.scionresearch.com
- SEOUL NATIONAL UNIVERSITY, Republic of Korea www.adhesion.org
- SOUTHWEST FORESTRY UNIVERSITY, China
- SUNY ESF—STATE UNIVERSITY OF NEW YORK, USA, www.esf.edu
- TECHNICAL UNIVERSITY in ZVOLEN, Slovakia, www.tuzvo.sk/en
- UNIVERSITE LAVAL, Canada, www.xylo.sbf.ulaval.ca
- UNIVERSITY OF GÖTTINGEN, Germany, www.holz.uni-goettingen.de
- UNIVERSITY OF MINNESOTA, USA, www.bbe.umn.edu
- US FOREST PRODUCTS LABORATORY, USA, www.fpl.fs.fed.us
- VIETNAM NATIONAL UNIVERSITY OF FORESTRY, HANOI, VIETNAM, Vietnam, www.vnuf.edu.vn
- WOOD TECHNOLOGY INSTITUTE, Poland, www.itd.poznan.pl
- ZHEJIANG AGRICULTURAL and FORESTRY UNIVERSITY , China, https://en.zafu.edu.cn/

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