

ISSUE

01

June 2024

# IAWS Bulletin



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## Message from the President

Dear Fellows of the Academy,



while we witness nature's resplendent renewal, our esteemed institution brims with vibrancy and momentum. With great pleasure, I announce the induction of ten distinguished individuals from diverse corners of the globe—China, France, Germany, Sweden, and the United States—into our esteemed fellowship. Their selection bespeaks not only their singular scientific acumen but also their seminal contributions to the wood and fiber science and technology field. Their presence among us heralds a new chapter of innovation and collaboration, auguring remarkable strides in our collective pursuit of scholarly excellence.

Furthermore, we are starting the process of nominations for the appointment of new fellows for the year 2024, an endeavor that underscores our unwavering commitment to fostering academic distinction and intellectual synergy. Details regarding the nomination process are provided in this newsletter (and our webpage) for your perusal.

In parallel, the imminent transition of our Academy Board warrants acknowledgment and gratitude towards those luminaries—Fellows Cufar, Du, Park, and Schimleck—whose steadfast stewardship has been instrumental in guiding our institution's trajectory over the past six years. We reserve a special commendation for Fellow Cufar, whose tenure as Board Chair and Executive Committee (EC) member epitomizes tireless dedication and sagacious leadership.

Let us warmly welcome the incoming Board members—Fellows Goodell, Koch, Mathew, and Xu—who assume their responsibilities on June 2, 2024, with the promise of invigorating our governance with fresh perspectives and sagacity.

Moreover, it is with a sense of anticipation that we look forward to the forthcoming International Association of Wood Science special session, embedded within the framework of the 67th International Convention of the Society of Wood Science and Technology, slated to convene in Portoroz, Slovenia, from June 30 to July 5. This auspicious occasion shall witness the convergence of leading minds engrossed in cutting-edge research and scholarly exchange discourse. I ardently anticipate the privilege of encountering and engaging with fellow luminaries amidst Slovenia's picturesque landscapes and blue seas.

May this season of blossoms and renewal imbue us all with renewed vigor and scholarly zeal as we continue our noble pursuit of knowledge and innovation!

*Stavros Avramidis*

## Message from the Editor

Dear Fellows of the Academy,



to all who are reading the first issue of our Bulletin in 2024, we acknowledge that it has been released later this year than usual. Typically, we publish spring and autumn issues, and we aim to maintain that schedule.

We would like to thank everyone who provided us with information on retirements, newly published books, newly adopted positions, received awards, and more. Such contributions help us stay connected, which is crucial for a global community like ours. This also reflects the vitality of wood science, and there is much room for growth.

I would like to emphasize that we should speak up more often and communicate better with people. Wood, as the most important sustainable material, is playing a crucial role in today's society, and wood science is instrumental in driving progress. If you have any ideas on how to be more active, more innovative, and better at caring, please let us know.

*Rupert Wimmer, Secretary*

## New Fellows 2023

Ten new fellows have been elected from the 2023 election. We welcome to the academy the following new fellows:

**Prof. [Stergios ADAMOPOULOS](#)**, Swedish University of Agricultural Sciences, Sweden

**Prof. [Dilpreet BAJWA](#)**, Head of Department, Mechanical and Industrial Engineering, Montana State University, USA

**Prof. [Charlotte Gjelstrup BJORDAL](#)**, Faculty of Science, University of Gothenburg, Sweden

**Prof. [Andreas KRAUSE](#)**, Director of the Thünen Institute of Wood Research, Germany

**Prof. [Kecheng LI](#)**, Department of Chemical and Paper Engineering, Western Michigan U, USA

**Prof. [Shengquan LIU](#)**, Dean, Forest and Landscape & Architecture College of Anhui Agricultural University, China

**Prof. [Lee Ann NEWSOM](#)**, Pennsylvania State University, USA

**Prof. [Yann ROGAUME](#)**, Director, LERMaB ENSTIB – University of Lorraine, France

**Prof. [Markus RUEGGEBERG](#)**, Institute of Forest Utilization and Forest Technology, TU Dresden, Germany

**Prof. [Ge WANG](#)**, International Center for Bamboo and Rattan (ICBR), China

## New Fellows 2023

**Prof. Stergios ADAMOPOULOS**, Swedish University of Agricultural Sciences, Sweden



### Curriculum Vitae

Professor Stergios Adamopoulos was born in Kozani, Greece. He studied forestry at the Aristotle University of Thessaloniki, where he earned his degree in 1995, followed by his PhD in wood science in 2001. Following his military service (2001-2003), he was awarded a Marie Curie postdoctoral fellowship, focusing on the fiber analysis of furnish materials used for packaging papers (2003-2004, Valencia, Spain). From 2004 to 2014, he held various academic positions at universities in Greece and Germany. Since 2015 he has been a professor in Sweden, initially at Linnaeus University (2015-2020), and since 2020 at the Swedish University of Agricultural Sciences (SLU).

### Major awards and honors, visiting positions, memberships, editorial boards and more

Science 2020 Professor at SLU, Dept of Forest Biomaterials and Technology, Uppsala, Sweden; 2015-2020 Professor, Linnaeus University at the Department of Forestry and Wood Technology, Växjö, Sweden; 2006-2014 Assistant Professor & promotion to Associate Professor at TEI of Larissa, Department of Forestry and Wood & Furniture Design, Karditsa, Greece; 2009-2012 Guest Professor at Georg-August Universität Göttingen, Germany; 2004-2010 Guest Professor at Democritus University of Thrace, Nea Orestiada, Greece; 2003-2004 EC Marie Curie Postdoctoral fellow at AIDIMA, Valencia, Spain; Reviewer for the Independent Research Fund Denmark, Denmark; Editorial board member for Wood and Fiber Science, Wood Mat Sci & Engineering, Molecules; Deputy Coordinator of IUFRO Unit 5.01.00 – Wood and fibre quality; Member of IAWA – International Association of Wood Anatomists; Management Committee member in several EU COST Actions.

### Principal wood science achievements

Prof. Adamopoulos has an extensive research portfolio and a prolific publication record within wood science. His PhD thesis (2001) significantly advanced our understanding of the variability in anatomical characteristics and wood properties of black locust, both within and between trees. A major focus of his research has been on the variation and quality of wood, primarily in hardwood species. His studies in this area have elucidated relationships between growth rings, cell dimensions, and wood density. He has also explored methods for defining juvenile-mature wood transition zones and predicting wood properties through non-destructive estimation in natural stands and plantations.

As a Marie Curie postdoctoral fellow (2003-2004), Prof. Adamopoulos developed characterization and classification methods for heterogeneous furnish sources used in paperboard making, utilizing fiber analysis techniques. He also collaborated with industry partners on the development of performance prediction tools for corrugated board (EC FP6 project ModelPack, 2006-2009). During his tenure at the University of Göttingen and subsequent years, he made significant contributions to wood modification research, addressing issues such as the effects of anatomical features and topochemistry, gluing, cracking, and grading. Additionally, he proposed novel methods for modifying low-quality recycled fibers to produce water-resistant packaging papers (EC FP7 project Fibre+, 2012-2015).

Since becoming a Professor in Sweden in 2015, Prof. Adamopoulos has made major contributions to the field of bio-based adhesives, including two reviews, a patent on oxidized starch systems, and research on lignosulfonates, liquefied biomass, emissions, and more. He has also worked on composites using industrial side streams and inorganic binders. He currently leads the Vinnova Competence Centre on bio-adhesives (2023-2028) in collaboration with major industries in Sweden and coordinates the EC Horizon project EcoReFibre (2022-2026), which aims to recycle MDF boards at TRL7.

## New Fellows 2023

**Prof. Dilpreet S. BAJWA**, Head, Mechanical and Industrial Engineering, Montana State University, USA



### Curriculum vitae

Dr. Dilpreet Bajwa is a Professor and head of the Department of Mechanical and Industrial Engineering at Montana State University, USA. Before academia, he spent 13 years in R&D roles at International Paper, Masonite Corp., Epoch Composites, and Greenland Composites. He has also been an adjunct professor at the University of Arkansas and a professor at North Dakota State University. Dr. Bajwa earned his doctorate in Wood Science and Engineering from the University of Illinois at Urbana-Champaign in 2000. His research focuses on developing sustainable, multifunctional materials from renewable feedstocks. Current projects include using nanocellulosic materials to strengthen wood, synthesizing bio-based thermochemical energy storage materials, creating safe fire-retardant systems for polymer composites, and processing and characterizing biopolymers and natural fiber composites.

### Major awards and honors, visiting positions, memberships, editorial boards and more

Since 2021, as department head, he is providing visionary leadership to academic and research programs, for 1,450 students and 43 faculty members; R&D Director & other leadership positions – International Paper, Masonite Corp.; Greenland Composite Fulbright Specialist Fellowship – U.S. Department of State, USA; In 2020 Outstanding Faculty Adviser (2017) and Diverse Talents Awards (2018) - North Dakota State Univ. Leadership roles: President - Association for Advancement of Industrial Crops (AAIC), 2022, Board Member, Co-Chair (Biofiber polymer Composites Conferences); Proposal Reviewer for National Science Foundation, USDA, Dept. of Energy, National Research Council, Canada, Fondazione Cariplo, Italy, Kuwait Foundation, Ministry of Science and Technology, Israel; Editor-in-Chief – Industrial Crops and Products Journal; Consultant for Space Age Synthetics, Bridgestone USA, Masonite Corporation, USDA Memberships – Forest Products Society, American Chemical Society, Wood and Fiber Science, AAIC.

### Principal wood science achievements

Prof. Bajwa's contributions to wood science began in 1996 with his work on modeling the aging behavior of railroad cross-ties. Starting his career at International Paper Company in 2000, he focused on wood-plastic composites. At Masonite Corporation, his research evaluated the durability and performance of medium and high-density particleboards for door skins and siding materials. In 2005, he transitioned to academia, researching natural fibers, bioresins, and biobased products. Notably, he developed a soy-based adhesive, Epoxidized sucrose soyate, for wood products. In the last decade, his research has shifted to the synthesis, functionalization, processing, characterization, and application of nanocellulosic materials and composites. This work includes enhancing the strength and durability of low-quality wood, improving the energy density of salts, developing cellulose-based fire retardants, and designing biodegradable mulches. Bajwa has secured over \$35 million in federal funding from agencies including USDA, NSF, NIST, DOE, and the US Army.

His research has led to the development of new materials, four invention disclosures, and numerous high-impact publications. He has presented at prestigious venues such as the Gordon Research Conferences, Glenn NASA Research Center, and USDA National Center for Agricultural Research. Prof. Bajwa has published 100 refereed journal articles and delivered 13 keynote/invited talks at international conferences. In recognition of his impactful research on natural fibers, he received the 2021 Outstanding Researcher Award from the Association for the Advancement of Industrial Crops.



## New Fellows 2023

**Prof. Charlotte G. BJORDAL**, Dept of Marine Sciences, University of Gothenburg, Sweden



### Curriculum vitae

Dr. Bjordal is a Professor at the Department of Marine Sciences, University of Gothenburg, Sweden. Between 2013 - 2015, she was Professor at the Department of Conservation (Cultural Heritage), University of Gothenburg, Sweden; between 2011 - 2013 she was Lecturer and Associate professor at the Department of Conservation, University of Gothenburg; 2005 - 2011: Guest and then senior scientist in wood technology, SP Swedish technical research institute, (RISE), Stockholm; 2000 - 2005 Research scientist at the Department of Wood Science, SLU, Uppsala, Sweden. She earned a Bachelor degree in 1986 „Conservator of cultural heritage objects“, The Royal Danish Academy of Fine Arts, (Denmark). In 2000, Dr. Bjordal was awarded a PhD for „Waterlogged archaeological Wood – Biodegradation and its implication for conservation“, at the Department of Wood science, Swedish University of Agricultural Sciences, SLU (Sweden). In 2009: Reader (Docent), at the Department of Building material, KTH, (Sweden).

### Major awards and honors, visiting positions, memberships, editorial boards and more

Project manager and coordinator of EU FP7 “Wreckprotect” (2009-2011) Grant agreement ID: 226225; Steering committee member “Cure the Oseberg”, University of Oslo, Norway, 2012-2015, 2016- 2019; National member of reference group “Archaeological wood conservation and chemistry”, Swedish National Heritage Board, 2013 – 2016; COST action IE 0601, MC member, Wood science in Cultural heritage, (2008–2011). CEN TC346 member, working group waterlogged archaeological wood (2012 – 2022). EU project SASMAP (2012-2015) received the EUROPA NOSTRA award 2016. Major positions at faculty level: Committee for Appointment of lectures and professors, 2015 – 2018. Research Board 2012 – 2015. Committee for approval of readers, 2012 – 2015; Infrastructure Board (Faculty of Science), GU 2011-12. Major position at Departmental level: Director of the Conservation program (2011-2013); Member of departmental Council, Dept of Marine Sciences (GU), 2015 – 2021.

### Principal wood science achievements

Since the start of her career, her research focus and commitment have been on waterlogged archaeological wood and its microbial degradation. Her dissertation in 2000, a pioneering transdisciplinary work in wood science, has served as a crucial platform for wood conservators worldwide, enhancing the understanding of archaeological wood as a precious material and its degradation by specialized bacteria. Over time, her research expanded to include degradation processes related to shipwrecks, foundation piles, preservative-treated wood, wood in landfills, and wood submerged in extreme environments like the cold Antarctic waters. With an extensive background as a wood conservator, her goal and dedication have always been to preserve wooden cultural heritage objects for future generations. This dedication led to her involvement in three EU FP-funded projects, including WRECKPROTECT, which she solely initiated and coordinated.

Her original, in-depth research has substantially contributed to the development of new wood conservation methods and long-term preservation techniques for in-situ preservation of shipwrecks at marine and terrestrial sites. She has also advanced the understanding of the interaction between wood, iron, and sulfur in the sea and contributed to the protection of foundation piles supporting historic buildings. Some of her findings have even been incorporated into climate modeling.

Additionally, her interest in basic research has led to crucial new knowledge about wood degradation by erosion bacteria. This includes understanding their growth, 3-D morphological cell wall fingerprints, cultivation and isolation techniques, biochemical transformation of wood components, biotopes, and genetic identity. By combining wood science, microbiology, archaeology, and conservation, her innovative research has greatly inspired the development of technologies for the adequate conservation and preservation of treasured ancient wooden objects of cultural and historical significance.

## New Fellows 2023

**Prof. Andreas KRAUSE**, Head, Thünen Institute of Wood Research, Germany



### Curriculum vitae

Dr. Krause is Head of Institute Thuenen-Institute for wood research. Previously, he was as Professor for Wood Physics and Processing Technology at University Hamburg, Germany; Between 2007 – 2013 he was a Postdoc at the Georg-August University Göttingen, Germany; In 2007 he earned a doctorate from the Georg-August University Göttingen, Germany; between 1999 – 2001 he did a traineeship as forestry manager, with management of state forests, In 1999 he received a Diploma degree in forestry science from the Georg-August-University Göttingen.

### Major awards and honors, visiting positions, memberships, editorial boards and more

Editorial board: European Journal of Wood and Wood Products, Fibers (MDPI); In 2015: Best Lecture Award, Study Program: Wood science at University Hamburg; In 2007: Schweighofer Prize in the category of wood product innovations, Schweighofer Foundation, Austria, In 2004: Ron Cockcroft Award, International Research Group on Wood Protection (IRG), Stockholm/Sweden.

### Principal wood science achievements

His major achievements are in four different research areas: (1) Exploration of the ultrastructure of wood – physical properties relation by using the synchrotron source at nano beamline (DESY, Germany), for measuring swelling and shrinking of wood; (2) Understanding wood-water relations: Showing that there are no porous structure in wood cell wall at all moisture contents and showing linearity of water content vs swelling at all stages in sorption by using newly developed equipment, (3) Developing new types of wood thermoplastic composites and understanding of mechanism of different composites, and (4) Developing and upscaling of a wood modification process based on DMDHEU.



## New Fellows 2023

**Prof. Kecheng LI**, Department of Chemical and Paper Engineering, Western Michigan University, USA



### Curriculum vitae

Dr. Li is a Professor at the Department of Chemical and Paper Engineering, Western Michigan University, USA; Before, he was Professor (2008-2016), Associate Professor (2004-2008), and Assistant Professor (2002-2004), at the Department of Chemical Engineering, University of New Brunswick, Canada;. He was also a lecturer (1988-1997) at the Department of Pulp and Paper Engineering, Shaanxi University of Sci Technol, China.

He earned a PhD in 2003, in Chemical Engineering, from the University of Toronto, Canada; a M.Sc. In 1988, and a B.Sc., Eng. In 1985, Pulp and Paper Engineering, Shaanxi University of Science and Technology, China;

### Major awards and honors, visiting positions, memberships, editorial boards and more

TAPPI Fellow (2023); Inaugural Paper Technology Foundation Inc. Endowed Professor at WMU (2022); Research Excellence Awards-largest total funding to an individual", WMU (2021); Paper; Technology Foundation "Foundation Fellow Award" (2020); Fellow of Royal Society of Chemistry, UK, (2016); "University Research Scholar", UNB (2016); "Douglas Attack Best Paper Award", Pulp and Paper Technical Association of Canada(2016); "Future Leaders Award" by Natural Resources Canada (Research Project Supervisor), (2016); "University Research Scholar", UNB (2016); "University Merit Award", UNB(2008); "Speakers Award", PACWEST Conference(2008); "Best Technical Paper Award-second place", PACWEST Conference(2008); Adjunct Professor, University of Waterloo (2016); TAPPI International Research Management Committee; Pulp & Paper Education & Research Alliance committee; 2023 REMADE research proposal review panel; 2017 CFI John R. Evans Leaders Award Committee; NSERC Discovery Grant Evaluation Group Committee, 2015-2018; Program Committee, REMADE Circular Economy Tech Submit & Conference Washington DC, 2023; Program Committee, Intl Sym on Bioplastics, Biocomposites and Biorefining, 2018; Program Committee, IACChE /CSCChE 2018; Co-chair, Lignocellulosic Biorefinery and Bioproducts Symposium, IACChE 2018; Co-chair, Forest Biorefining Symposium at CSCChE 2013; Chair, Best Paper Awards Judge Committee Executive Editor, Journal of Bioprocess Engineering & Biorefinery, USA; Editorial Board Member, Journal of Chemical and Process Engineering, USA; Guest Editor, Journal of Science.

### Principal wood science achievements

Dr. Li has 30+ years of experience in wood and biomass related research fields. His areas of research interests include pulp and paper, biorefining for biofuels, nanocellulose, biochemicals; enzyme technologies for industrial processes; and state-of-the-art surface and nanoscale techniques. Dr. Li has served as the PI and project leader of a number of research projects which are funded in USA by DOE REMADE, DOE EERE, Graphic Packaging International WestRock, New-Indy, Novozymes, and previously in Canada by Canadian Foundation for Innovation, Natural Sciences and Engineering Research Council of Canada, Atlantic Innovation Fund (AIF), New Brunswick Innovation Fund (NBIF), and by a number of industrial leaders such as Resolute Forest Products, Andritz, West Fraser, Smurfit-Stone Container, UMP-Kymmene, Tembec, Millar Western, and Irving Paper. Dr. Li and his students have authored 120+ refereed journal papers and book chapters, and delivered numerous conference presentations. He has also developed more than ten proprietary technologies and holds six US patents. Dr. Li has been invited by universities and research institutes to give seminars in e.g., Australia, Canada, China, Finland, Japan, Korean, and USA, and by conferences and symposiums to deliver invited and keynote speeches (40+). He has served a regular reviewer for 50+ academic journals in North America and Europe in bioenergy, chem-eng, materials science, nano-technologies, surface sciences,

## New Fellows 2023

**Prof. Shengquan LIU**, Dean, Forest, Landscape & Architecture College of Anhui Agricultural University (AAU). China



### Curriculum Vitae

Dr. **Shengquan LIU** is a Professor at the Forest and Landscape & Architecture College of AAU; Between 1996 and 2001 he was an Associate Professor in Forest and Landscape & Architecture College of AAU; 1992.7-1996.9: Lecturer in Forest and Landscape & Architecture College of AAU; 1994.9-1997.9. Ph.D. of wood science and technology in Chinese Academy; 1989.9-1992.7. Master of wood science in Anhui Agricultural College; 1984.8-1986.7. Diploma of Forestry in Anhui Agricultural College.

### Major awards and honors, visiting positions, memberships, editorial boards and more

In 2020, he won the Anhui Science and Technology Award Second Prize; In 2010: Award of Anhui Youth Science and Technology; Award of China Forestry Youth Science and Technology in 2007; Ministry of Education New Century Talents in 2007; Award of IFS (International Science Foundation) Jubilee in 2006; Award of National Science and Technology (2004, 1999), Dean of School of Forestry & Landscape Architecture (2015.1-Now); Dean of School of international Education (2010.1-2014.12); He was Vice dean of the School of Forestry & Landscape Architecture (2006-2009). Since 2021 he is Deputy Chairman of the wood science and technology of the China Forestry Society; Since 2020, Deputy Chairman of Anhui Forestry Society; Director of Key Lab. of State Forestry and Grassland Administration on Wood Quality Improvement and High Efficient Utilization, National Innovation Alliance on Characteristics Forest Resources Conservation and Value-added Exploitation of the Dabie Mountains (2018.1-Now); Academic and Technical Leaders of Anhui Province (2010); Deputy Chairman of the Biomass Materials Branch of the China Forestry Society (2009.1-Now); Chairman of the Forest Products Industry Association of Anhui Forestry Society (2006.1-Now). Advanced visitor at the wood research team of Lakehead University of Canada (2013.10-2014.4); Visitor at wood research institute of Kyoto University of Japan (2008.10-2009.4); Visitor at LMGC of CNRS in Montpellier of France (2004.9-2005.9); Postdoctoral researcher at LMGC of CNRS; IAWA Member; Member of the 6th and 7th "Forestry Engineering" Discipline of the Academic Degrees Committee of the State Council; Members of Association of Forestry science, Wood science and Technology, and others. Editorial boards of journal of wood industry, and journal of forest engineering in China. Reviewer of Journal of Tropical Forestry, Journal of Forestry Science, Wood Industry, and Forest Engineering in China.

### Principal wood science achievements

For the past decades, Dr. Liu has been dedicated to teaching and researching wood anatomy, wood improvements, woodprocessing, and wood properties in relation to silviculture and utilization. Dr. Liu revealed the effects of different clones, site conditions, and cultivation measures on wood properties, veneer, and pulp quality of 27 poplar plantations and obtained the genetic variation patterns of poplar clones. He proposed the optimum cultivation measures and rapid measuring methods of wood properties in poplars suitable for veneer and pulp. He discovered the distribution of growth stress (pines, poplars, eucalyptus, beeches) and auxin (pines, poplars) in normal and reaction wood, and revealed their relationships between growth stress and growth characters, cultivation measures, wood properties and formation mechanism for reaction wood. He developed the new function floors and materials for poplar plantation, which has been produced in several enterprises. He established a Key Lab and an Innovation Alliance of the State Forest Bureau, promoting collaborative innovation between industries and his college.

## New Fellows 2023

**Prof. Lee Ann NEWSOM**, Pennsylvania State University, USA



### Curriculum Vitae

Dr. Newsom is an Associate Professor emeritus at the Department of Anthropology at the Pennsylvania State University, USA. Between 2016 and 2021, she was Professor at the University of Florida, Humanities Department, and between 2002 and 2016 an Associate Professor of Anthropology at the Department of Anthropology, PSU. She was Curator at the Center for Archaeological Investigations, Southern Illinois Univ., Carbondale; also Adjunct Asst. Professor (promoted to Assoc.), Anthropology and Plant Biology departments,

between 1993-2001. She holds a Bachelor and a Masters degree in Anthropology from the University of Florida, and did also her PhD in Anthropology at the same university.

### Major awards and honors, visiting positions, memberships, editorial boards and more

She is a Fellow, class of 2002, John D. & Catherine T. MacArthur Foundation (<http://www.macfound.org/fellows/696/>); received the Cozzarelli Prize in Applied Biological, Agricultural, & Environ. Sciences, 2016, Graham et al. (PNAS 2016) ([www.pnas.org/site/misc/cozzarelliprize.xhtml](http://www.pnas.org/site/misc/cozzarelliprize.xhtml)); Then, National Award, Cuban Academy of Sciences, 2014 (with 20 collaborators); Barbara Lawrence Award, Society of Ethnobiology, 1992. IAWA Working Committee on softwoods, 1998-2003; Plant Macrofossils Workgroup, NEOTOMA Paleocommunity Database (<http://www.neotomadb.org/>), 2010-2017. Society for American Archaeology, Fryxell Award Committee (2013-2016), chair (2015-16). -Assoc. Editor, Int. J. Wood Culture, Brill, 2022-on; Assoc. Editor, Vegetation History & Archaeobotany, SpringerVerlag, 2008-on; Direct Submission Editor, PNAS ([www.pnascentral.org](http://www.pnascentral.org)), 2014; Co-Editor, J. Ethnobiology, Society for Ethnobiology, 2013-2015; Assoc. Academic Ed., PLoS ONE, Public Library of Science, 2011-2014

### Principal wood science achievements

Dr. Newsom is an archaeobotanist specializing in archaeological and paleontological wood. Her research integrates wood anatomy, wood science, archaeology, and anthropology, with a particular focus on the Caribbean and adjacent regions. Her expertise is built on extensive experience with ancient wood of various ages and preservation states. Her archaeological work includes wood identification, timber sourcing, and insights into wood technology, along with refinements to radiocarbon dating considering wood species and incremental growth. She has pioneered and innovated analyses of charcoal and waterlogged wood from the Caribbean Islands and eastern North America. Her 2004 book provided the first comprehensive treatment of native Caribbean peoples' fuelwood use, offering insights into species selection and temporal trends at local and regional scales. This work draws from Forest Ecology, Historical Ecology, and Human Behavioral Ecology, particularly concerning forest resilience and wood resource management. Her research has contributed significant insights into indigenous peoples' wood reliance and technology, encompassing 10,000 years of human activity.

Her paleobotanical work emphasizes paleoenvironments. For example, her *Salix* wood assignments from sediment cores taken in the Pribilof Islands provided the first conclusive evidence for the immediate presence (versus wind-blown pollen) of Arctic shrub tundra in the southern Beringian landscape. Her analyses of preserved dung samples highlighted no-analog plant communities and forest browsing by extinct mastodons in southeastern North America.

Dr. Newsom's 2022 book promotes understanding of the research potential of ancient wood, offering practical advice and emphasizing the complexities of taxonomic assignments involving fragmentary, degraded material. Her innovative research combines wood science, microbiology, archaeology, and conservation, inspiring the development of technologies for conserving and preserving ancient wooden objects of cultural and historical significance.

## New Fellows 2023

**Prof. Yann ROGAUME**, Head of LERMAB (Laboratory of Wood Science), University of Lorraine, France



### Curriculum Vitae

Dr. Rogaume is a Professor at the University of Lorraine (ENSTIB). He graduated from University of Tours in 1992, department of physics and chemistry; graduated also from University of Poitiers in 1994, Department of mechanical engineering; post-graduated from University of Poitiers in 1995, department of Aerodynamics, Combustion, Thermal exchanges and Acoustics; PhD defense at the University of Poitiers: "physico-chemistry of the thermal degradation of nitrogen content molecules such as polyamides and polyurethans". Award: Felicitations du jury (10% best PhD). 2000 – 2009 Assistant Professor - University of Lorraine (ENSTIB Engineering School for Wood Industries and Technologies) In 2008, accreditation to supervise research and PhD students. Since 2000,

foundation and leading of a lab for energetic valorization of wood and biomass. Since 2006, head of the research team "wood and waste for energy": from 3 persons to 12 persons now.

### Major awards and honors, visiting positions, memberships, editorial boards and more

Received award for PhD supervision: 1° PhD in Lorraine Region in 2007, 1° PhD in University of Lorraine in 2008 and 2022; Silver Medal of the French Academy of Agriculture (2017). French leader for 4 European Projects (2008-2010, 2012-2015, 2013-2016 and 2017-2020). Expert for French ministries in research Call for Proposal 2 to 10 projects/year); Member of the Scientific Committee of ADEME from 2016 (French Agency for Energy and Environment); Expert for different French institutes (ANR, HCERES); Member of the Scientific Committee of the CEA (project GENEPI) and Mines Engineering School (Albi); Expert of gasification of biomass and for different companies and French ministries. Foreign training period in Bangkok, Ouagadougou, Berkeley, Maryland, Beijing, Karlsruhe, Brazzaville.

### Principal wood science achievements

Since his recruitment in 2000, Dr. Rogaume has established a range of equipment and semi-industrial pilots at the University, making their unit the leading French R&D center for "Thermochemical Energy Recovery from Wood and Wood Waste." His collaborative work with industry has led to the design and sizing of numerous reactors for domestic and district heating applications and the production of syngas, which can be converted into methane, hydrogen, or biofuels. Dr. Rogaume has also spearheaded numerous projects aimed at reducing pollutant emissions from wood-fired heating, particularly focusing on particulate matter. Currently, he is developing a pyrolysis-gasification process to optimize hydrogen production, aiming to convert biomass or wood waste into methane or Sustainable Aviation Fuels (SAF). The objective is to enhance the value of by-products, waste, or invasive plants, thereby supporting the development of the wood industry while reducing pressure on forest resources. This work is carried out in partnership with a company that markets these processes and is funded by European organizations, the French government, and several global energy companies.

## New Fellows 2023

**Prof. Markus RUEGGERBERG**, Institute of Forest Utilization and Forest Technology, TU Dresden, Germany



### Curriculum Vitae

Dr. Rueggeberg is a Professor for Forest Utilization at the Dresden University of Technology, Germany. In 2020-2020 he was a Senior Scientist at the Institute of Wood Technology, Dresden (IHD), between 2014 and 2020 he worked as a Senior Scientist and Group leader at the Chair of Wood Based Materials, Institute for Building Materials, ETH Zurich, Switzerland, as well as at the Cellulose and Wood Materials, Empa, Dubendorf, Switzerland. 2011-2014: Postdoc, Empa & ETH Zurich, Switzerland, 2009-2011: Postdoc, Plant Biomechanics and Biomimetics Group, MPI for Colloids and Interfaces,

Potsdam, Germany Scientific Education; He completed his PhD in 2009 at the University of Freiburg, Germany & MPI for Colloids and Interfaces. 1999 –2005: Biology studies at the University of Freiburg & University of Düsseldorf, Germany; 2012– 2014- Postdoc Scholarship, Empa, Switzerland: FP7 People Marie-Curie-Action COFUND.

### Major awards and honors, visiting positions, memberships, editorial boards and more

Urbach Tower: Materialpreis 2021 in the category “Material application” awarded by raumprobe, a physical & online material data base - Urbach Tower: DigitalFUTURES World Award 2020: Best project

### Principal wood science achievements

Dr. Rueggeberg has conducted extensive research on the mechanics, anatomy, and cell wall structure of palm trees and genetically engineered young poplar trees, revealing a mechanical role of lignin in cell walls with large microfibril angles. This finding suggests an alternative mechanism for adapting mechanical properties alongside varying density or microfibril angle. To elucidate the cellulose microfibril orientation distribution, he developed an advanced evaluation routine for X-ray diffraction data. This routine has been utilized in numerous projects to understand the structure-property relationships in wood and wood cell walls by combining mechanical experiments with structural and biochemical analysis.

Collaborating with experts in modeling and simulation, Dr. Rueggeberg has simulated the mechanical behavior of chemically modified spruce samples. He has also innovatively applied the swelling and shrinking properties of wood, which cause anisotropic dimensional changes, to develop new applications in actuation and self-forming. By manufacturing bilayers, these dimensional changes are transformed into reversible bending upon drying or wetting. These bilayers can function as actuators, such as autonomous shading elements, or serve as basic elements of curved, self-formed cross-laminated timber, which is initially manufactured in a flat state. Using appropriate models, the curved state can be programmed into the material, representing a paradigm shift in the manufacturing of complex-shaped wooden elements.

The Urbach Tower, built in 2019, exemplifies the first building consisting of such self-formed wooden elements, showcasing Dr. Rueggeberg's pioneering work in this field.



## New Fellows 2023

**Prof. Ge WANG**, International Center for Bamboo and Rattan (ICBR), China



### Curriculum Vitae

Dr. Wang is Professor at the International Center for Bamboo and Rattan (ICBR), China; between 1998-2007 he was Associate professor, and an Assistant professor between 1988-1998. He holds a Ph.D. of the Chinese Academy of Forestry, China (2003); a M.Sc. obtained from the Chinese Academy of Forestry, China (1999); and a Bachelor degree from the Northeast Forestry University, China in 1988.

### Major awards and honors, visiting positions, memberships, editorial boards and more

Awards and Honors: State Council Special Contribution Expert, China (2020); Second Prize, National Science & Technology Progress Award, China (2019); First Prize, Liangxi Forestry Science & Technology Progress Award, China (2018, 2019); Second Prize and Third Prize, Gorge G. Marra Award for Outstanding Paper, Society of Wood Science and Technology (SWST), USA (2012); First Prize, National Science & Technology Progress Award, China (2006); Positions: Vice Chairman & Executive Council Director, Green Composite Materials Committee, SAMPE, China (2020-present); Group Leader, ICBR, China (2003-present); Secretary-General, National Bamboo and Rattan Standardization Technical Committee, China (2011-2018); Secretary-General, Bamboo Utilization Committee, China Bamboo Industry Association, China (2009-2018); Memberships and Consultancies: Expert, ISO/TC 296, China (2015-present); Member, SWST, USA (2012- present); Executive Member, Wood Science Branch, Chinese Society of Forestry, China (2016-present); Think Tank Expert, National Bamboo Industry Research Institute, China (2023-2026).

### Principal wood science achievements

Prof. Wang is dedicated to advancing the characterization of bamboo fiber properties and the manufacturing of advanced bamboo composites. He has made notable contributions in several key areas. First, he developed innovative methods for producing bamboo fibers in various forms and precise techniques for testing the mechanical properties of individual short fibers. His work revealed the micro-mechanical and interfacial properties of bamboo fibers, establishing a pioneering technical system for evaluating the strength and toughness of individual cellulosic fibers.

Additionally, Prof. Wang engineered a novel whole-sheet processing technique for bamboo bundle fiber veneer and developed integrated broom weaving equipment. This innovation led to the creation of bamboo bundle laminated veneer lumber (BLVL), which offers increased uniformity and reduced density compared to traditional bamboo scrimber. He also invented bamboo fiber/strip winding and prepreg molding technologies, enabling the versatile production of special-shaped composites. These technologies are applicable in manufacturing bamboo-wound pipelines, corridors, automotive interior components, and construction materials.

Prof. Wang's work extends beyond research and development to industry collaborations and commercialization. He established numerous collaborations with industry, facilitating the commercialization of his technologies. These efforts have directly created substantial technical jobs and generated significant revenue through technology transfer projects. Furthermore, he made significant contributions to the establishment of the ISO technical committee on bamboo and rattan (ISO TC/296) and the development of ISO standards for bamboo flooring (ISO 21629:2021) and bamboo-related vocabulary (ISO 21625:2020), supported by the International Organization for Bamboo and Rattan (INBAR).



## 2024 Nominations for Election of Fellows

The nomination process is relatively simple; all you need to do is fill in the [Nomination form](#) and send it to me. For those to be considered in the next election, the deadline for receipt of nominations is **31 July 2024**.



I then contact the nominee, confirm their willingness to stand for election, and then have them complete the more detailed application form. The Executive Committee reviews the nominees to determine if their applications are complete, and then, in early September submits the completed applications to the membership for ballot.

Typically, scientists who are nominated are either mid-career, showing great promise and accomplishments, or near the end of their career, when their peers feel that they have made major continuing contributions over their professional life.

Several areas of Fellowship are under-represented in IAWS. One significant area is Fellows from developing countries. Due to past or current challenges in publishing in leading journals and language barriers, their number of refereed scientific contributions may be lower. Another under-represented area involves certain scientific disciplines; if you are in one of these fields, you are likely aware of this issue. The Executive Committee is also interested in electing wood science managers who have made significant impacts through their oversight of research activities, even if they do not have the typical number of refereed publications. Additionally, the academy is underrepresented by female researchers, and we strongly encourage the nomination of female colleagues.

Please spend some time thinking about potential nominees, perhaps looking through the Directory and the listing of Fellows by countries. Since we do not “promote” ourselves to gain members, it is up to the Fellows in the Academy to provide the basis for this recognition.

Stavros Avramidis, President

**NOMINATION FORM** [You may also [download](#) the form from the “New Fellows” page on the IAWS website]

**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 management of research; etc):**

**Date:**

**Nominator name:**

**Email address:**

**Telephone:**

**Please return to: [Stavros Avramidis](#) and [Rupert Wimmer](#) before **31 July 2024****

## IAWS PhD Award 2024

The International Academy of Wood Science (IAWS) seeks to recognize exceptional PhD-level thesis and dissertation research worldwide. We are pleased to announce that nominations and applications for the IAWS PhD Dissertation Award for 2024 are now open.

The deadline for submissions is **August 15, 2024**. We encourage you to nominate deserving students !

Nominations can be submitted by anyone and are not restricted to IAWS Fellows.



### Here are the detailed rules:

- 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 advisor
- The submission can be by the student and/or the student's advisor.
- The thesis/dissertation must have been completed within one year prior to the yearly announcement.
- The documentation shall be sent by email to the Academy Board Chair - Prof. Shusheng Pang, [shusheng.pang@canterbury.ac.nz](mailto:shusheng.pang@canterbury.ac.nz)

## New Academy Board appointed



The Executive Committee has appointed Fellow **Shusheng Pang** as the Chair of the new Academy Board. Academy board members have been appointed as well.

### Board Chair

PANG, Shusheng (2027)
-----------------------

### Members

Member (appointed until 1 June of the year...)
MANSFIELD, Shawn (2027)
PANG, Shusheng (2027)
SUGIYAMA, Juniji (2027)
BUCUR, Voichita (2028)
GORBACHEVA, Galina (2028)
YOUNG, Timothy (2028)
KURODA, Keiko (2028)
ZHANG, Tony (2030)
MATHEW, Aji (2030)
KOCH, Gerald (2030)
GOODELL, Barry (2030)
XU, Feng (2030)

# AcadeMY NEWS

## News from Fellows



In October 2023, Fellow Professor **Klaus Richter** retired, having always been on the "Holzweg" (the wood path) in the very best sense.

As a trained wood scientist, Professor Richter earned his PhD about dendrochronology from the University of Hamburg in 1988. He then moved to the Wood Department of Empa in Switzerland, where he took over as head in 2002, and in 2011, he accepted a position at TUM as the Chair of Wood Science. Klaus Richter influenced research not only through new insights into wood-adhesive interactions and his holistic approaches for more sustainable wood use through cascading, but also as the editor of "our" Journal "Wood Science and Technology". He served in various policy advisory groups, including the Expert Councils for Bioeconomy in Bavaria and the Federal Government as well as the Scientific Advisory Board for Forest Policy of the Federal Government, where he contributed significantly to sustainable forestry and wood management. As a retiree Klaus Richter will continue to support the forestry and timber value systems in an advisory capacity, and will also serve as journal editor for a couple of more years. **The academy is wishing all the best!**

Fellow Professor **Barry Goodell** retired from the University of Massachusetts in the Autumn of 2023, and has been greatly enjoying life since.

He finally has the time to apply his biodeterioration expertise by e.g. spraying down his roof at home to get rid of the moss that is deteriorating the shingles. He spent some time traveling this winter with his wife and collaborator Professor Jody Jellison – who also retired last Autumn. He continues writing grant proposals with colleagues, and research papers are in the pipeline as well.



We are honored to have Barry on our Academy Board. He was also awarded an Emeritus status at his prior University of Maine. Barry and Jody will be moving back to Maine for residency, at least from summer through early winter. **Enjoy !**



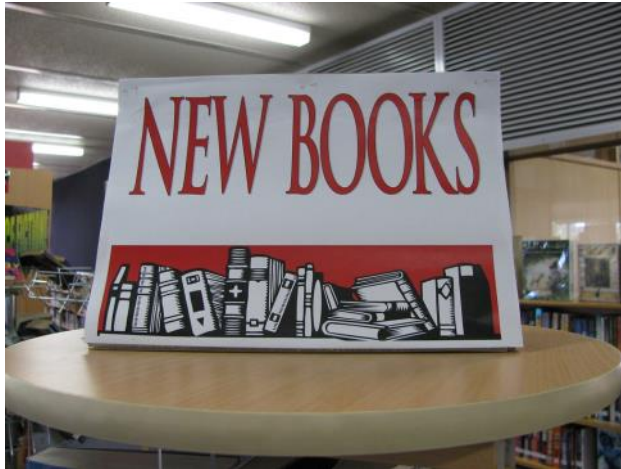
By February 29th, 2024, Fellow Professor **Sung Phil Mun** retired from his 36-year tenure at Jeonbuk National University, South Korea. He has been honored with the title of Professor Emeritus effective March 1st. He also has taken the role of CEO at the company Pinux Co. Ltd., which indicates that he is eager to stay active. **Best wishes!**

**If you have any NEWS, please share!**



# AcadeMY NEWS

## News from Fellows



During the COVID-19 pandemic, **Fellow Dr. Meng Gong**, Professor of Innovative Wood Products and Timber Engineering at the University of New Brunswick, Canada, advanced his research on engineered wood products (EWPs). He authored or co-authored four key chapters on modern Engineered wood

products, examining their history, classifications, design philosophy, and manufacturing. The chapters are elaborating EWPs such as plywood, laminated veneer lumber (LVL), oriented strand boards (OSB), and also mass timber products including glue-laminated timber and cross-laminated timber (CLT). The chapters also cover explore the environmental impact and market trends of EWPs through life cycle assessments.

- Wood and Engineered Wood Products: Stress and Deformation: DOI: 10.5772/intechopen.101199
- Lumber-Based Mass Timber Products in Construction: DOI: 10.5772/intechopen.85808
- Veneer-Based Engineered Wood Products in Construction: DOI: 10.5772/intechopen.102034
- Strand-Based Engineered Wood Products in Construction: DOI: 10.5772/intechopen.100324

**If you have any NEWS, please share!**



# AcadeMY NEWS

\*)



Fellow **Keiko Kuroda**, Professor Emeritus, Kobe University, has recently adopted the position as a Vice Mayor of her hometown, Kobe City (Hyogo Pref. Japan). Her duties are to promote the SDGs, especially the sustainable use of forest resources.

She will also continue her academic works, as a Professor Emeritus at Kobe University, and also as a specially appointed professor, at the Research Institute for Sustainable Humanosphere at Kyoto University. **Congratulations!**



We were informed that fellow Prof. **Guanben Du** was elected as an Academician by the Chinese Academy of Engineering, in November 2023. This position is especially honorable for Chinese scientists, as they can enjoy

benefits by the governmental, such as full support of own research. **Congratulations!**

Retired Fellow Michael Bariska is being honored with an honorary diploma by the University of Sopron, Hungary, marking the 65th anniversary of his graduation. After escaping Hungary due to the 1956 revolution, Dr. Bariska earned his degree from ETH Zürich, Switzerland, in 1959. His alma mater in Sopron has formally recognized his ETH degree. Dr. Bariska's pioneering work in the 1970s on vapor sorption and wood modification has left a lasting impact in the field. **Congratulations!**

## News from Fellows



The 2024 [Marcus Wallenberg Prize](#) for „Conceptual framework and pioneering research for advanced understanding of lignin“

The this years Wallenberg Prize was awarded to Fellows Prof. **Wout Boerjan** and Prof. **John Ralph**, for their groundbreaking research leading to a fuller understanding of lignin biosynthesis and structural diversity. Lignin is a wood component important for the strength and resistance to microbial decay. Thanks to the chemical structure of lignin, it's an interesting material for scientists and chemists when developing new biobased applications. To be successful in separating and utilizing lignin it's necessary to understand how it's built, its chemical structure and the functionality it provides as basis for chemicals and materials.

Both scientists developed and innovatively applied advanced analytical techniques in ways that greatly enhance our view of lignin biosynthesis and structure in trees. Their research provides a basis for development of wood deconstruction processes and new applications for lignin, the most abundant source of natural aromatics in the biosphere. **Congratulations on this achievement!**



**John Ralph**  
Professor of Biochemistry and Biological Systems Engineering, the Wisconsin Energy Institute, University of Wisconsin-Madison (USA)

**Wout Boerjan**  
Professor, Department of Plant Biotechnology and Bioinformatics, Gent University (Belgium) and Center for Plant Systems Biology, VIB (Belgium)

**If you have any NEWS, please share!**

# AcadeMY NEWS



An abbdendum from 2023:

**Wallenberg Prize for „Groundbreaking economic models for integrated analysis of the forest sector“**

The 2023 [Marcus Wallenberg Prize](#) was awarded to



Fellow Dr. **Joseph Buongiorno**, together with Drs Darius M. Adams and Richard Haynes, for their development of the original and ground-breaking forest economic models TAMM and PAPYRUS and its extension to the global forest products model GFPM.

The need to analyze the impact of policies and other factors that influence forestry and the forest industries on a global, national, and regional level is increasing. Climate change put pressures on forest as carbon sinks, and population and income growth imply rising pressures on the demand of forest raw materials all over the world.

The work on the models commenced in the 1970's, when major changes took place in the forest industry as a result of globalization and increased demand. This led to environmental concerns and challenges related to international trade regulations in the forest sector. Appropriate tools to analyze the effects of such concerns became an urgent requirement to manage the future development within the sector, and it was in this setting that TAMM and PAPYRUS were developed.

## News from Fellows

The prize recipient Dr. Buongiorno is Professor Emeritus of Forest Economics at University of Wisconsin-Madison, USA. **Congratulations indeed !**



**Fellow Joseph Buongiorno**, Darius M. Adams and Richard Haynes, receiving the Wallenberg Prize from the King of Sweden, Carl XVI. Gustaf, in November 2023.

**If you have any NEWS, please share!**

## Conference reports

IAWS co-sponsored 2024 World Wood Day Online Symposium and The Sixth IUFRO Forest Products Culture Colloquium, March 21st - 22nd, 2024. **Prof. Ingo Burgert** hosted the [IAWS special session](#), which was entitled “Wood Products and Wood Biotechnology”.



The following talks were presented during this session:

The Frontier of Innovation: Wood Products and (Bio) Technology for Sustainable Development

Prof. Rupert Wimmer  
BOKU University, Institute of Wood Technology and Renewable Materials (**Keynote**)

Research and Development on Bamboo Properties and Bamboo Fiber-based Composites for Plastic Substitute

Dr. Ge Wang  
International Center for Bamboo and Rattan

Improving Wood Quality for Pulping and Biorefining

Prof. Wout Boerjan  
Dep. of Plant Biotechnology and Bioinformatics,  
Ghent University

Wood Modification Based on In-situ Esterification of Pinus Sylvestris with Citric Acid and Sorbitol

Dr. Katarzyna Kurkowiak  
Wood Biology and Wood products,  
Georg-August-University Göttingen

### Coffee Break

BioGlue-Centre 2024-2028: A New Competence Centre for Bio-based Adhesives in Sweden

Prof. Stergios Adamopoulos  
Swedish University of Agricultural Sciences

Recent Research with Archaeological Wood: Identification and Analysis of Very Small or Particulate Material and Taxa with Anomalous Anatomical Structure

Dr. Lee A. Newsom  
The Pennsylvania State University (Emerita)

Transforming Wood into a High-performance Engineering Material via Cellulose Nanocrystal Impregnation.

Prof. Dilpreet Singh Bajwa  
Montana State University

Transfer learning for predicting wood density of different tree species: Calibration transfer from portable NIR spectrometer to Hyperspectral imaging

Mr. Zheyu Zhang  
College of Mechanical and Electrical Engineering, Northeast Forestry University/ Department of Wood Science, University of British Columbia

My Last Hurrah: A Quick Retirement Review and Wrap-up of my Research Results in Wood Science and Sustainable Biomaterials

Prof. Barry Goodell  
Professor Emeritus Univ. Maine, & Professor-Retired Univ. Massachusetts University of Massachusetts and University of Maine

Some of the presentations can be found as [Videos](#).



## 2024 ANNUAL CONVENTION, PORTOROŽ, SLOVENIA



Society of Wood Science and Technology Annual Convention, **30 June – 5 July 2024**, Portorož, Slovenia. This conference offers a **IAWS session**, which includes an **Academy Lecture by Prof. Ingo Burgert**.

### THE SIGNIFICANCE OF BASIC WOOD SCIENCE IN A SUSTAINABLE WORLD

Chair: Rupert Wenner (BOKU, Austria) - organized by IAWS

13:45-14:45	Ingo Burgert (ETH Zurich, Switzerland) "Wood materials - potentials and limitations" (Academy Lecture)
14:50-15:10	Katarina Čufar (University of Ljubljana, Slovenia) "Wood anatomy and dendrochronology - a long tradition and current challenges"
15:10-15:30	Bohumil Kasal (Fraunhofer WKI, Germany) "Materials from renewable resources - great future or just a modern trend? Are they really sustainable?"
15:30-15:50	Markus Rüggeberg (Technical university in Dresden, Germany) "The dimensional instability of wood - a new look on an old problem"
15:50-16:10	Andreas Krause (Thünen Institute, Germany) "Swelling of wood cell wall - in 3D at high resolution"
16:10-16:30	Juan Li (Fraunhofer WKI, Germany) "Aging of wood as a construction material measured by atomic force microscopy"

**IAWS Dinner on Monday, 1 July, 19:00, at the Restaurant Ivo in Piran**



The 10th Pacific Regional Wood Anatomy Conference, **10— 14 September 2024**, Hokkaido, Japan

This conference aims to provide an exciting opportunity to exchange new knowledge and stimulate ideas in the field of wood anatomy and other related issues.

## Upcoming Conferences



The 4th International Plant Spectroscopy Conference will take place between **24 -27 September 2024** in Vienna, Austria

The aim of the conference is to bring spectroscopy to plant scientists and plant sciences to spectroscopists, to open up a communication channel and to showcase the plethora of available spectroscopic techniques and their potential in plant sciences. IAWS Fellows **Lennart Salmen** and **Lloyd Donaldson** will give keynotes, among others.

## Welcome to IUFRO Tree Biotech

AUGUST 4TH-8TH 2024, ANNAPOLIS, MD, USA

The IUFRO Tree Biotech 2024 Conference is scheduled to take place in Annapolis, Maryland, USA, from **4 - 8 August, 2024**. This biennial international conference is designed to facilitate the gathering of global researchers, students, and industry professionals, providing a platform for the presentation of cutting-edge advancements and innovations in forest biotechnology.

The 27<sup>th</sup> Session of the International Commission on Poplars and Other Fast-Growing Trees Sustaining People and the Environment (IPC27), "Poplars and other fast-growing trees for climate change mitigation and adaptation - Pathways to climate resilience and carbon neutral societies", will be held on **21 – 25 October 2024**, at the Palais des congrès, in Bordeaux, France.

## Obituary Prof. Pieter Baas 1944– 2024



We regret to inform you that our Fellow, Prof. Dr. Pieter Baas, emeritus professor at Leiden University, has passed away on April 29, 2024.

Professor Dr. Pieter Baas was one of the most distinguished scientists in plant anatomy and wood anatomy and the greatest advocate for worldwide cooperation of wood anatomists in our times. Pieter Baas passed away in Leiden, the day after his 80th birthday. He was a life time fellow of IAWS.

instrumental in nominating many female candidates for IAWS fellowship and strongly supported gender and regional balance in the Academy. I was able to visit Pieter during a visit to Leiden after the IAWS meeting in Gratz, Austria, just after I took over as co-editor of IAWA Journal and was treated to the famous tour around Leiden and the surrounding countryside (in search of an authentic Dutch windmill).

We have to acknowledge Pieter's academic contribution with a massive 510 articles, books, editorial notes and reports, 13738 citations, and an h-index of 57 (Google Scholar). This doesn't include all of the IAWA Bulletin and IAWA Journal articles that received his editorial attention over the 40+ years he served as editor. Pieter also recently served as associate editor for the International Journal of Wood Culture.

### Our Fellow Lloyd Donaldson personally remembers Prof. Pieter Baas:

I first met Pieter at the Botanical Congress in Sydney, Australia in 1981. Pieter traveled extensively and visited New Zealand for the Pacific Wood Anatomy meeting in Rotorua in 1994 and again for an IAWS executive meeting in 2018. I served with Pieter on the IAWS executive for the next 3 years with numerous meetings including EC meetings in Corvallis, USA and Guadalajara, Mexico, and another Pacific wood anatomy meeting in Bali. Pieter served as leader of the Academy Board, and in 2018, a small committee was formed to pursue greater representation of females and to encourage the nomination of fellows in some under-represented regions including South America and Malaysia. Pieter suggested Barb Lachenbruch, Roberta Farrell, and Ruben Ananias on the committee [All three subsequently agreed to assist]. Pieter was asked by Rob Evans to act as chair and he agreed. Pieter was

## Obituary Prof. Graeme P. Berlyn 1933– 2024



On February 16, 2024, Professor Graeme P. Berlyn, a world-renowned expert on the anatomy and physiology of plants and trees, died February 16 in Hamden. He taught over 60 years at the Yale School of the Environment (YSE).

Dr. Berlyn's breadth of research included wood anatomy, plant embryology, tissue culture, biotechnology, and the morphology and physiology of trees and forests in relation to environmental stress. He published more than 166 journal articles and his book, "Botanical Microtechnique and Cytochemistry," has more than 2,200 citations. He was an expert on histology and electron microscopy and served as the only plant scientist on the Biological Stain Commission, the international organization that sets the guidelines for the acceptable biotechnique of staining and preparing histological samples, primarily in medicine.

After working for the U.S. Forest Service in Oregon and Washington, he came to Yale in July, 1960 at the age of 26. His early work focused on wood science and cell development, specifically on cottonwood. While at Yale, Prof. Berlyn broadened his research focus on wood cellular structure, examining the nuclear effects of radiation on plants; the adaptation of spruce fir to acid rain across elevation gradients. One of his most cited papers was on chlorophyll physiology fluorescence. What is also remembered is that at the heart of all his work was his commitment to his students.



## Journal Rankings

### Journal Ranking—Wood Science & Technology (Google Scholar; by June 2024)

		h5-index	h5-median
1.	Journal of Cleaner Production	246	321
2.	Bioresource Technology	161	207
3.	Composites Part B: Engineering	136	178
4.	Industrial Crops and Products	93	121
5.	Cellulose	77	96
6.	Journal of Natural Fibers	53	70
7.	Materials and Structures	44	63
8.	BioResources	40	52
9.	Journal of Bioresources and Bioproducts	39	108
10.	Annals of Forest Science	34	42
11.	European Journal of Wood and Wood Products	32	45
12.	Wood Science and Technology	29	38
13.	Journal of Renewable Materials	28	38
14.	Holzforschung	27	35
15.	Journal of Wood Science	25	38
16.	Wood Material Science & Engineering	24	33
17.	Maderas. Ciencia y Tecnología	20	24
18.	Journal of Wood Chemistry and Technology	19	25
19.	International Association of Wood Anatomists Journal	19	25
20.	Wood and Fiber Science	18	27
21.	Floresta e Ambiente	17	20
22.	Cellulose Chemistry and Technology	16	24
23.	Nordic Pulp & Paper Research Journal	16	20
24.	Wood Research (Bratislava)	16	19
25.	Forest Products Journal	14	19
26.	Journal of Forestry Engineering	13	21
27.	International Wood Products Journal	12	16

**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 have at least h citations each. **H5-median** is based on H5-index, but instead measures the median (or middle) value of citations for the h number of citations.

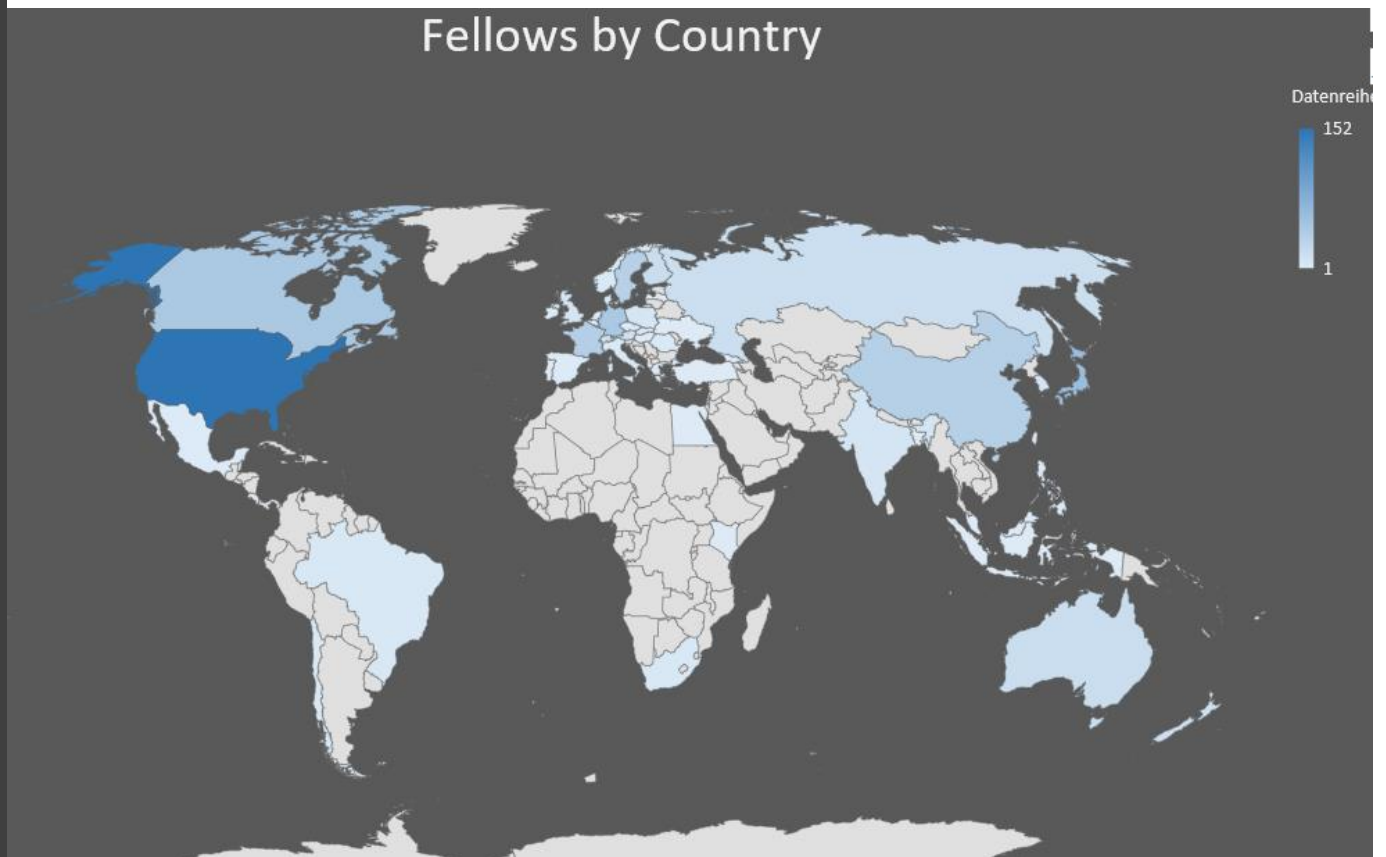
## Statistics

### Distribution of Fellows by Country

Country	Males	Females			
Australia	17	1	Slovakia	3	0
Austria	15	2	Slovenia	3	3
Bangladesh	1	0	South Africa	5	1
Belgium	2	0	Spain	2	2
Brazil	5	1	Sweden	34	3
Canada	44	4	Switzerland	13	2
Chile	4	0	Taiwan	5	1
China	35	5	Turkey	1	0
Costa Rica	1	0	Ukraine	1	0
Czechia	2	0	United Kingdom	9	0
Denmark	5	0	USA	152	7
Egypt	1	0			
Finland	18	3			
France	37	7	Total	609	53
Georgia	1	0			
Germany	45	1	Active fellows	92	
Greece	3	0	Lifetime fellows	148	
Hungary	1	0	Retired fellows	245	
India	9	0	Deceased fellows	183	
Indonesia	1	0			
Ireland	1	0			
Israel	4	0			
Italy	4	2			
Japan	58	1			
Kenya	1	1			
Korea, South	8	0			
Latvia	2	0			
Malaysia	2	1			
Mexico	2	1			
Netherlands	2	1			
New Zealand	15	1			
Norway	4	0			
Philippines	3	0			
Poland	7	0			
Portugal	1	0			
Romania	4	0			
Russia	16	2			

## Statistics

### Distribution of Fellows by Country



### **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 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 2024**

Arno SCHNIEWIND, USA  
Pieter BAAS, The Netherlands

### **Fellows deceased in 2023**

Walter LIESE Germany  
Benhua FEI, China

### **Fellows deceased in 2022**

Frank BEALL, USA  
Günter SCHULTZE-DEWITZ, Germany  
Björn HENNIMNGSSON, Sweden

### **Fellows deceased in 2021**

Edmone ROFFAEL, Germany  
David GORING, Canada  
Dieter ECKSTEIN, Germany  
Chung-Yun HSE, USA  
Dietrich FENGEL, Germany

### **Fellows deceased in 2020**

Fritz SCHWEINGRUBER, Switzerland  
Robert YOUNGS, USA

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



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