

Future meetings

The 10th PRWAC in Asahikawa, Japan on September 10th - 14th, 2024

The 10th Pacific Regional Wood Anatomy Conference (10th PRWAC) will be held in Asahikawa, Japan, from September 10th - 14th, 2024. Asahikawa is located in the central part of Hokkaido Island and is surrounded by fertile farmland and lush nature. The Asahikawa area is also well-known for distributing wooden furniture and crafts. We are looking forward to your participation in this in-person meeting, which will take place in a city closely connected with wood science, technology, and industry.

Registration Fees

	Early Bird	Regular	On-site
General Participants	JPY 30,000	JPY 35,000	JPY 40,000
Students	JPY 20,000	JPY 25,000	JPY 30,000

*All prices are non-taxable. The registration fees include access to the conference abstract book, excursion and conference dinner on Friday, September 13, 2024.

Kindly visit the conference website for registration details and abstract submission guidelines (<https://www.prwac2024.org>).

Yuzou Sano and Hisashi Abe, Japan

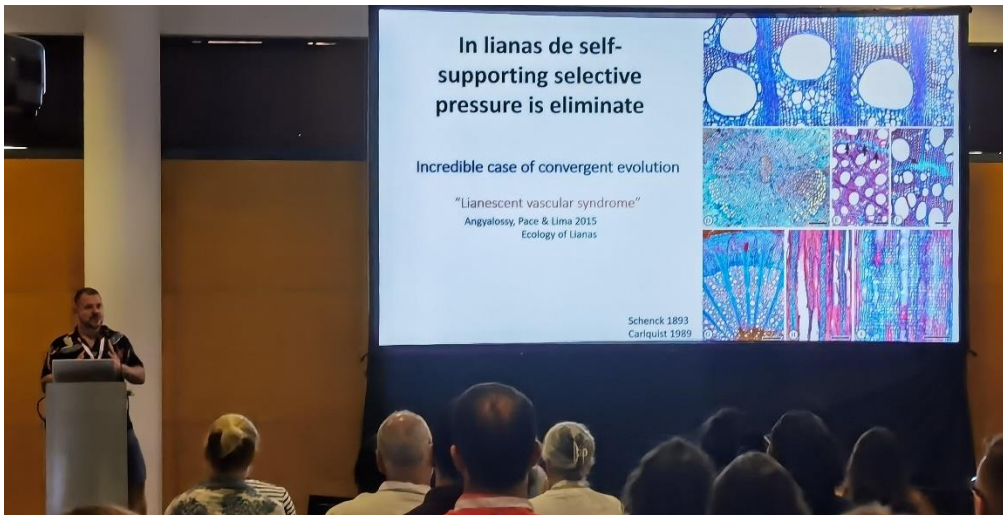
Meeting reports

XX IBC in Madrid, Spain on July 21st - 27th, 2024

The XX International Botanical Congress (IBC) took place in Madrid, Spain, from July 21st - 27th, 2024. During this congress, over 2900 botanists registered and participated in a total of 267 symposia, four of which focused on wood anatomy. These included the "IAWA Symposium - The Contribution of Wood in Forest: From Wood Dynamics to Trait Diversity and Carbon Gains" proposed by Yafang Yin, Veronica De Micco, and Pieter Baas; "Morphological, Anatomical, and Evolutionary Basis of Habit Transitions in Plants" by Marcelo Pace, Joyce Onyenedum, and Veronica Angyalossy; "Xylem Anatomy as a Central Hub Linking Fluid Transport Processes from the Individual Plant Level to Ecosystems" by Frederic Lens; and "Bark Structure: Evolutionary, Functional, and Ecological Implications" by Aleksei Oskolski, Alan Crivellaro, and Ekaterina Kotina.



Part of participants of IAWA Symposium



A shot of ongoing symposium on habit transitions in plants



A shot of ongoing symposium on bark structure

These wood symposiums presented the most recent advances in methods and applications for understanding xylem development and structure in trees, aiming to improve research capacity and international cooperation among the wood community, forestry, and botany societies, thereby promoting effective conservation and sustainable utilization of forestry resources.

As a long-term tradition, an IAWA social hour with an official ceremony was organized by Frederic Lens, Cees Lut, and Yafang Yin, during the congress.



Participants of IAWA Social Hour



A brief memorial to Professor Pieter Baas during IAWA Social Hour

Detailed information is available by clicking <https://ibcmadrid2024.com/>. The next 21st IBC will be held in Cape Town, South Africa in July, 2029.

Yupei Wei and Lingyu Ma, China

IAWA-IUFRO Symposium on Wood Identification during IUFRO XXVI IUFRO World Congress, June 23rd - 29th, 2024

The XXVI IUFRO World Congress was held in Stockholm, Sweden on June 23rd - 29th, 2024. During the congress, the IAWA-IUFRO Symposium titled "T5.16 Advancing Methods and Applications of Wood Identification" was moderated by Yafang Yin, Gerald Koch, Tereza Pastore and Emmanuel Ebanyenle on June 27th-28th. More than 60 representatives from over 30 related universities and research institutes attended this symposium. A total of 20 representatives from 14 countries, including Australia, Belgium, Brazil, China, Ecuador, Germany, Ghana, India, Japan, Madagascar, Malaysia, Paraguay, Romania, and United Kingdom, conducted 12 oral presentations and 8 poster presentations.

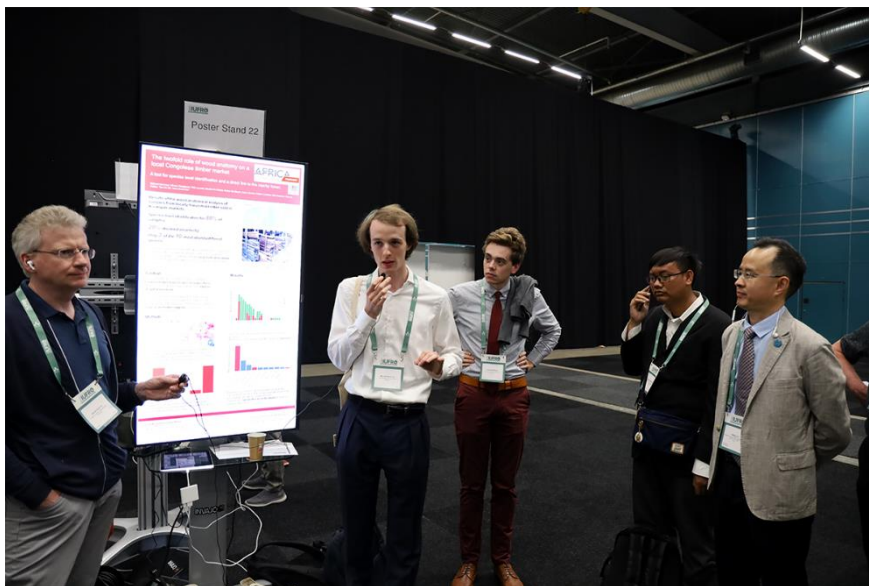
This IAWA-IUFRO symposium presented the most recent advances in methods and applications of wood identification, with improvement of research capacity in wood collection, wood anatomy, artificial

intelligence, biotechnology, phytochemistry and databases establishment, for promoting effective conservation and sustainable utilization of forestry resources.

Please visit <https://iufro2024.com/detailed-programme/> for more detailed information.



Part of participants of IAWA-IUFRO symposium



Poster presentations with short oral of IAWA-IUFRO symposium

Yafang Yin, Gerald Koch, Tereza Pastore

XXVI IUFRO World Congress 2024: Personal Experience from Emmanuel Ebanyenle, Ghana

Emmanuel Ebanyenle, Wood Anatomy Laboratory of CSIR-Forestry Research Institute of Ghana was fortunate to participate in the T5.16 IAWA-IUFRO Symposium on Advancing Methods and Applications of Wood Identification held on 27th and 28th June, 2024 at Stockholm, Sweden. He co-chaired the poster session of IAWA-IUFRO Symposium and also shared Ghana's experience in science-based wood identification methods through an oral presentation "An automated timber identification system for *Guibourtia ehie* and two *Melicia* species" and a poster presentation "The role of multi-stakeholders' dialogue in addressing timber trafficking: implications for science-based wood identification methods in Ghana". Several presentations from colleague scientists exposed him to cutting edge

research in anatomical, chemical and genetic methods for determination of origin and species identification of timber. In his opinion advancing research in chemical and genetic research in Ghana for determination of origin and timber species identification will complement the existing timber verification techniques to combat illegal logging more effectively. Fortunately, his team is currently collecting geo-referenced wood specimens for over 100 Ghanaian timbers across the ecological zones of Ghana in cooperation with US Forest Service. Interested Scientists are welcome to partner with him and his colleagues to research into the chemical and genetic methods for determination of origin of timber and species identification. Finally, it was a great feeling meeting with IAWA members in person. He is grateful to IAWA and CSIR- Forestry Research Institute of Ghana for supporting him to participate in XXVI IUFRO World Congress 2024 in Stockholm, Sweden.



Oral presentation given by Emmanuel Ebanyenle

Emmanuel Ebanyenle, Ghana

Miscellaneous News

BLUMEA Published an Obituary in memoriam Pieter Baas on August 8th, 2024

On August 8th 2024, Blumea - Biodiversity, Evolution and Biogeography of Plants published an obituary in memoriam Pieter Baas, as Van Welzen PC, Lut C, Lens F, et al. 2024. In memoriam Pieter Baas, 80 years old, Blumea 69 (1): i–x. <https://doi.org/10.3767/blumea.2024.69.01.00>. Please visit the following link for free read:

<https://www.ingentaconnect.com/content/nhn/blumea/pre-prints/content-nbc-blumea-0691#>

Cees Lut, the Netherlands

IAWA Special Issue 2025 on Quantitative Wood Anatomy (QWA)

IAWA Journal is organizing a Special Issue called “Quantitative Wood Anatomy: research applications, opportunities and challenges” in memory of Professor Pieter Baas. Professor Dr. 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. Colleagues in the research field, IAWA members, and others are invited to contribute reviews, original research articles, and viewpoint papers relating to Quantitative Wood Anatomy (QWA) with a special emphasis on recent advances in wood anatomy and multidisciplinary approaches. We expect to publish this Special Issue as IAWA Journal Volume 46, Issue 4 (2025), however manuscripts will be available online once accepted.

This Special issue will be edited by Yafang Yin (yafang@caf.ac.cn), Georg von Arx (georg.vonarx@wsl.ch) and Veronica De Micco (demicco@unina.it). Please contact the editors to indicate your interest and the topics your manuscript will address - the editors will strive to include a balanced group of high-quality papers. Please indicate in the cover letter your wish to be included in this Special Issue. Manuscripts can be submitted to the IAWA Journal at <https://www.editorialmanager.com/iawa/default.aspx>.

Abstract: Wood anatomy has been increasingly driven towards a Quantitative Wood Anatomy (QWA) approach in the last two decades. In 2007, at the 2nd Workshop on QWA (WSL, Birmensdorf, Switzerland), QWA was defined for the first time as a “methodological approach based on the measurement of wood cell anatomical characteristics, analyzed through time and used to characterize the relationships between tree growth and various environmental factors”. Since then, the community of scientists working with QWA has grown considerably, and the research approach of QWA has been increasingly widespread across different disciplines.

QWA is a truly integrative research approach, applied at different tissue scales (e.g. from cell ultrastructure up to macro-anatomical level) and life forms (e.g. from herbaceous plants to dwarf shrubs up to giant trees), using traditional light microscopy techniques, but also profiting from modern tools such as micro-computed tomography and dedicated (AI-based) image analysis software, and embracing scientists from various disciplines to answer questions related to dendrosciences, ecophysiology, ecology, evolution, forest management and protection, geosciences, paleobotany, species identification, tree biology, wood dynamics and formation, wood quality and many more.

This special issue aims to give an overview of recent methodological developments and research applications of QWA, highlighting the potential of quantifying xylem traits (i.e., countable, measurable, and discrete ones) in different plant organs, but also the remaining pitfalls.

Original research and novel methodological papers with a focus or strong link to QWA are welcome, as well as reviews and opinion articles, which may consolidate this approach and indicate future research trends.

This special issue is dedicated to Professor Dr. Pieter Baas who has contributed to building much of the knowledge on wood anatomy of the last century and has inspired generations of students and scientists with his competence, kindness, and passion for the beauty of wood.

Keywords: Archaeobotany, cell wall, dendroanatomy, dendro-ecology, digital image analysis, eco-microscopy, forest, geosciences, phloem, plant hydraulics, structure-function relationships, tree growth, tree rings, tree-ring anatomy, wood (bamboo, rattan), wood anatomical traits, wood classification, xylem, xylogenesis.

Yafang Yin, Georg von Arx and Veronica De Micco

The 2023 impact factor of IAWA Journal is released

The impact factor of IAWA Journal, sponsored by the International Association of Wood Anatomists, is 1.4 in 2023. The past impact factors were 1.9 (2022), 2.987 (2021), 2.308 (2020), 1.627 (2019), 3.182 (2018), 1.903 (2017), 0.403 (2016), 1.043 (2015) and 1.074 (2014).

Call for Newsletter Items

The IAWA Newsletter keeps the IAWA community actively informed and stimulates members to visit the IAWA website for the latest and detailed news. Please send any news items you wish to share with the whole IAWA community to the newsletter editors Dr. Shan Li (lishan.ecology@hotmail.com) and Dr. Yang Lu (yang.lu@caf.ac.cn) of the IAWA Office, Beijing.

Call for Manuscripts of IAWA Journal 2024

The editors of the IAWA Journal would like to encourage new manuscript submissions for volume 46, 2025. A reminder that subscribers/IAWA members can register for 'table of contents alerts on the IAWA Journal homepage. The table of contents for the latest issue is included below.

Lloyd Donaldson & Veronica De Micco
Editors in Chief – IAWA Journal

Obituary

In memoriam Professor Dr. Pieter Baas (1944–2024)

Authors: Elisabeth Wheeler, Lloyd Donaldson, Peter Gasson, Frederic Lens, Marcelo Pace, and Yafang Yin

Pages: 255–259

Regular articles

Fossil woods from Corcovado (Eocene?), Argentinean Patagonia: angiosperm diversity and biodeterioration

Authors: Roberto R. Pujana, Juan L. García Massini, Sol Noetinger, and Inés Aramendía

Pages: 261–283

Wood structural diversity in fynbos, chaparral, and maquis: a preliminary estimation

Authors: Alexei A. Oskolski and Funmilade M. Akinlabi

Pages: 284–296

Forestry control in the Brazilian Amazon III: anatomy of wood and charcoal of tree species from sustainable forest management

Authors: Alana Assunção da Silva, Kaick Coelho de Sousa, Fernanda Ilkiu Borges de Souza, João Rodrigo Coimbra Nobre, Thiago de Paula Protásio, and Luiz Eduardo de Lima Melo

Pages: 297–334

Diversity of wood colour in tropical timber species and its relationship with wood density and anatomical features

Authors: Fernanda Bessa, Vicelina Sousa, Teresa Quilhó, and Helena Pereira

Pages: 335–357

Bark anatomy of *Pteroceltis tatarinowii*, Cannabaceae

Authors: Bingwei Chen, Yu'na Kan, Shengcheng Zhai, Michaela Eder, and Changtong Mei

Pages: 358–374

Age of heartwood initiation in trunks of young *Pinus sylvestris* L. trees in the taiga zone

Authors: Tatiana V. Tarelkina, Natalia A. Galibina, Maria A. Ershova, Sergei A. Moshnikov, Kseniya M. Nikerova, Nikita V. Afoshin, and Ludmila I. Semenova

Pages: 375–390

Barrier zone formation and development in the stems of *Aquilaria sinensis* (Thymelaeaceae) and the effect on agarwood formation

Authors: Peiwei Liu, Yuxiu Zhang, Yun Yang, Xingning Lin, Songning Lin, Yanqing Deng, Bo Chen, and Jianhe Wei

Pages: 391–403