

## Future Meetings

### **The 2019 WWD Symposium and the 2<sup>nd</sup> IUFRO Forest Products Culture Research Group Colloquium, March 21-23, Austria**

The 2019 World Wood Day (WWD) Symposium and the 2<sup>nd</sup> IUFRO Forest Products Culture Research Group Colloquium which will be held from March 21<sup>st</sup> to 23<sup>rd</sup> of 2019 in the Austrian Open Air Museum Stübing has as general theme: *Change – from tradition to innovation*.

The symposium is supported by IUFRO, IAWA and IAWS. Go for programs, symposium 2019 at url

[www.worldwoodday.org](http://www.worldwoodday.org)

Pieter Baas, Netherlands

### **EGU General Assembly, April 8-13, 2019, Vienna, Austria**

Session BG2.2: Tree mortality and forest vulnerability across different biomes and climatic conditions: the need of multidisciplinary approaches at various scales. Conveners are Francesco Ripullone, Giovanna Battipaglia, Veronica De Micco, and Jesus Julio Camarero. This session aims at promoting a lively discussion on the issue of forest vulnerability caused by climate changes, with integrated multi-scale, multi-temporal and interdisciplinary approaches. A detailed description of the session can be found at <https://meetingorganizer.copernicus.org/EGU2019/session/32154>

### **Abstract Submission Deadline for TRACE 2019 (Italy) Is extended to February 15**

The meeting TRACE (Tree rings in Archaeology, Climatology and Ecology), to be held May 7-10, 2019 in San Leucio Caserta, aims to build bridges and facilitate knowledge exchange in all contemporary fields of tree-ring science. It will include 7 sessions on forest growth, dendroclimatology, human history, ecology and ecophysiology, dendrochronology in the tropics and tree-ring networks.

The session "wood anatomy meets Dendro Sciences" is organized in cooperation with IAWA. The session aims to explore the role of anatomical studies in gathering environmental information that is translated into functional wood traits during plant growth and then remains stored in wood. The Chair is Veronica De Micco from the University of Naples, and a well-known keynote speaker is Hans Beeckman from the Royal Museum for Central Africa. The deadline for registration and abstract submission is February 15<sup>th</sup>, 2019. For more details visit: [www.trace2019.com](http://www.trace2019.com)

Veronica De Micco, Italy

### **IAWA-IUFRO International Symposium: Challenges and Opportunities for Updating Wood Identification, May 20-22, 2019 and GTTN-IAWA Application, May 23, 2019, Beijing, China**

This symposium will be co-organized by the Research Institute of Wood Industry, Chinese Academy of Forestry and the Forest Products Laboratory, Forest Service, USA. The symposium registration and abstract submission is now available here: <http://iawa-iufro-symposium.intoom.com/>

On May 23, 2019, GTTN (<https://globaltimbertrackingnetwork.org/events/>) Global Timber Tracking Network, will organize a Workshop of GTTN-IAWA Application on timber tracking network at the same venue as the IAWA-IUFRO Symposium.

Lichao Jiao and Tuo He, China

### **XV Cell Wall Meeting to be held 7-12 July, 2019 in Cambridge, United Kingdom**

This meeting will cover the following topics: 1) Plant cell wall composition, structure and architecture; 2) Plant cell wall biosynthesis; 3) Cell biology and dynamics of plant cell wall formation; 4) Plant cell walls: growth, morphogenesis, development & biomechanics; 5) Cell wall interactions with the environment: micro-organisms, signalling and defence; 6) Plant and micro-organismal degradation and metabolism of cell walls; 7) Cell walls as a resource: food, feed, fuel, timber. For more information about the meeting, please check the website <http://cellwall2019.org/>

Shan Li, China

### **BOTANY 2019 Symposia, July 27-31, 2019, Tucson, USA**

BOTANY 2019 will be held in Tucson, Arizona, USA from July 27-31, 2019. The symposia include topics as follows: phylogenomic perspectives on reproductive isolation and introgression; evolution and adaptation of xeric plants; the potential of machine learning for plant biology; the intersection of applied and academic botany; crop wild relatives and land races; multiple perspectives on green algal evolution and the earliest land plants. The website and opening time for abstract submission will soon be available. Please check the link for more information on each symposium.

[https://gallery.mailchimp.com/7b5241ec2a609d26192947333/files/5c02a62e-3b6f-4c7f-b2d1-6894fccee14a/Botany\\_2019\\_Symposia.pdf](https://gallery.mailchimp.com/7b5241ec2a609d26192947333/files/5c02a62e-3b6f-4c7f-b2d1-6894fccee14a/Botany_2019_Symposia.pdf)

Shan Li, China

### **EuroDendro Conference, September 9-13, 2019, Brno, Czech Republic**

The forthcoming EuroDendro 2019 Conference organized by Mendel University, will take place in 2019 in Brno, Czech Republic. The EuroDendro meeting is one of the most renowned dendro-platforms focusing on the recent breakthroughs of tree-ring research and related subjects. Papers on all fields of tree-ring studies, anatomy and physiology of tree rings are welcome. Both oral and poster presentations will carry equal weight and abstracts will be published for both categories. For more information, please visit <http://eurodendro2019.mendelu.cz/>

Kyriaki Giagli, Czech Republic

### **Plant anatomy symposium in Moscow, Russia, September 16-21, 2019**

Symposium "Plant Anatomy: Traditions and Perspectives" dedicated to Prof. Ludmila Lotova's 90th anniversary is going to be held in the Moscow State University (Russia) in September 16-21, 2019: <http://msu-botany.ru/conf-lotova2019/>. As Prof. Ludmila Lotova was bark anatomist, the attendance of bark and wood experts is especially welcome.

Alexei Oskolski, South Africa

### **4<sup>th</sup> Xylem International Meeting, September 25-27, 2019, Padua, Italy**

The 4<sup>th</sup> Xylem International Meeting is going to be held in the Botanical Garden of the University of Padua, September 25-27, 2019. XIM4 is a meeting of discussion on the recent advances in the field of plant hydraulics. The soil-plant-atmosphere continuum is composed by different structural, anatomical and biochemical characteristics (e.g., different cell types and proportions, cell and pit sizes, biomolecular regulation of different processes affecting water transport, etc.). The aim of XIM4 is to advance the knowledge on the integration of these structures in contributing to the overall efficiency of the water transport system, and also in determining susceptibility to hydraulic dysfunctions caused by the environmental variability.

For more information, please check the website <http://intra.tesaf.unipd.it/CMS/xim/default.asp>

Giai Petit, Italy

## **IUFRO 2019 Congress, September 29 to October 5, 2019, Curitiba, Brazil**

The IUFRO 2019 Congress will be held at Curitiba, Brazil, from September 29 to October 5, 2019. Within this Congress, IAWA initiated an IAWA-IUFRO Session (Symposium) - C5d New Methods and Applications of Timber Identification, under the Congress theme Forests and Forest Products for a Greener Future. Meanwhile, a related session organized by LPF of Brazil is listed as C3i - Tools for Tropical Wood Identification against Illegal Logging. These two sessions will be organized as an IAWA-IUFRO-LPF Joint Symposium during the IUFRO Congress.

Abstracts submission has been completed by January 10, 2019 and accepted presenters will be informed whether they get an oral and poster presentation by the end of February, 2019. The Congress registration is available at: <http://iufro2019.com>.

## **Meeting Reports**

### **The 5<sup>th</sup> IAWA-China Group annual meeting at Fuzhou, China, November 23-24, 2018**

The fifth IAWA China Group Annual Meeting was held at Fuzhou city, Fujian Province, China, on November 23<sup>rd</sup> and 24<sup>th</sup> 2018, organized by the Fujian Agriculture and Forestry University. Over 100 participants from more than 36 universities, academic research institutes and wood products inspection related research centers attended the meeting.



Participants of the 5<sup>th</sup> IAWA-China Group meeting.

Prof. Lloyd Alister Donaldson, upcoming Editor-in-Chief of IAWA Journal, gave a keynote speech about 'Wood Identification in New Zealand'. Prof. Yoon Soo Kim, vice-president of IAWA, talked about 'Wood Science as Gate Keeper for Study of Wooden Cultural Heritages'. Dr. Cheng Yeming from the Geological Museum of China, Prof. Pan Biao from Nanjing Forestry University, Prof. Qiu Jian from the Southwest Forestry University and Prof. Lin Jinguo from the Fujian Agriculture and Forestry University also gave different keynote speeches related with fossil wood, bark anatomy and techniques for wood anatomy. There were 26 IAWA members presenting their current research data on secondary phloem formation, wood identification techniques related with forest business, applied wood recognition, chemical analysis on archaeological wood. From this year, the annual meeting of the IAWA China Group set up the Excellent Presentation Award for students, and 4 students received the award at this meeting. The award holders are from the Chinese Forestry Academy, International Centre for Bamboo and Rattan, Nanjing Forestry University, and the Fujian Agriculture and Forestry University. The next IAWA-China Group annual meeting will be held around November 2019, at Anhui Agricultural University, Hefei, China.

Cheng Yuan and Shengcheng Zhai, China

## IAWA Symposium “Wood anatomy: an African perspective”, January 7–10, 2019



The conveners and some speakers at the IAWA Session during the 45<sup>th</sup> SAAB Conference.

Wood anatomy was one of the focal themes at the 45<sup>th</sup> Annual Conference of the South African Association of Botanists (SAAB) held on 8-11 January 2019 in the University of Johannesburg, South Africa. Pieter Baas and Elisabeth Wheeler attended this meeting as invited speakers: their plenary lectures concerned the analysis of wood anatomical diversity of the South African flora in a global context and Trait evolution in fossil woods from Cretaceous to Pliocene. Apart from that, the IAWA symposium “Wood anatomy: an African perspective” had been organized with presentations by seven speakers from five countries (Nigeria, Poland, Russia, South Africa and the USA) and covering highly complementary topics of structural botany, such as: African fossil woods from the Permo-Triassic boundary (M.K. Bamford), secondary woodiness and pedomorphosis (K. Frankiewicz), a new type of cambial variants found in the Malvales (G.Gama), identification of woods in cultural heritage artifacts by thermal desorption-gas chromatography/mass spectrometry (C. Mallinkrodt), identification of South African medicinal barks (E.L. Kotina and B.-E. van Wyk), function and formation of broad rays in wood and bark (A. Oskolski), and comparative wood anatomy of South African Meliaceae (M.O. Oyedeji-Amusa). This was the second international wood anatomy meeting ever held in Africa. The first one was in Pretoria in 1984. The meeting will hopefully stimulate wood and bark anatomical studies on the African continent with its unique diversity of woody plants and vegetation types.

Alexei Oskolski, Johannesburg

### **Digitalization of Tropical Woods (1925–1960) is completed**

Dr. Jugo Ilic, IAWA member from Melbourne, Australia, has completed the digitalization of Tropical Woods issued from 1925–1960 and transferred them to the IAWA Beijing Office. These Tropical Woods include some important “classical” papers, and has been posted on the IAWA website under the link [http://www.iawa-website.org/en/Downloads/Tropical\\_Woods\\_1925\\_1960.shtml](http://www.iawa-website.org/en/Downloads/Tropical_Woods_1925_1960.shtml)

Shan Li, China

### **Call for Newsletter Items**

The IAWA Newsletter will keep the IAWA community actively informed and stimulate 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 Membership to the newsletter editor Yafang Yin ([yafang@caf.ac.cn](mailto:yafang@caf.ac.cn)).



## Contents of IAWA Journal 40 (1), 2019: 1–148

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## Important message on access to the Brill-IAWA Journal Platform

Many of you have experienced major problems in accessing the electronic version of the IAWA Journal due to changes in the Brill.com platform last year. We and Brill Publishers are very sorry for the inconvenience this has caused. In case of problems: in order to restore access, please follow instructions in the opening page of <https://brill.com/iawa>. If you continue to experience any problems with activating your account, please notify [brillonline@brill.com](mailto:brillonline@brill.com). If problems remain, please also notify the IAWA Office ([iawa.financial.office@gmail.com](mailto:iawa.financial.office@gmail.com)).

## Advance IAWA Journal Articles

IAWA Members can already access the following papers on the [brill.com](https://brill.com) website:

<https://brill.com/view/journals/iawa/iawa-overview.xml>

The doi numbers have not yet been activated, but will be later.

## IAWA Journal issue 40 (1)

**Large volume vessels are vulnerable to water-stress-induced embolism in stems of poplar**

By: Anna L. Jacobsen, R. Brandon Pratt, Martin D. Venturas and Uwe G. Hacke

[doi 10.1163/22941932-40190233](https://doi.org/10.1163/22941932-40190233)

**The occurrence and development of intraxylary phloem in young *Aquilaria sinensis* shoots**

By: Bei Luo, Tomoya Imai, Junji Sugiyama and Jian Qiu

[doi 10.1163/22941932-40190221](https://doi.org/10.1163/22941932-40190221)

**Wood anatomy of seven *Stryphnodendron* species (Mimosoid clade - Caesalpinioideae - Leguminosae)**

By: Kelly Cristina Moreira dos Santos, Gabriel Uriel Cruz Araújo dos Santos, Claudia Franca Barros, Haroldo Cavalcante de Lima and Cátia Henriques Callado

[doi 10.1163/22941932-40190229](https://doi.org/10.1163/22941932-40190229)

**Wood discrimination analyses of *Pterocarpus tinctorius* and endangered *Pterocarpus santalinus* using DART-FTICR-MS coupled with multivariate statistics**

By: Maomao Zhang, Guang Jie Zhao, Bo Liu, Tuo He, Juan Guo, Xiaomei Jiang and Yafang Yin

[doi 10.1163/22941932-40190224](https://doi.org/10.1163/22941932-40190224)

**CharKey: An electronic identification key for wood charcoals of French Guiana**

By: Stéphanie C. Bodin, Rita Scheel-Ybert, Jacques Beauchêne, Jean-François Molino and Laurent Bremond

[doi 10.1163/22941932-40190227](https://doi.org/10.1163/22941932-40190227)

**Wood species analysis of traditional hand-operated spinning wheels from Central Europe**

By: Tomáš Kolář, Vladimír Gryc, Konrad Mayer, Michal Rybníček, Hanuš Vavrčík, Andrea Weber and Michael Grabner

[doi 10.1163/22941932-40190223](https://doi.org/10.1163/22941932-40190223)

**Anatomy and mechanical properties of woods used in electric guitars**

By: Patrik Ahvenainen

[doi 10.1163/22941932-40190218](https://doi.org/10.1163/22941932-40190218)

For special issues 2–4 of Jubilee Volume 40 of the IAWA Journal the following papers have already been published on internet

**IAWA Journal issue 40 (2) – Special issue**

**Sample size and cardinal orientation in cambial activity analysis: a case study**

By: Maxmira de Souza Arêdes-dos-Reis, Monique Silva Costa, Gabriel Uriel Cruz Araújo dos Santos and Cátia Henriques Callado

[doi 10.1163/22941932-40190215](https://doi.org/10.1163/22941932-40190215)

**Within-ring variability of wood structure and its relationship to drought sensitivity in Norway spruce trunks**

By: Saskia Luss, Sven-Olof Lundqvist, Robert Evans, Thomas Grahn, Lars Olsson, Gaii Petit and Sabine Rosner

[doi 10.1163/22941932-40190216](https://doi.org/10.1163/22941932-40190216)

**Climate signals from intra-annual wood density fluctuations in *Abies durangensis***

By: Marcos González-Cásares, Marín Pompa-García and Alejandro Venegas-González

[doi 10.1163/22941932-40190217](https://doi.org/10.1163/22941932-40190217)

**The effect of mistletoe (*Viscum album*) on branch wood and needle anatomy of Scots pine (*Pinus sylvestris*)**

By: Murat Ozturk, Kadir Alperen Coskuner, Yetkin Usta, Bedri Serdar and Ertugrul Bilgili

[doi 10.1163/22941932-40190219](https://doi.org/10.1163/22941932-40190219)

**Wood-trait analysis to understand climatic factors triggering intra-annual density-fluctuations in co-occurring Mediterranean trees**

By: Angela Balzano, Giovanna Battipaglia and Veronica De Micco

[doi 10.1163/22941932-40190220](https://doi.org/10.1163/22941932-40190220)

**Influence of climatic factors on silver fir xylogenesis along the Italian Peninsula**

By: Serena Antonucci, Sergio Rossi, Fabio Lombardi, Marco Marchetti and Roberto Tognetti

[doi 10.1163/22941932-40190222](https://doi.org/10.1163/22941932-40190222)

**Linking functional traits and climate-growth relationships in Mediterranean species through wood density**

By: J. Julio Camarero

[doi 10.1163/22941932-40190225](https://doi.org/10.1163/22941932-40190225)

**Seasonal growth responses to climate in wet and dry conifer forests**

By: Andrea Cecilia Acosta-Hernández, J. Julio Camarero and Marín Pompa-García

[doi 10.1163/22941932-40190226](https://doi.org/10.1163/22941932-40190226)

**Are living peatland trees a reliable natural archive for climate reconstruction?**

By: Anna Dinella, Francesco Giammarchi and Giustino Tonon

[doi 10.1163/22941932-40190228](https://doi.org/10.1163/22941932-40190228)

**IAWA Journal issue 40 (3) – Special issue**

**Wood evolution: Baileyan trends and Functional traits in the fossil record**

By: Elisabeth A. Wheeler and Pieter Baas

[doi 10.1163/22941932-40190230](https://doi.org/10.1163/22941932-40190230)

**The Piedra Chamana fossil woods (Eocene, Peru), II**

By: D.W. Woodcock, H.W. Meyer and Y. Prado

<https://doi.org/10.1163/22941932-40190231>

**On the hydraulic conductance of three woody Devonian plants**

By: B. Cascales-Miñana, P. Gerrienne, B. Sirjacq and P. Steemans

[doi 10.1163/22941932-40190232](https://doi.org/10.1163/22941932-40190232)

**Structurally complex, yet anatomically plesiomorphic: permineralized plants from the Emsian of Gaspé (Quebec, Canada) expand the diversity of Early Devonian euphylllophytes**

By: Maya A. Bickner and Alexandru M.F. Tomescu

[doi 10.1163/22941932-40190234](https://doi.org/10.1163/22941932-40190234)