

## Future Meetings

### **The first Forum of Amazon Wood Anatomists (FAMAZON), November 22–24, 2017, Brazil**

The first Forum of Amazon Wood Anatomists (FAMAZON) with the theme “Challenges and perspectives for the coming years”, will be held from 22 to 24 November, 2017 in the Center of Natural Sciences and Technology of the Para State University. This is an initiative of research group “Wood Anatomy of Amazonian Species” from the Para State University associated with Embrapa Eastern Amazon. “Wood Anatomy of Amazonian Species” is a group certified by the National Council for Scientific and Technological Development from Brazil–CNPq.

This event will be a landmark in the organization of wood anatomists in Para State. At the meeting there will be assessments of wood anatomy as: science underlying the development of technological and innovative research for the Forest Sector; intrinsic knowledge about the development and adaptation of plants to the environment; and, Timber Certification and chain of custody, giving credibility to the Amazon Timber Market and to the historical record of the diversity of wood species in the Amazon biome through its wood collections.

Cláudia Urbinati, Brazil

### **4<sup>th</sup> IAWA-China Group Annual Meeting, November 25–26, 2017, China**

The fourth IAWA China Group Annual Meeting will be held at Zhang-Jia-Gang city, China, 25 and 26 November, 2017 by the Entry-Exit Inspection and Quarantine Bureau of Zhang-Jia-Gang.

"Innovating the research on wood anatomy and promoting sustainable development and utilization of forest resources" will be the theme of this meeting. Around 80 participants have registered for attending the meeting.

Jingjing Wang, China

### **12<sup>th</sup> Joint Seminar of China-Korea-Japan on Wood Quality and Utilization, December 18–20, 2017, Japan**

The 12<sup>th</sup> Joint Seminar of China-Korea-Japan on Wood Quality and Utilization of Domestic Species, a Joint Conference of the 346<sup>th</sup> RISH Symposium on Wood Culture and Science XVII, will be held December 18–20, 2017 at the Research Institute for Sustainable Humanosphere of Kyoto University, Japan. More than 100 participants from China, Korea and Japan registered for the seminar. The seminar series are held alternately by China, Korea, and Japan. The aim of the seminar is to provide a platform for researchers to meet and exchange the latest research results related to wood quality and utilization of domestic species from China, Korea, Japan, and other countries. Recent-year registered IAWA members from China and Japan participated into the seminar. Please contact the Seminar Secretary and check the website for updated information: <http://www.rish.kyoto-u.ac.jp/CKJ/2017/> – E-mail: [ckj2017uji@rish.kyoto-u.ac.jp](mailto:ckj2017uji@rish.kyoto-u.ac.jp)

Junji Sugiyama and Suyako Tazuru, Japan

### **IAWA Members organize a European Geosciences Union (EGU) Session, April 8–13, 2018, Vienna**

Veronica De Micco, Giovanna Battipaglia, Francesco Ripullone and Jesus Julio Camarero are convening the session “Mediterranean forests under pressure: current knowledge and future science directions” (<http://meetingorganizer.copernicus.org/EGU2018/session/27624>) at the EGU General Assembly 2018 (European Geosciences Union - EGU2018) that will take place on 08-13 Apr 2018 in Vienna, Austria.

The session focuses on efforts to improve current understanding on how Mediterranean forest ecosystems respond to changes in climate and to increasing occurrence of extreme events such as heat waves and severe drought stress. Contributions include observational, theoretical, and experimental studies, spanning a range of scales and conditions. Contributions on studies in semi-arid and other drought-prone ecosystems are also welcome. The abstract submission deadline is 13:00 CET on January 10, 2018.

Veronica De Micco, Italy

### **IAWA Sponsored Symposium “100 years of Bailey Trends – Wood Evolution, Function and Future” at Botany 2018, July 21–25, 2018, Rochester, Minnesota, USA**

This symposium commemorates the centennial anniversary of the publication of Bailey and Tupper’s classical paper “Size variation in tracheary cells: I. A comparison between the secondary xylems of vascular cryptogams, gymnosperms and angiosperms”. In keeping with Bailey’s themes, the symposium will include presentations on current thoughts on the evolutionary trends in secondary xylem, the ecophysiological context driving wood evolution, the evolution of pit structure and other functional xylem traits, evolution of secondary woodiness and future directions of wood anatomical research in the Anthropocene. Confirmed speakers are Pieter Baas, Ned Friedman, Frederic Lens, Elisabeth Wheeler, Kasia Ziemska.

IAWA members are encouraged to submit abstracts on topics related to this symposium to the Structural – Developmental section of the Botanical Society of America (BSA). It is too early to register, abstracts will be due in spring 2018. In early 2018, check the Botanical Society of America web page for details and the IAWA Facebook page:

<https://botany.org> – <https://www.facebook.com/IAWA-134228139984567/>

Elisabeth Wheeler, USA

### **IAWA sessions at the 10<sup>th</sup> European Palaeobotany & Palynology Conference (EPPC), August 12–17, 2018, University College Dublin**

IAWA will sponsor a general session "Fossil Woods. New Results and Perspective." Conveners are Anais Boura, Université Pierre et Marie Curie, Paris, France, and Anne-Laure Decombeix, CNRS-UMR AMAP, Montpellier, France. This general session welcomes all contributions linked to the study of fossil wood and bark anatomy, ranging from the description of new taxa to the use of wood to reconstruct the diversity, biology, and/or environment of fossil plants. We also invite contributions that aim to move forward the taxonomy of fossil woods, introduce new methods of analysis, or advance the conservation of fossil specimens and sites. Studies that focus more specifically on the timing and phylogeny of functional traits in wood can be submitted in our sister symposium on these topics.

There is also an IAWA sponsored symposium "The Timing and Phylogeny of Functional Traits in Wood." Conveners are Lisa Boucher, University of Texas, USA, and Nathan Jud, Cornell University, USA. This session will focus on aspects of the timing and phylogenetic placement of functional traits in the evolution of secondary xylem including, but not limited to: trends in the appearance of traits in the fossil record; combinations of characters in phylogenetic lineages; novel traits as adaptations to environmental or niche shifts; evolution of trait correlations; and phylogenetic constraints on wood evolution. Submission deadline 31 January 2018; please check:

<http://eppc2018.ie/call-for-abstracts/>

Elisabeth Wheeler, USA

## Meeting Reports

### International Botanical Conference (IBC) in China, July 23–29, 2017

The IBCs are the largest conferences in our field and take place every six years. During the latest edition in the booming city of Shenzhen, which is situated in southeastern China and is home to around 14 million inhabitants, 7000 scientists from all kinds of fields related to plant sciences attended the 19<sup>th</sup> International Botanical Conference. IAWA has a long tradition of organising wood symposia during the IBCs. Perhaps some of you remember attending St. Petersburg (1975), Sydney (1981), Berlin (1987), Tokyo (1993), St. Louis (1999), Vienna (2006), or Melbourne (2011).

Anyone who has attended an IBC in the past knows that these are huge events, and this was especially true for the Shenzhen conference. Consequently, the many symposia had to be spread over more than 20 parallel sessions and two main venues, making it challenging to select the presentations you wanted to attend. The number of posters was also overwhelming, but fortunately there were lots of digital poster panels allowing participants to screen for topics of interest at any given time.

IAWA successfully organised a wood symposium, entitled “Novel insights into wood research – from evolution to developmental genetics and functional traits” with six interesting contributions. Lichao Jiao (Chinese Academy of Forestry, Beijing, China) talked about forensic timber identification using molecular tools, Christine Strullu-Derrien (Natural History Museum, London, UK) had a wonderful presentation about tracheids in the oldest wood fossil known so far (407 million years old!) based on X-ray imaging, Bo Xu’s contribution (Cambridge University, Cambridge, UK) was about gene diversification and the evolution of water conducting cells in land plants, Frederic Lens (Naturalis Biodiversity Center, Leiden, The Netherlands) presented his work on the evolutionary transition from herbaceousness towards derived woodiness in flowering plants, the presentation of Shan Li (now Chinese Academy of Forestry, Beijing, China) dealt with the functional value of intervessel pit membrane thickness in flowering plants, and, last but not least, Marcelo Pace (Smithsonian Institute, Washington, USA) presented the recently published IAWA bark list.

Professor Biao Pan and Dr. Shengcheng Zhai (China Group of IAWA) also organised a Social Hour (picture at left), including an official ceremony where Dr. Frederic Lens presented the I.W. Bailey award to Dr. Shan Li, for her paper “Intervessel pit membrane thickness as a key determinant of embolism resistance in angiosperm xylem”, published in *IAWA Journal* 37: 152–171” (picture at right).



Looking forward to meeting many of you during the next IBC in Rio de Janeiro, Brazil, in 2023, but hopefully it will not take so long and we will see each other sooner during one of the many IAWA symposia scheduled for the coming years.

Frederic Lens, Netherlands

## 68<sup>th</sup> Brazilian National Congress of Botany 2017

Wood and bark anatomy were in the spotlight during the 68<sup>th</sup> Brazilian National Congress of Botany 2017 in the scenic city of Rio de Janeiro, August 20 to 25. At the opening ceremony of the Congress, Dr. Cecília Gonçalves Costa, a renowned wood and bark anatomist, IAWA member, and former mentor of numerous graduate students, received a well-deserved award for her accomplishments across her fruitful career at the Research Institute of the Botanical Garden of Rio de Janeiro. Her acceptance of this award was a proud moment for the entire Brazilian Plant Anatomist community.

The Congress offered three courses on wood and bark anatomy that were filled to maximum capacity. One was held two days prior to the Congress at the Federal University of the State of Rio de Janeiro and dealt with the recently published IAWA List of Microscopic Bark Features. This course comprised 16 hours of instruction by the organizers and instructors: Drs. Veronica Angyalossy, Carmen R. Marcati, and Marcelo R. Pace, from the São Paulo State University and Smithsonian Institution, respectively. Students benefited from the rich slide collection of Dr. Ray F. Evert from the University of Wisconsin-Madison, exhibiting details of the bark features depicted within the recently published IAWA List of Microscopic Bark Features. Two other courses dealt with wood anatomy, one with the Identification of Woods from the Brazilian Historical Heritage, comprising 6 hours of instruction by Dr. João Carlos F. Melo Jr., from the Joinville Regional University, in which he addressed the conceptual and methodological approaches to identify woods from the Brazilian colonial period. The third course dealt with the macroscopic identification of lianas and was organized by Drs. Neusa Tamaio, Arno F.N. Brandes and Marcelo R. Pace, from the Research Institute of the Rio de Janeiro Botanical Garden, Fluminense Federal University, and Smithsonian Institution, respectively. This course represented 7.5 hours of instruction over five days focused on understanding stem anatomical features for identifying the most abundant lianescent families and genera of the Neotropics.

At the Congress, the First Brazilian Panel of Dendrochronology, that was organized by Dr. Karin Esemann-Quadros from the Joinville Regional University, reunited researchers from Brazil and abroad, from Germany, where advances in the field could be tracked and planned. Students of wood anatomy also received awards for their works. Notably, Sabrina do Nascimento Silva, a graduate student of Dr. Cátia H. Callado, from the Federal University of the State of Rio de Janeiro, received an honorable mention for her study on the “Flora of Ilha Grande based on the identification of woods used in constructions, emphasizing the old bridge connecting Vila Dois Rios and the beach of Parnaioica”.

The overall success of the Congress shows that the academic community of Brazil has persevered through recent economic crises. Awardees and participants at the congress demonstrated that research programs in Brazil, including in wood anatomy, have remained strong, impactful, and vibrant.



IAWA members at the Congress at Rio de Janeiro. From left to right Carmen Marcati, Cecília Costa, Cláudia Barros, Veronica Angyalossy, and Karin Esemann de Quadros.

Marcelo Pace, Brazil

## **International Summer School “Dendroecology, Quantitative Wood Anatomy and Stable Isotopes: from xylogenesi s to tree rings” in Naples, Italy**

A highly successful International Summer School “Dendroecology, Quantitative Wood Anatomy and Stable Isotopes: from xylogenesi s to tree rings” was organized in Italy at Portici (Naples) and Caserta, September 25-29, 2017, under the joint auspices of IAWA, the Association of Tree-ring Research (ATR), the University of Naples Federico II, the University of Campania Luigi Vanvitelli, the University of Padua, the Società Botanica Italiana (SBI), the Società Italiana di Selvicoltura ed Ecologia Forestale (SISEF) and the Società Italiana di Ecologia (SItE).

The school provided basic, innovative and interdisciplinary knowledge on different aspects of wood formation: from xylogenesi s to quantitative wood anatomy, from tree-ring stable isotopes to data interpretation. IAWA Members Veronica De Micco, Giovanna Battipaglia and Marco Carrer headed the Organizing Committee and hosted a very full and intensive programme consisting of theory, field-work training and hands-on laboratory sessions. Students were involved in all aspects of sample preparation and analysis as well as data elaboration and interpretation, related to dynamics of wood formation and tree-ring analysis in response to environmental factors. Main topics included: Dendrochronology (tree-ring widths measurements with LINTAB system, TSAP software analyses and tree-ring chronology analyses), quantitative wood anatomy (xylogenesi s analyses and quantification of functional wood traits), tree ring stable isotopes (C & O), data analyses and interpretation of ecophysiological meaning based on the proposed multidisciplinary approach. The venue of the meeting close to the Royal Palaces of Portici and Caserta offered a nice background to escape from the tight schedule and to relax during lunch breaks and evening hours!

The school was headed by 7 instructors: Giovanna Battipaglia, Jesus Julius Camarero, Marco Carrer, Paolo Cherubini, Veronica De Micco, Cyrille Ratherberg, and Jordi Voltas, and was attended by 27 Students from 13 countries from all over the world. Instructors and Students have been invited to contribute to a special issue of the IAWA Journal, titled “From xylogenesi s to tree rings in biology, ecology, forestry and urban trees” (see below). Although the organization of this Summer School was very intensive and demanding, the feedbacks received from instructors and participants were so enthusiastic and positive that we promise that we will be back soon with a second edition.



Instructors and Participants of the International Summer School “Dendroecology, Quantitative Wood Anatomy and Stable Isotopes: from xylogenesi s to tree rings” at the Royal Palace at Portici where the Department of Agriculture of the University of Naples is located.

Veronica De Micco and Giovanna Battipaglia, Italy

## **9<sup>th</sup> Pacific Regional Wood Anatomy Conference (PRWAC) and Annual Meeting IAWS 2017 in Bali, Indonesia**

The joint conference of the 9<sup>th</sup> PRWAC (Pacific Regional Wood Anatomy Conference), the Annual Meeting of IAWS (International Academy of Wood Science) 2017 and the 9<sup>th</sup> International Symposium of the Indonesian Wood Research Society (IWoRS) was successfully convened on 26–29 September in Bali, Indonesia. About 190 participants from 18 countries attended and actively discussed various aspects of wood science. During the meeting, seven new IAWA members were recruited from four countries.

On September 27<sup>th</sup>, Executive Secretary Dr. Yafang Yin moderated the IAWA Business meeting in the evening and introduced the current situation of the IAWA. Dr. Hisashi Abe reported the nominating process for new council members and Professor Pieter Baas provided the explanation and solution to the abrupt drop of the impact factor of the IAWA Journal. Finally, the organization of the 10<sup>th</sup> PRWAC was discussed and Japan was adopted as the next host country. The IAWS Business meeting was then moderated by Dr. Robert Evans, the present president of the IAWS.



We appreciate the efforts and guidance of Professor Sri Nugroho Marsoem, the chairman of the 9<sup>th</sup> PRWAC and Annual Meeting of IAWS, Dr. Tomy Listyanto, the chairman of the 9<sup>th</sup> International Symposium of Indonesian Wood Research Society and all organisers of this joint meeting.

Hisashi Abe and Yasuhiro Utsumi, Japan

## **Miscellaneous News**

### **Chinese SFA visits the Thünen Centre of Competence on the Origin of Timber in Hamburg**

On September 19<sup>th</sup>, a delegation of the Chinese State Forestry Administration (SFA) visited the Thünen Centre of Competence on the Origin of Timber in Hamburg for information and discussions on current questions about the implementation of the European Timber Regulation (EUTR). The delegation was officially invited by the German Ministry of Food and Agriculture (BMEL) in context of the 3<sup>rd</sup> Meeting of the China-Germany Working Group for Forestry.

The “daily” control of internationally traded timber at the competence centre was introduced by Gerald Koch and Bernd Degen presenting an overview on methodological progress in the fields of microscopic and genetic wood identification, including the identification of fibre boards (MDF), paper and charcoal. A subsequent lecture by Ulrich Bick provided information on the significance of global market analysis and the requirements for certification systems. In addition to insights into the practical work of the Centre of Competence, the delegation visited the scientific wood collection at the Thünen-Institute of Wood Research with focus on seized wood products consis-

ting of CITES-protected species. The very intensive and stimulating discussions as well as pleasant exchanges of experiences with the Chinese delegation demonstrated the need and success of international cooperation to promote the legality and sustainability of forestry.

Gerald Koch, Germany

### **Announcement of IAWA Special Issue “From xylogenesis to tree rings in biology, ecology, forestry and urban trees”**

As an output of the International Summer School “Dendroecology, Quantitative Wood Anatomy and Stable Isotopes: from xylogenesis to tree rings”, IAWA is producing a book, edited also as special issue of IAWA Journal, including papers on subjects studied in the course and widening the interest through an interdisciplinary approach towards other applied fields such as management of urban trees. As suggested by the title of this special issue “From xylogenesis to tree rings in biology, ecology, forestry and urban trees”, articles (either reviews, methodological or research papers) are welcome on many aspects of tree-ring research. Guest Editors are: Pieter Baas, Giovanna Battipaglia, Jesus Julio Camarero, Chiara Cirillo, Veronica De Micco.

Key dates are: Paper submission: 31 January 2018; On-line availability: soon after acceptance; Publishing date for the hard copy: end of 2018–beginning 2019.

Veronica De Micco and Giovanna Battipaglia, Italy

### **Forest Legality Week and Global Timber Tracking Network (GTTN) Meeting 2017 in Washington D.C.**

Forest Legality Week took place at the World Resources Institute (WRI) in Washington D.C. from October 17–19, 2017. It was intended to enable dialogue and inspire action and partnerships to more effectively implement and monitor timber trade legality and due diligence measures. It is an annual multi-stakeholder, international event, drawing participants from governments, the private sector, civil society, the scientific community, and service providers such as timber certification bodies. The core of the meeting was a series of panel discussions - with plenty of room for questions by the audience - with topics including: The CITES Rosewood Listings: progress and challenges one year on; timber traceability systems; demand-side timber legality developments in Asia; timber trade information: challenges and solutions; years after the Lacey Act Amendment: impacts and outlook; private sector experiences in implementing due care practices; forests, climate, and governance: key roles of transparency and legality; GTTN Phase 2. Additionally, the meeting accommodated interactions with the different providers of timber traceability systems as well as a range of side meetings convened by partner organizations including Chatham House, the Nature Conservancy and the Global Timber Tracking Network. Please check the website for detailed information: <http://www.forestlegality.org/event/washington-forest-legality-week-2017>

In the frame of the Forest Legality Week and hosted by the WRI, the GTTN held its first working groups meeting on 19 and 20 October 2017. The GTTN promotes and supports all stakeholders involved in the operationalization of innovative tools for species identification and for determining the geographic origin of wood assisting the fight against illegal logging and related trade around the globe. Its members came together to discuss and to evolve strategies for the three working groups on: 1) International standards and recommendations for the application of the different timber tracking tools; 2) A global database of available timber tracking expertise and reference data; 3) Communication and advocacy concerning illegal logging, timber trade and the timber tracking tools. The members present at the meeting will now set up task forces, together with the other members of the 38 nationalities from all continents currently represented in the GTTN, to work on their common goals taking global action against illegal logging and the associated timber trade. Please check the website for detailed information:

<https://globaltimbertrackingnetwork.org/event/gttn-timber-tracking-workshops/>

Volker Haag and Nele Schmitz, Germany

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## PhD thesis on Tension wood and Tension bark

On October 17, 2017, IAWA Member Barbara Ghislain successfully defended her PhD thesis on anatomical diversity and efficiency of tension wood in tropical trees at the University of French Guyana. Part of Barbara's thesis, supervised by Bruno Clair, was published in the IAWA Journal this year (vol. 38: 245–265). The textbooks on tension wood will need to be rewritten, because Barbara found that in tropical trees the majority of species have tension wood with lignified instead of unlignified "gelatinous" layers, and there is even a significant number of angiosperm trees without any tension wood at all, which generate their "motor power" to straighten young stems and maintain branch wood angles with tension bark. Studies on this fascinating reaction bark in tropical trees is now being continued by postdoc Romain Lehnebach in Kourou, French Guyana.

Pieter Baas, Netherlands

## A New Plant Anatomy Lab Established in Madagascar in 2017

A new plant anatomy laboratory was recently established at the University of Antananarivo Madagascar. This lab is fully operational and now we are working on the establishment of a fully documented reference collection of *Dalbergia* and *Diospyros* of Madagascar. The first anatomical atlas of these species was already published by Springer this year. We are working to analyze more duplicates per species and more species to complete the previous work to validate the proposed identification key.

If you need additional information, please contact Dr. Harisoa Ravaomanalina:

harisoa.ravaomanalina@gmail.com

<https://www.facebook.com/368062966397/photos/a.376401216397.158172.368062966397/10154488434736398/?type=3&theater>.

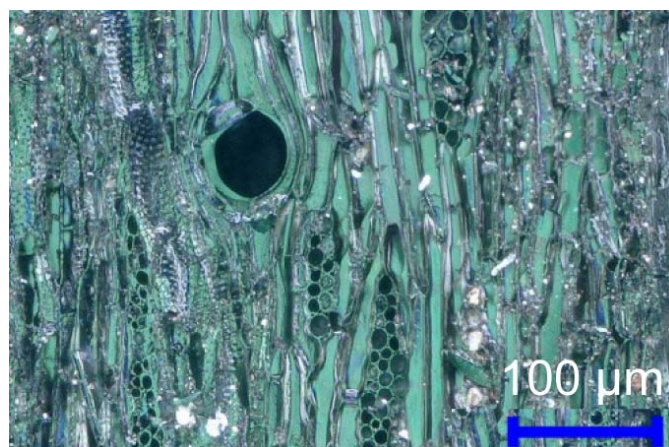
Harisoa Ravaomanalina, Madagascar

## Charcoal Identification Asks for Help

Recently a new challenge has come forward for the wood identification activities of charcoal. The charcoal (for barbecue) in Germany is in much demand and the declaration on the bag often does not coincide with its contents. After checking the contents of some bags, it was concluded that in the majority of the cases considerable numbers of tropical timbers were in the bags. While checking numerous pieces of charcoal, we observed some astonishing anatomical details not attributable to any of the known tissues making part of the complex structure of wood. The image of the tangential section was taken with a "3D-reflected-light microscope", an excellent means of studying the surfaces of pieces of charcoal. A number of circular to oval openings were observed.

Our intent in publishing these images in the IAWA Newsletter is to ask whether you have any suggestions as regards the nature of these structures. Please send your ideas to Dr. Hans-Georg Richter (hans.richter@thuenen.de) of the Thünen-Institute of Wood Research, Hamburg.

Hans-Georg Richter, Germany





## 20 Candidates nominated for the next IAWA Council

In total, 20 candidates from 12 countries were nominated by one or more colleagues to the IAWA Council (Year 2018–2020). Council members serve a three-year term, with the possibility to be re-elected to a second continuous term. The Executive Secretary and current Council will solicit brief vision statements from those who accept nomination – these statements will be collected by the end of October and made available to all IAWA Members at the time of ballot distribution this November.

## New Deputy Executive Secretaries appointed for the IAWA

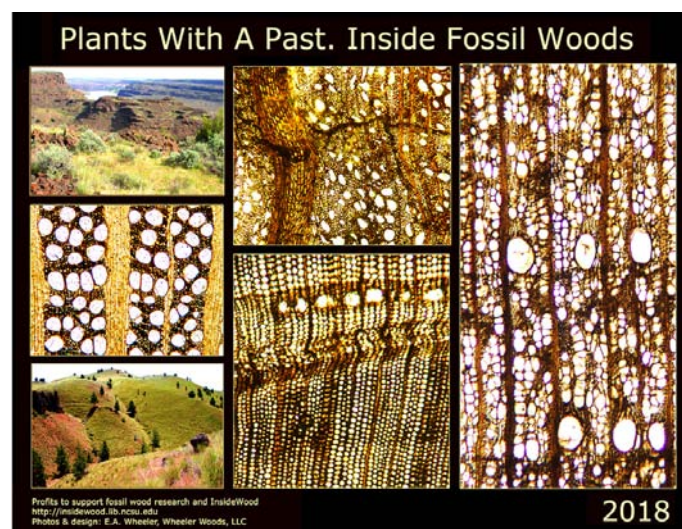
According to the IAWA Constitution, Dr. Hisashi Abe from the Forestry and Forest Products Research Institute (FFPRI) of Japan and Dr. Alex Wiedenhoft from the Forest Products Laboratory (FPL) of USA were nominated as candidates of the Deputy Executive Secretary of the IAWA, and won the official approval of the IAWA Council. The present Executive Secretary Dr. Yafang Yin formally appointed them as the new Deputy Executive Secretaries of the IAWA during his term, starting November 1<sup>st</sup>, 2017. The Executive Secretary will work with two Deputy Executive Secretaries together to share the responsibility and promote the IAWA.

## 2018 Plants With A Past. Inside Fossil Woods

This 2018 calendar is designed for wood anatomists to display in their office or lab. Each month features a different plant group or fossil wood locality with multiple photomicrographs. The dates for Arbor Days around the world are noted, so you'll know when to take some extra time for celebrating trees and their wood. This calendar includes some wood anatomist specific days you might want to observe - birth dates of I.W. Bailey, Sherwin Carlquist, C.R. Metcalfe. If you want to encourage some whimsy in your lab, it helps to know when to observe Chocolate Cake Day, Wombat Day, Avoid Procrastination Day, and Bug Bunny's Birthday. To order and see a preview of the calendar go to

<http://www.lulu.com/shop/elisabeth-wheeler/2018-plants-with-a-past-inside-fossil-wood/calendar/product-23225361.html>.

Check the Lulu Press home page <http://www.lulu.com/hometo> get the code for any current sale.



Elisabeth Wheeler, USA

## Call for Newsletter items

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)), so that we can make it a lively and interesting quarterly periodical.

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