# **IAWA Newsletter - December 2016**



# Yafang Yin new Executive Secretary of IAWA



The IAWA Council has elected Prof. Dr. Yafang Yin as new Executive Secretary of the IAWA, as from 1 January 2017. He succeeds Dr. Frederic Lens, who held the position from 2011 onwards. Yafang Yin (1976) majored in Forest Products and Engineering at the Northeast Forestry University, China, 1996 and took his PhD in 2002 at the Chinese Academy of Forestry in Beijing. His dissertation dealt with Histo- and cytological studies of cambium activity and wood formation in Populus tomentosa. He held post-doc positions and visiting scholarships at Forintek (Canada), FFPRI (Japan), and KTH (Sweden) and has been employed by the Chinese Academy of Forestry in Beijing throughout his career, from 2009 as Chief of the Wood Anatomy and Utilization department, and from 2011 as full Professor. Currently he holds a scholarship from the Chinese Government for 12 months to do research at the famous wood collection of FPL in Madison, Wisconsin (USA). Yafang has been on the IAWA Council from 2010 onwards. He is also the Deputy Chair of the very active IAWA-China group that was established in 2014. His current interests are in wood identification and timber provenancing, and wood properties in relation to cell wall (ultra)structure. In his vision for IAWA 2017–2021 Yafang will aim to strengthen IAWA Membership by engaging more young researchers and students in IAWA conferences and symposia and to help improve the impact of the IAWA Journal. We wish him great success with the tasks ahead.

# I.W. Bailey awards 2016 go to Carla Jane Harper and Shan Li

A panel of 8 judges composed of Pieter Baas, Lloyd Donaldson, Frederic Lens, Imogen Poole, Ute Sass-Klaassen, Uwe Schmitt, Elisabeth Wheeler, and Michael Wiemann has evaluated 10 nominations for the I.W. Bailey Award 2016 – manuscripts or papers by early career wood anatomists submitted or published between September 2015 and September 2016. Because the field was so strong, and no Bailey award was given in 2015, the judges decided to select two papers and authors for the award: Carla Jane Harper for her manuscript with co-authors on "Fungal decay in Permian glossopteridalean stem and root wood from Antarctica", accepted for IAWA J. 38 (1); and Shan Li for her paper with co-authors on "Intervessel pit membrane thickness as a key determinant of embolism resistance in angiosperm xylem", published in IAWA J. 37 (2): 152–171. These authors will receive the sum of EUR 1000 each – sponsored by Brill Publishers, and a certificate.

#### Some comments by the judges:

On the manuscript by Carla Jane Harper et al.: "this paper admirably illustrates how a piece of scientific research can be clearly conveyed to the wider audience with an appeal beyond that of the specialist. The paper documents fungal decay in Permian glossopterids but rather than just documenting the phenomenon it delves deeper into the subject and comes up with identifications and implications (anatomically and ecologically). Overall the paper is well written and clearly laid out. The results are logical and concise with clear figures and tables. The discussion is nicely set out and elaborates on the wider picture, which in turn clearly relates back to the initial aims."

On the paper by Shan Li et al.: "This entry stands out for its scientific quality. The paper is well written and the quality of the figures is excellent. The investigation of pit membrane thickness expands on earlier work to include a wide range of different samples and a rich database of experimental data on cavitation resistance. The topic of air embolism and the role of pit membrane ultrastructure in its spreading in the sapwood is of wide interest."

Three other papers attracted special praise from the award panel: Barbara Ghislain for "Diversity in the organisation and lignification of tension wood fibre walls", accepted for IAWA J. 38 (2); Nathan Jud for "Angiosperm wood from the Upper Cretaceous (Coniacian) of Britisch Columbia, Canada", accepted for IAWA J. 38 (2); and Martina Lazzarin for "Tracheid and pit anatomy vary in tandem in a tall *Sequoiadendron giganteum* tree", published in IAWA J. 37 (2): 172–185.



# Walter Liese at 90 honoured twice

On 11 November 2016 about 150 wood and forestry scientists gathered in Schloss Reinbek, Hamburg, Germany to honour Professor Walter Liese on the occasion of his 90th birthday earlier this year. In a symposium reflecting Walter's broad interests former students and colleagues presented talks on Bamboo, Rattan, Wood preservation, Geometry and Morphogenesis. Key note speaker was Walter himself, looking back on his rich and eventful career. Wulf Killman presented the laudatio and many speakers added their congratulations on behalf of IAWS, IUFRO, and institutions in Ghana, and Germany.

On 28 April the Forest Research Institute Malaysia (FRIM) convened a Seminar in Bamboo commemorating Walter Liese. The proceedings of this meeting, enriched by numerous personal tributes are currently being published by FRIM, with Dr. Salle Mohd. Nor and Norhayati Nordin as editors under the title "Tributes to Walter Liese".

Walter Liese was presented with an Honorary Membership of IAWA for his many services to wood anatomy in the widest sense in Kyoto, Japan, in 1981 during a IUFRO World Congress. We join the international community in thanking him for his ongoing contributions and in wishing him good health and happiness in the coming years.

## **Veronica De Micco joins IAWA Journal Editorial Team**

Dr. Veronica De Micco (Naples, Italy) has kindly agreed to serve as Associate Editor of the IAWA Journal. Veronica brings with her experience as co-editor of the successful special IAWA Journal Issues on Wood Structure in Plant Biology in Ecology (2013) and on Functional Traits (2016). Her expertise at the borderline between anatomy, physiology and ecology will be welcome in our editorial team.

## **Future Meetings**

#### Cell Wall Symposium at Scion, Rotorua, New Zealand, 2017

Scion is hosting a 1-day symposium on plant cell walls at the Rotorua campus on Tuesday 21 February 2017. Registrations are now open. A registration fee of NZ\$ 40 covers coffee, lunch and a printed programme. An abstract book will be produced based on presentations at the meeting. This meeting is timed to coincide with a business meeting of the International Academy of Wood Science the preceding day so several international speakers will be able to attend. Presentations on any aspects of primary or secondary cell walls in plants, or products including food or materials made from cell walls, are welcome. Registrations and abstracts are due by 1 January 2017.

To register and/or send an abstract please send an email to Lloyd Donaldson giving your details before 1 January 2017 (lloyd.donaldson@scionresearch.com). Air NZ flies to Rotorua daily from Auckland (3 flights) and Wellington (3 flights). Please send an abstract of your talk as a Word document prior to the January 1 deadline. Please use minimal formatting. The abstract can be up to 2 A4 pages and may include 1 colour figure.

## IAWA Symposium at XIX IBC 2017, Shenzen, China

On behalf of IAWA, Dr. Frederic Lens and Prof. Pan Biao are organizing a symposium during the XIX International Botanical Congress in Shenzen, China, from 23–29 July 2017. Our symposium is called T4-39 and the abstracts can be found with the link mentioned below.

Deadline for submitting abstracts for oral presentations is extended till January 15th 2017 via http://www.ibc2017.cn/Abstracts/?61. Six slots are available.

The IAWA symposium will be on a wide array of modern wood research. We aim for a balanced contribution of presentations related to (1) wood identification techniques based on wood anatomy, DNA barcoding and/or chemical profiling that provide us with a good overview about current techniques in the fight against illegal logging, (2) evolutionary and ecological signals in the stem anatomy of trees and shrubs, (3) developmental wood genetics focusing on candidate genes involved in cambium or wood formation, and (4) various aspects on functional wood anatomy, which is a vibrant discipline linking xylem anatomy and physiology, including amongst others topics on xylem refilling and the potential artefacts that long vessels may induce when estimating resistance to embolism formation.

An IAWA social event will be organized with the support of the IAWA-China Group, and constitute a traditional highlight for all wood, bark and bamboo anatomists attending\ the IBC.

#### IX PRWAC in Bali Indonesia, 2017

Readers are reminded of the 9th Pacific Regional Wood Anatomy Conference in Kute, Bali, Indonesia to be held from 26–19 September jointly with the annual meeting of IAWS and IUFRO Division 5. Registration and submission of papers and posters is open at url: www.woodconference.fkt.ugm.ac.id/9th-prwac/. Topics addressed will be: Tree physiology and pathology, Wood formation and cambial activity, Dendrochronology (Tree ring analysis) & dendroclimatology, Wood identification, Wood quality, Tropical hardwood and NWFP, Paleobotany and archaeology, Protection of endangered wood, Wood utilization and environment, Wood culture, General wood anatomy, Cytochemistry: cellulose, hemicellulose, and lignin, Wood anatomy and processing, Wood properties, Wood processing technology, and Biomass energy. The conference will be held in the Harris Hotel on the beautiful island of Bali, Indonesia.

### IAWA Bark Symposium at IUFRO Division 5, Vancouver, 2017

Among the many sessions during the All-Division 5 Conference in Vancouver from June 12–16, 2017 one stands out as IAWA Symposium om Function Driven Variability in Wood and Bark, convened by Paul McLean (Forest Research, UK), Pekka Saranpää (Natural Resources Institute Finland - LUKE), and Uwe Schmitt (Thünen Institute, Germany).

The session aims to promote scientific discussion on within-species variability in wood and bark that are driven by genetics and/or the natural or man-made (e.g. silviculture) environment. The session will pay particular attention to factors that affect the function of wood and bark for the tree and how this has consequences for forest products. The session will consider variability within and between individual trees and how the variability of the material can be characterised or managed throughout the forest wood chain to promote optimisation.

#### Wood Science and Engineering in the Third Millennium - ICWSE 2017

The 11th edition of this international meeting which will be organized by the Transilvania University - Faculty of Wood Engineering, in Brasov, Romania, from 2–4 November 2017.

The papers accepted for oral presentation will be published (full online access) in a special edition of PRO LIGNO - scientific journal in the field of wood engineering (http://www.proligno.ro/en). The conference details are available on the conference website: http://www.unitbv.ro/il/Conferinte/ICWSE2017.aspx

# Successful IAWA Symposium on Hydraulic Architecture through Time in Salvador de Bahia, Brazil

The IAWA Symposium on "Hydraulic Architecture through time" on 24 October 2016 in Salvador de Bahia, Brazil was well-attended and highly successful. All talks and posters attracted a lively discussion. Dr. Nareerat Boonchai from Thailand could not be with us in the flesh, but sent a recorded powerpoint presentation. Throughout the International Palaeobotany Congress IAWA had a stand for attracting new members and selling publications, peopled by Elisabeth Wheeler, Jakub Sakala and Pieter Baas. The next IOPC will be in Prague in 2020, and we are planning a strong presence of IAWA at that venue where Jakub Sakala already successfully hosted a memorable IAWA Social hour at a European Paleobotany Conference in 2006.

Lisa Boucher, Anne-Laure Decombeix and Jonathan Wilson, the conveners of this symposium, are actively planning a special IAWA Journal issue on Hydraulic Architecture through Time, to be published in 2018.



Jamile Fernandes, Marcelo Silva, Pieter Baas and Elisabeth Wheeler at the IAWA table in Salvador de Bahia (by courtesy of Marcelo Silva).

## IAWA Barklist published

IAWA Journal issue 37(4) is entirely devoted to the new IAWA List of Microscopic Bark Features, authored by an international IAWA Committee of 15 members from 9 countries, and edited by Veronica Angyalossy, Marcelo R. Pace & Pieter Baas. All IAWA Members will receive a copy and/or e-access to this landmark publication, which should standardize terminology in bark anatomy in a similar way that the IAWA Hardwood and Softwood Lists have done. IAWA Members with e-access only are greatly encouraged to order separate hard copies – produced in a specially attractive cover, to have ready near their microscopes or while teaching advanced plant anatomy courses. See advertisement at the end of this Newsletter.

#### **IAWA Website in Transition**

While Prof. Yafang Yin is preparing for the IAWA Website to be managed from Beijing, there will be a transition period during which the IAWA Website will not be updated. Please refer to our regular Newsletter for the latest IAWA Association affairs and Wood Anatomy news.

## **Dues Notices IAWA Membership**

Within a few weeks you will receive your IAWA annual dues notice for 2017 from Cees Lut, IAWA's financial administrator. Please pay promptly, also if the notice includes arrears for 2016!

#### 2017 Calendars for Wood Anatomists

Plants With A Past. Inside Fossil Wood – Each month features a different plant group or fossil wood locality with multiple images showing the anatomy of fossil and modern woods, most in color. Inside Woods of the U.S.A. – Photomicrographs of trees and shrubs native to the U.S.A., a different family each month. This calendar is a useful reference for learning wood anatomy, with comments on the features diagnostic of the featured families.

Both calendars give dates of Arbor Days worldwide and some whimsical days to celebrate – Wombat Day, Bugs Bunny's birthday, Procrastination Day. Decorate the walls of your office or lab with these informative calendars.

Available from Lulu Press – http://lulu.com. Search for InsideWood. There are e-stores in the US, UK, Germany, France, Italy, Netherlands, Canada, Spain, Australia, Ireland, Switzerland. Chose the store convenient for you at the circular flag icon at top of page. Check their home page to see if they offer a discount code.

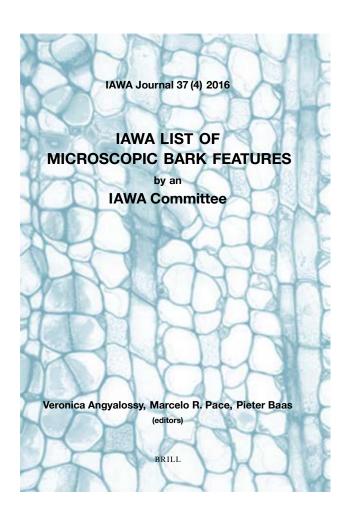
Direct link to previews and ordering information:

http://www.lulu.com/shop/elisabeth-wheeler/2017-plants-with-a-past-inside-fossil-wood/calendar/prod-uct-22957142.html

http://www.lulu.com/shop/elisabeth-wheeler/2017-inside-us-woods/calendar/product-22924328.html







# IAWA LIST OF MICROSCOPIC BARK FEATURES

by an IAWA Committee of 16 bark anatomists and edited by Veronica Angyalossy, Marcelo R. Pace, and Pieter Baas

Reprinted from IAWA Journal 37 (4): 517–615 (2016)

Price of hard copies in special cover (paperback): EUR 13.00 (USD 15.00) plus postage. Special discounts will be given for bulk orders for teaching purposes.

This IAWA List of microscopic bark characters sets a new international standard for the definition and recognition of anatomical features of barks in woody angiosperms and gymnosperms. Codes are given for 173 anatomical character states to facilitate databasing the huge diversity of bark structure in trees and shrubs. It is richly illustrated with 169 splendid micrographs, virtually all in colour. An appendix gives practical guidance on methods for the microscopic study of bark.

The "IAWA Bark List" is not only indispensable for any future work on comparative bark anatomy and microscopic bark identification, but can also be used as a first inventory of functional traits in this complex tissue that is so vital for the physiology and protection of trees. Its significance can be compared with the IAWA Lists for Hardwood and Softwood Identification (1989 and 2004) that have been adopted by the entire international wood anatomical community.

The Bark List will also be a most valuable resource for advanced botanical teaching.

Please order with the IAWA Office: eevn33@kpnmail.nl or pieter.baas@naturalis.nl