

The Wood Technology Society

A Division of the Institute of Materials, Minerals and Mining

Winter 2020 Newsletter

Welcome to the winter newsletter for the Wood Technology Society.

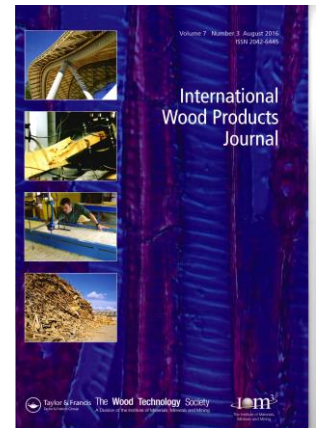
In this issue we offer a review of the WTS's activities in 2019, and highlight some events and opportunities in the pipeline for 2020. We hope we'll meet you at our events.

Morwenna Spear FIMMM

What has the WTS been up to?

At our recent Annual Review Meeting the board considered the many achievements of 2019 – these included the conference (Timber 2019), the *From Timber To Trees* seminars in Edinburgh and Winter Seminars in London. It also included our regular column in the Timber Trades Journal – *Talking Timber*, and the ongoing work on our website and social media, as well as refreshing our newsletter. We have also submitted a few articles or content to Materials World, and we hope you spotted the theme for the December issue's crossword...

Another significant output is the *International Wood Products Journal*, <https://www.tandfonline.com/toc/ywpij20/current>. This is the scientific journal edited by our own Gervais Sawyer, and published by Taylor Francis. Do remember to consider this if you are looking to publish your scientific papers in the field of wood technology. The journal currently is published quarterly, and features a wide range of articles on wood products. Don't forget, your IOM3 membership gives you access to this and many other scientific journals online (more info here <https://www.iom3.org/publications>).



We cannot overlook the monumental effort that has gone into scanning the archive of the *Journal of the Institute of Wood Science* (which changed its name to *International Wood Products Journal* in 2010 as we joined the IOM3). Volumes 17 to 19 (2005 to 2009) are available through the Taylor Francis website from the transition period of IWSc and IOM3 merger. However the early issues, starting in 1958 have been scanned and uploaded to the IOM3 document portal (<https://iom3.captureweb.co.uk/>).

News from the board

A task group of the board has formed to investigate and develop the member experience for TIMMM members. We will be contacting relevant members early in the new year to hear your thoughts on the current offering, and any areas that could be improved. If you receive an email about this, do make sure to follow up – we'd love to hear from you!

Recent Events

The WTS Winter Seminars, in London, comprised three short talks to look at the past, the present and the future of wood technology. Kindly sponsored by Lignia Wood Company, and well attended, despite the change of date (due to the General Election).

Gervais Sawyer (Timber Consultant) set the scene with an entertaining and inspiring look at some of the heroes of wood technology – from the first use of mechanised saws in China in the 5th Century BC. Lu Ban, the engineer and inventor went on to be revered as the god of carpentry! Onwards through Talos in ancient Greece to many inventors in Europe in the 18th Century and up to the modern day. It was truly fascinating to appreciate the innovations which have given us the wood-working and wood-protection technologies of today.

Next Morwenna Spear (Bangor University) covered the options of generating ‘Tailor-made timber’ here and now. This focused on wood modification technologies which can protect timber from biological attack or to reduce dimensional instability. They are also a potential springboard for new products and technologies. Many products have emerged onto the market (acetylated wood, thermally modified wood, resin modified wood) and awareness of the differences between them may help in selecting the best modified timber for the task.

To conclude the session Martin Ansell (Bath University) was invited to repeat his popular *Advances in Wood Science and Technology* talk, and some new additions. The future of wood technology ranges from robotics and additive manufacturing techniques such as 3D printing, through to developments in wood modification (to transparent wood, densified wood and beyond...) and innovation in timber engineering. The wide range of applications and technologies is continually growing, from energy storage to shape-morphing materials. Similarly, the application of new technologies to wood industry challenges, such as CT scanning of logs or the use of artificial intelligence to detect insect attack. You can see some highlights from this talk in the January issue of *Materials World* too.

Who are your wood science and technology heroes?

During Gervais’s talk at the Winter Seminars we were encouraged to reflect on our wood science heroes. In his talk, Gervais nominated Terry Highley (of USDA Forest Service) for a massive study which he coordinated in the 1990s comparing a huge range of timber preservatives; and in the field of wood decay, Prof John Levy (Imperial College) for inspiring so many students in the field.

We’d like to extend this challenge to you, our members – perhaps you have a favourite inventor, pioneering scientist or writer who has made a difference to your field. If so, we would love to hear about them. Email us on wts@iom3.org with subject line ‘wood science heroes’.

What’s new on our website?

We continue to highlight a few additions to the WTS microsite (<https://www.iom3.org/wood-technology-society>). Did you know that we have been revising the Essential Reading section?

This now includes many texts from classic textbooks to the most recent publications in the field. <https://www.iom3.org/wood-technology-society/essential-reading>

You might also be interested in the Wood Under the Microscope page which shows common softwoods and a range of interesting hardwoods (from Balsa to Mahogany) to illustrate the differences in wood anatomy (<https://www.iom3.org/wood-technology-society/wood-under-microscope>).

The images are either radial longitudinal section (RLS), tangential longitudinal section (TLS) or transverse section (TS). The TS allows differences with growth rings (earlywood and latewood), or size and distribution of vessels to be seen (in hardwoods), while the RLS images often show the rays crossing the longitudinally aligned fibres or tracheids. While you are browsing, why not also look at our short primer on Wood Identification (<https://www.iom3.org/wood-technology-society/wood-identification>)

The regular “Meet the WTS board” column is an opportunity to get to know your board members. Follow this link to find out about Martin Ansell’s pioneering work on fatigue testing of laminated timber for wind turbine blades (<https://www.iom3.org/wood-technology-society/feature/2019/dec/17/meet-wts-board-martin-ansell-and-windfarms>). Previous editions can be found in the Features section of the website.

Regular visitors to the website might have noticed some changes, including improved compatibility when browsing on a tablet or mobile phone. The IOM3 web team have been addressing some long-standing issues as the first phase of an exciting revamp of the site, and we look forward to some increased functionality in the spring.

As ever, if you are participating in notable wood or timber events and activities (or know of others taking part who deserve a mention) do get in touch with details so we can add it to the events section, or report it in our news (wts@iom3.org).

Social Media

Remember to keep an eye on our social media accounts! We have a twitter account ([@wood_technology](https://twitter.com/wood_technology), https://twitter.com/wood_technology), Instagram ([@wood_technology_society](https://www.instagram.com/wood_technology_society/), https://www.instagram.com/wood_technology_society/) and LinkedIn (<https://www.linkedin.com/groups/8138693/>).

What’s coming up soon?

There will be a few places available to join us on a visit to the Misericords at Ripon Cathedral on 17th June 2020. These timbers date back to the 15th Century, and feature intricately carved creative scenes and designs. Join us to find out more, including the Alice In Wonderland connection. Full details of how to sign up for the visit will be on our website in the spring.

We expect to run Timber 2020 on 9-10th September in London. This year we will feature invited guest speakers as well as scientific talks. The Call for Papers will be circulated and posted on our website shortly.

Also planned are seminars in Scotland and the North East of England, so do keep an eye on the events board on our website for more information! <https://www.iom3.org/wood-technology-society/events>