ISSUE

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# IAWS Bulletin

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#### Executive

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Lloyd Donaldson

### Message from the President



Some business of the Academy was delayed or postponed due to the COVID pandemic. Nonetheless, the Academy was fortunate to elect four new Academy Board members. Fellows Ingo Burgert (ETH Zurich, Switzerland), Shusheng Pang (Canterbury University, New Zealand), Mansfield Shawn (University of British Columbia, Canada), and Junji Sugiyama (Kyoto University, Japan) and were elected as Academy Board Members, replacing four retired board members. They will serve on the board for the next 6 years.

The Academy is also proud to elect thirteen new fellows. Five woman scientists were elected out of 13 new fellows. Moreover, the Academy now has fellows from Africa and Malaysia. IAWS continues to improve the imbalance in gender and geography of fellows. Biographic details of board members and new fellows can be found later in this Bulletin.

The Academy is also very happy to have four new affiliated members; International Association of Wood Anatomists (IAWA), Korean Society of Wood Science and Technology (KSWST), Southwest Forestry University (Kunming, Peoples Republic of China) and National Institute of Forestry Science (Seoul, South Korea).

We all appreciate their participation as Affiliated Members and their contributions to the development of the Academy.

Furthermore, the Academy successfully presented the IAWS Special Session in the 2021 World Wood Day Symposium. Vice President Stavros chaired the special session. Fellow Phil Evans (UBC, Canada) presented an Academy lecture titled as *"Containing carbon in wood used for coastal defense marine construction"*. Many of the Academy fellows presented their research works in a two-day virtual symposium.

The Academy continues enhancing the visibility and accessibility of our website in the last couple of years. Lloyd Donaldson has arranged for the new website and downloaded all files from the old website for archiving. In the near future we will all enjoy the newly arranged website of the Academy. We all appreciate Lloyd for his painstaking work not just to Academy's website but also to Bulletin editing. Last but not least, I am very happy to report the sound financial situation of the IAWS due to the extraordinary management by Howard Rosen. We are very grateful to Howard Rosen. I appreciate all the EC members for their commitment and enthusiasm for the Academy.

For a while, all the meetings of the Academy will be take place virtually. It takes time for us to return to the "old" normal but I am sure we can meet in person again soon. I believe that all the fellows can make very productive and meaningful time even in the pandemic situation. I wish all of you well.

Thirteen new fellows were elected from the 2020 election. We welcome to the academy the following new fellows:

*Prof. Dr Benhua Fei,* Executive Deputy Director General, Research Professor, International Centre for Bamboo and Rattan, Beijing, China.

**Prof. Dr Aster Gebrekirstos**, Head of the Dendrochronology Laboratory, World Agroforestry (ICRAF), United Nations Avenue, Gigiri, P.O. Box 30677-00100, Nairobi, Kenya.

Prof. Dr Mark Irle, Senior Researcher, Ecole Supérieure du Bois, Nantes, France.

**Prof. Dr Andreja Kutnar**, Full Professor for the field "Wood Science" at the University of Primorska Slovenia; Director of research institute InnoRenew CoE, Slovenia; Affiliated faculty member in the Department of Wood Science and Engineering, Oregon State University USA.

*Prof. Dr Lu Lin*, Distinguished Professor and Vice Dean, College of Energy, Xiamen University, China.

*Prof. Dr Changtong Mei*, Professor, College of Materials Science and Engineering, Nanjing Forestry University, China.

*Prof. Dr Veronica de Micco*, Associate Professor in Environmental and Applied Botany, Dept. Agricultural Sciences, University of Naples Federico (UNINA), Naples, Italy.

**Prof. Dr Rozi Mohamed**, Full Professor, Department of Forestry Science and Biodiversity, Faculty of Forestry and Environment, Universiti Putra Malaysia, 43400 UPM Serdang Selangor, Malaysia.

*Prof. Dr Antje Potthast*, Full Professor, University of Natural Resources and Life Sciences, Vienna (BOKU), Austria.

*Prof. Dr Scott Renneckar*, Professor; Department of Wood Science at the University of British Columbia, Vancouver, Canada.

**Prof. Dr Jinquan Wan**, Professor State Key Laboratory of Pulp and Paper Engineering South China University of Technology #501 Pulp and Paper Building, Wushan Road, Guangzhou, China.

*Prof. Dr Shuangfei Wang*, Professor, College of Light Industry and Food Engineering, Guangxi University, No. 100 Daxue Road, Nanning, Guangxi, China.

**Prof. Dr Zhihui Wu**, Professor, College of Furniture and Industrial Design, Nanjing Forestry University, China.

*Prof. Dr Benhua Fei,* Executive Deputy Director General, Research Professor, International Centre for Bamboo and Rattan, Beijing, China.



Curriculum Vitae: Dr. Fei earned his Bachelor's Degree of Agronomy from the Faculty of Forestry, Anhui Agricultural University (AAU) in 1987. From 1987 to 1989, he worked at the Forestry Bureau of Liu'an County, Anhui Province. From 1989 to 1992, he conducted postgraduate study at AAU and received a Master's Degree of Engineering upon graduation. He joined the faculty of AAU afterwards and served first as a lecturer and then as the department dean until 1997. He received his Ph.D in wood science and technology, from the Chinese Academy of Forestry (CAF) in 1999 after three years of study. From 1999 to 2005, he worked at CAF in the capacity of Associate Research Professor, and then as Research Professor and Doctoral Supervisor. Between 2001 and 2005, Dr. Fei also served as Assistant to CAF President. Between May and August 2001, he undertook a further study program at the Forestry and Forest Products Research Institute, Japan as a visiting scholar. From 2005 to 2009, he served as Director General of Beijing Forestry Machinery Research Institute, State Forestry Administration of China, then as Deputy Director General of ICBR from 2009-2013. Since February 2013, he has been serving as Executive Director General, Research Professor, Doctoral Supervisor at ICBR.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: Secretary-General, National Technical Committee on Timber, Standardization Administration of China (2006–2016); Vice President, Chinese Society of Forestry (2016–); President, China Bamboo Industry Association (2017–); Member, Specialists Panel for the Ministry of Housing and Urban-Rural Development of China (2010–); Chairperson, ISO/TC 296 Bamboo and Rattan (2015–); Visiting Scholar, Forestry and Forest Products Research Institute, Japan (2001); Member, International Society of Wood Science and Technology (SWST) (2013–); Associate Editor, Forestry Science (2016–).

**Principal Wood Science Achievements:** Long engaged in research of wood and bamboo science, Dr. Fei has chaired over 10 national research projects, including projects of Technology Support Program of China's National Five–Year plan. He has also tutored 29 graduate students. Dr. Fei was awarded honorary titles such as Provincial Plans, National HighTech R&D Program (863 Program), National Natural Science Fund. His research has won one First Prize and three Second Prizes of China's National Science and Technology Progress Awards. Meanwhile, these research results were transformed into 7 national patents of invention, 19 patents of utility model and over 170 papers, among which over 60 were included by SCI. Moreover, Dr. Fei has authored 14 books, such as Characterization Technology and Application of Mechanical Properties of Wood Cell Wall, Timber Architecture, Construction Technique of Lightweight Timber Structures, Properties of Major Tree Species in China's Plantations, Properties of Major Tree Species in the World, Bamboo and Rattan in the World, Correlation between Structure, Chemical Composition and Properties in Wood, Chinese Forestry Project, Strategy of Forestry Research in China's Sustainable Development–Level Talented Teacher, recipient of special allowance of the State Council, national candidate for the New Century Talents Project, and National Outstanding Scientific and Technological Worker. He has made great breakthroughs in the research of basic properties of wood, cell wall science of wood and bamboo, and research and development of bamboo engineering materials, which have exerted great influence at home and abroad.

*Prof. Dr Aster Gebrekirstos,* Head of the Dendrochronology Laboratory, World Agroforestry (ICRAF), United Nations Avenue, Gigiri, P.O. Box 30677-00100, Nairobi, Kenya.



**Curriculum Vitae:** Education, PhD Tropical Forest Ecology, 2006, University of Gottingen, Germany; MSc Tropical Forestry, 1998, Wageningen Agricultural University; BSc Forestry, 1994, Alemaya University; Diploma Forestry, 1988, Wondo Genet College of Forestry; More than 25 years experience in research, tertiary level teaching, fundraising, and consulting; lead and participate in various research projects across Africa and Asia.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: Elected Fellow of the African Academy of Sciences 2017; 2016 conferred Eleonore Trefftz Visiting Professorship, Faculty of Environmental Sciences, Technical University Dresden, Germany; Winner of AfriCAN Climate Award for Excellence in Climate Change Research in 2014; Special Award for Ground Breaking Science in 2009; Nominated for The World Academy of Sciences (TWAS) Fellow 2020 (awaiting final decisions). Currently-Vice President International Union for Agroforestry (IUAF); Chair of the Environment Committee African Academy of Sciences; Deputy coordinator of IUFRO Task Force on Global Tree Mortality Patterns and Trends; Mountain Research Institute (MRI) Science Leadership Council (since 2016); PAGES Scientific leadership. Served as Associate Editor of the journal Dendrochronologia and involved in reviewing papers for various international journals, grants and member of many scientific societies including Association for Tree Ring Research.

**Principal Wood Science Achievements:** Prof. Gebrekirstos found several tree species that form annual rings and grow to multi-century age across Africa and conducted pioneer work on stable isotope dendrochronology in Africa. She pioneered combining different measurements, such as tree ring width, stable isotopes and leaf plant water potential to characterize species adaptation potential to climate change. She produced relevant information on regional climate variability and trees' responses to climate change, and together with her PhD students and international collaborators She established the longest annually resolved rainfall variability and river discharge reconstructions (370 years) for the Greater Horn of Africa region so far. Her group also recommended tree and shrub species for land restoration and agroforestry based on their functional traits such as, density, water use efficiency, drought tolerance. She also developed wood anatomical time series in Asia (Bangladesh, China). Ongoing studies include wood anatomy, particularly vessel characteristics, and on wood fungal infections of Cacoa (*Theobroma cacao*, Malvaceae), a very important commercial tree species.

Africa's wood and climate science is the least developed globally. Prof. Gebrekirstos has raised funds and established dendrochronology and wood anatomy labs in Ethiopia (2009) and Nairobi, Kenya (in 2013). She trained MSc and PhD students from different parts of Africa, thereby spread the science into their respective Universities. Since this innovative discipline is not yet a standard in the curriculum of most universities, this requires collaborative efforts including funding, capacity building, laboratory facilities, and exchange of expertise, and she is in the process to establish an African Tree Ring Society.

Prof. Dr Mark Irle, Senior Researcher, Ecole Supérieure du Bois, Nantes, France.



**Curriculum Vitae:** Present: Senior Researcher Laboratory, Ecole Supérieure du Bois; 2004 – 2010: Deputy Director, Ecole Supérieure du Bois; 2002 – 2010: Research Director, Ecole Supérieure du Bois; 1997 – 2002: Head of Forest Products Research Centre, Buckinghamshire Chilterns University College (BCUC, now Buckinghamshire New University); 1996 – 1997: Reader in Wood Science, BCUC; 1994 – 1996: Principal Lecturer, BCUC; 1986 – 1994: Lecturer in the School of Agricultural and Forest Sciences (SAFS), University of Wales, Bangor; 1985 – 1986: Research assistant investigating the commercial viability of zirconium based water repellents for wood. SAFS, University of Wales, Bangor.

**Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies:** President of InnovaWood; Research Associate of IVALSA, Florence, Italy (2017–present). Fellow of The Wood Technology Society of the Institute of Materials, Minerals and Mining (UK). Member of Wood Panel Industries Federation Technical Committee. (1995–present). Member of the Editorial Board of International Wood Products Journal (2009–present), European Journal of Wood and Wood Products (2017–present) and Wood Material Science & Engineering (2017–present).

**Principal Wood Science Achievements:** Through many collaborative, applied research projects Prof. Irle has contributed to our understanding of: adhesive rheology, wood rheology (including mechanosporption), wood recycling (assessing quality, improving quality and developing novel recycling methods), the properties and performance of all types of wood-based panels, but, particleboard and plywood in particular, formaldehyde emission, wood-cement compatibility and wood weathering. He has helped train around 2,500 graduates and post-graduates of wood science and technology who, in their turn, have played their parts in developing the wood sector to what it is today.

**Prof. Dr Andreja Kutnar**, Full Professor for the field "Wood Science" at the University of Primorska Slovenia; Director of research institute InnoRenew CoE, Slovenia; Affiliated faculty member in the Department of Wood Science and Engineering, Oregon State University USA.



**Curriculum Vitae:** Education 2008: Doctor of Philosophy, Biotechnical Faculty, Department of Wood Science and Technology, University of Ljubljana, Slovenia. 2003: Bachelor of Science, Biotechnical Faculty, Department of Wood Science and Technology, University of Ljubljana, Slovenia. Current Position(s) 2020 – present: Full Professor for the field "Wood Science", UP FAMNIT. 2020 – present: Programme coordinator of PhD study programme "Renewable Materials for Healthy Built Environments" at University of Primorska (Slovenia). 2017 – present: Director of InnoRenew CoE, Slovenia. 2017 – present: Affiliated faculty member in the Department of Wood Science and Engineering, Oregon State University, USA. 2016 – present: MSc

Study Programme Co-Coordinator Sustainable Built Environment at University of Primorska.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: 2020 – present: President of the Society of Wood Science and Technology, USA; 2019 – 2023: Member of the Science and Technology Council of the Republic of Slovenia (appointed by Slovenian Government); 2018: "Zois Certificate of Recognition" for excellence scientific achievements in wood science (Received from the Republic of Slovenia); 2015 – 2019: Management Committee Chair of the COST Action FP1407 "Understanding wood modification through an integrated scientific and environmental impact approach (ModWoodLife); 2017 – present: Co-Editor of journal Wood Material Science and Engineering; 2018 – 2018: DAAD Guest Professor at Georg-August-Universität Göttingen, Germany; 2017: Award for excellence scientific achievements (Award received from University of Primorska, Slovenia); 2015: Honor Role for excellent scientific achievements (Award received from University of Primorska, Slovenia); 2009: "Jesenko award" for the best PhD student graduating in the year 2008 (Award received from Biotechnical faculty, University of Ljubljana, Slovenia); 2004: "Jesenko award" for excellent scientific achievements (Award received from University of Primorska, Slovenia); 2009: "Jesenko award" for the best PhD student graduating in the year 2008 (Award received from Biotechnical faculty, University of Ljubljana, Slovenia); 2004: "Jesenko award" for excellent scientific achievenia).

**Principal Wood Science Achievements:** Prof Kutnar's main area of research is wood science. Her work has primarily focused on wood modification using combinations of heat, moisture, and compression. She has also studied adhesive bonding, wood-based composite materials, and life cycle assessment of wood products and related processes. Her work on wood modification has focused on understanding how raw material properties and modification process parameters influence the physical properties, performance, and environmental impact of modified wood products.

She coordinates the H2020 WIDESPREAD—Teaming 2 project, "Renewable materials and healthy environments research and innovation centre of excellence (InnoRenew CoE)". Between 2015 and 2019, she was the management committee chair of COST Action FP1407, "Understanding wood modification through an integrated scientific and environmental impact approach (ModWoodLife) and has been an active member of other COST Actions.

In 2013 she was granted, as the principal investigator, a research project from Slovenian Research Agency Z4-5520-1669 Rheological properties of thermo-hydro-mechanically treated wood. In 2019, she was granted the basic research project J4-1767 Selective extraction of high value molecules from forest products processing residues in the speciality chemicals sector. Since 2012 she has been awarded more than 22 collaborative research projects from the Slovenian Research Agency with different countries: Germany, Chile, Argentina, Canada, USA, Russia, Switzerland, Spain, New Zealand, Serbia, and Bosnia and Hercegovina.

*Prof. Dr Lu Lin*, Distinguished Professor and Vice Dean, College of Energy, Xiamen University, China.



**Curriculum Vitae:** After his PhD from Sun Yat-Sen University in 1994, Dr. Lin worked as key scientist to develop novel clean bleaching methods for papermaking at State Key Lab of Pulp & Paper Engineering in South China University of Technology more than 16 years. During that period he stayed two years as senior visiting scholar at North Carolina State University, USA. Since 2010 at Xiamen University he initiated the development of bioenergy and high-value chemicals from wood biomass. He focuses on research about the formation and upgrading of biomass-derived platform chemicals and develops novel bio-refinery ways and procedures based on wood biomass to supply carbon-based products.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: Dr. Lin is the distinguished professor and vice dean of the College of Energy at Xiamen University. Based on his great achievement in wood science and biorefinery, Dr. Lin has been awarded the First Grade Prize of Technology Progress of Henan Province, China (2016) and the First Grade Prize of Science and Technology of Central Universities, China (2007). He is elected as the member of Energy Society of China, member of Biomass Energy Association of China and member of Committee of Biomass Energy of China. He is honored as editorial board member in the renowned journals like J. Bio-Based Materials & Bioenergy (USA), J. Bioprocessing & Bioenergy (USA) and widely invited as reviewer from eminent journals. Dr. Lin also served as the Chairman of Organizing Committee for 4th International Conference on Biorefinery-towards Bioenergy 2013 (Xiamen, China) and the Chairman for First Xiamen Forum on Biomass Frontiers 2018 (Xiamen, China).

**Principal Wood Science Achievements:** Dr. Lu as an expert in pulp and paper chemistry developed oxygen delignification for lignocellulose fractionation called cooking with active oxygen and solid alkali (CAOSA), which can fractionate lignocellulose into its constituents and maintain its form for further processing. By CAOSA, environmentally friendly chemicals are employed instead of undesirable chemicals such as strong alkalis and sulfides. After being recruited as Distinguished Professor at Xiamen University, he focused on upgrading the catalytic valorization of cellulose, hemicellulose and lignin. Starting from the traditional wood chemistry, now he tries to develop a biorefinery system from lignocelluloses to replace the petroleum-based chemicals and materials. Last 25 years he published more than 200 papers in the peer-reviewed journals and 25 patents. His H factor 41 and 5182 citations (Scopus) reflect his achievements as humble scientist. He also edited four books (Chinese) and three book chapters (English) in the field of papermaking, biorefinery and biomaterials.

*Prof. Dr Changtong Mei*, Professor, College of Materials Science and Engineering, Nanjing Forestry University, China.



**Curriculum Vitae:** Changtong Mei received his B.S degree in Wood Science and Engineering from Nanjing Forestry University (NJFU), Nanjing, China in 1990. He then joined, as a teaching assistant, the Department of Wood Science and Processing, NJFU's College of Wood Science and Technology. In 1995, Changtong continued his Master's studies in Wood Science and Technology at NJFU, and received his MS degree in 1998. After working for two years as a lecturer, he enrolled into the doctoral program of Wood Science and Technology at NJFU, and received his PhD in 2004. From January 2002 to January 2003, Changtong worked, as a visiting scholar at FPInnovations (formally Forintek Canada Corp.), Canada. Changtong was promoted to associate professor and full professor in September 2004 and July 2010, respectively. He served as the

Department Head since January 2005. From January 2008 to June 2011, Changtong was the Vice Dean in NJFU's College of Materials Science and Engineering. He also served as the Vice Dean of NJFU's Graduate School for 3 years. Since July 2014, he has been serving as the Dean of NJFU's College of Materials Science and Engineering.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: Prof. Mei was awarded with the Second Prize of National Science and Technology Progress by the State Council of China, and the Second Prize of Technical Invention Award by the Ministry of Education of China. He is the Dean of NJFU's College of Materials Science and Engineering, members of American Wood Science and Technology Society, Chinese Society of Forestry, editorial boards of the Journal of Bioresources and Bioproducts, the Journal of Forestry Industry, and the Journal of Wood Industry. He also actively provides consulting services to the wood industry and societies.

**Principal Wood Science Achievements:** Prof. Mei teaches undergraduate and graduate courses related to wood physics, wood drying, processing of wood-based panels, engineered wood products, and natural fiber and polymer composites. Over the last 30 years at NJFU, Prof. Mei has been the teacher and mentor of over 360 undergraduate, masters and doctorate students, post-doctoral fellows and visiting researchers.

Prof. Mei led more than 30 key research projects funded by various provincial and national agencies in the areas of utilization of plantation wood, high performance OSB and LVL products, core-shell structural wood fiber/polymer composites, and use of agricultural residues resources. His major research achievements include revealing and modelling the interface modification and property relationship of core-shell structure wood fiber/polymer composites, development and advancement of conventional and novel methods for improving quality and performance of OSB/LVL made of fast-growing tree species, and bonding mechanism of wheat/rice straws with various treatment methods.

Since 2000, Prof. Mei has also been working closely with the local wood products industry to develop innovative processes of improving commercial manufacturing process of OSB products for container flooring, new flatten methods for thick poplar veneer to improve dimensional stability of plywood products, and using glass fibers to reinforce high grade poplar LVL. He has been dedicating himself, in addition to fundamental research, on technology transfer to the industry through joint projects and proof-of-concept endeavors with industry at the national and international level.

*Prof. Dr Veronica de Micco*, Associate Professor in Environmental and Applied Botany, Dept. Agricultural Sciences, University of Naples Federico (UNINA), Naples, Italy.



**Curriculum Vitae:** Education: 2004 – PhD in woody crops, University of Naples Federico II; 2000 – degree in Agricultural Science and Technology, at UNINA, (110/110 with laudem); Positions: Assistant Professor of Environmental and Applied Botany, at UNINA, (2007 – 2015); temporary researcher at the University of Rome, (2006 – 2007); research fellow at the University of Salerno, (2004 – 2006); post-doc researcher at the CNRS, CERMAV, Grenoble, France (2004 – 2006); research collaborations at UNINA, (1999 – 2004); Coordination and participation in projects: participated/participates in more than 20 and coordinated/coordinates 8 national/international projects funded by ASI and ESA (Italian and European Space Agency), Regione Campania, companies; Teaching and student supervision: since 2007, teaching for courses in general and systematic botany and supervisor of 5 PhD students and of more than 50 master students at UNINA; since 2013: instructor at summer schools on Wood Matters and *erasmus mundus* courses

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: Main Awards: 2011 Marisa Bellisario Award, XXIII Edition, for the "excellent and brilliant professionalism and expertise in the fields of research, innovation and development", Rome, Italy; 2008 Award "Alla Ricerca di Talenti, premio Roberto Marrama" Section Research, Ed. 2007–2008; IT2005 Award of the Italian Botanical Society (SBI) for the best PhD Thesis in Botany (Rome, Italy); 2003 "Luigi Napolitano Award" by the International Astronaut Federation (IAF) (Bremen, Germany). Editorial Boards and Commissions: 2019–now, Editor of Trees Structure and Function (Springer Nature) and Forests (MDPI); 2017–now, Guest Associate Editor and Review Editor of Frontiers in Plant Science (FPS); 2017, Commission Member for the I.W. Bailey Award of IAWA; 2016–now, Associate Editor of IAWA Journal (Editorial Board Member since 2011) 2014; 2019–2020, guest editor of Dendrochronologia (Elsevier); 2008–14, Member of the Editorial Advisory Board of The Open Forest Science Journal; Member of Committee for projects revision: FCT Fundacao para a Ciencia e a Tecnologia (Portugal, 2020), National Science Center (Poland, 2020), Dutch Research Council (Netherlands, 2008, 2019). Memberships of Scientific Societies: 2001-..., member of the Italian Botanical Society (SBI); 2004-..., Member of IAWA - International Association of Wood Anatomists; 2018-..., Member of EGU - European Geosciences Union. Main Institutional Responsibilities: Member of: Life Science Working Group of ESA (2020-...); Scientific and Management Committee of UNINA Botanical Garden (2015 -...); Afro-European Regional Committee of IAWA(2012-...); IAWA Council (2012-2017); Management Committee of the UE COST Action FP1106 (2012–2017).

Principal Wood Science Achievements: Prof. de Micco is researcher and teacher in quantitative wood anatomy, plant hydraulics and functional anatomy. She is responsible for the Plant and Wood Anatomy Lab at UNINA which investigates plant and wood structure studying the evolution of plant morpho-functional traits and adaptive plasticity by analyzing the relations among plants, environmental and human factors. Her inspiration is understanding the past, interpreting the present and forecasting the future. She has been involved in international cooperation through various positions such as Member of the IAWA Council and of the Management Committee of the EU COST Action STREESS – Studying Tree Responses to Extreme Events: a SynthesiS and as a promoter of the Q-Net, International Network "of scholars using Quantitative Wood Anatomy (QWA) in various contexts such as archaeobotany, dendrosciences, ecophysiology, forest ecology and management, geosciences, tree biology and wood quality" (https://qwa-net.com/). She collaborates with main research groups involved in applying QWA to unravel environmental signals in false tree-rings.

*Prof. Dr Rozi Mohamed*, Full Professor, Department of Forestry Science and Biodiversity, Faculty of Forestry and Environment, Universiti Putra Malaysia, 43400 UPM Serdang Selangor, Malaysia.



**Curriculum Vitae:** Nationality: Malaysian; Education: PhD in Forest Science, Oregon State University, USA, 2006; MSc. in Forest Science, Oregon State University, USA, 2000; BSc. (Hons.), Universiti Kebangsaan Malaysia, Malaysia, 1991; Work experiences: Professor (2017 – present); Associate Professor (2012 – 2017); Senior Lecturer (2007 – 2012); Lecturer (2004 – 2007).

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: Authored >100 publications in journals, proceedings, chapters in book, technical papers etc; Reviewed > 50 scientific manuscripts including for high impact journals such as BMC Genomics, PlosOne, Frontiers in Plant Science, Tree Genetics & Genome, Functional & Integrative Genomics, Holzforschung, Industrial Crops & Products; Chairman/founder of the 1st and 2nd Intl Scientific Symposium on Agarwood (ISSA) in 2013 and 2016, respectively; Subject expert in Aquilaria Red Listing (Botanic Gardens Conservation International (BGCI)/ International Union for Conservation of Nature (IUCN)/ The Wildlife Trade Monitoring Network (TRAFFIC); Subject expert in Standardization Working Group (Global Timber Tracking Network (GTTN); Visiting scientist Universite Henri Poincare, Nancy, France (2011); Consultancy work: DNA barcoding of Malaysian timber species for Malaysian Timber Industrial Board (MTIB); testing agarwood induction methods for Malaccensis Sdn. Bhd., Agarwood Development Sdn. Bhd., and Prolintas Sdn. Bhd.; Editorial board member of The Malaysian Forester (2007-2013); Member of the prestigious Yang Dipertuan Agong Scholarship Interviewing Committee (2012-2016); Member of the National Committee for the Development of Agarwood Industry, MTIB (2013-2014); Chairman, Scientific Sub-Committee of IUFRO Kuala Lumpur 2010; Secretariat, The 7th Pacific Regional Wood Anatomy Conference (PRWAC), 2009; Coordinator & resource person for the Int Training Course on Forest Biodiversity (APAFRI/BIOVERSITY ÍNT, 2008); Excellence Service Award at UPM (2007-2018); Received several Gold (1) and Silver (3) medals for the Design, Research and Innovation Exhibition at UPM; Member of the American Society of Plant Biologists (ASPB, 2008-2015), Malaysian Nature Society (MNS, 2006 - present) and Institute of Foresters, Malaysia (IRIM 2013).

**Principal Wood Science Achievements:** Prof. Mohamed is a recognized scientist in the field of forest biotechnology. Her research focuses on the endangered *Aquilaria* species and its resinous wood product, agarwood. All species of *Aquilaria* are protected by international law due to excessive exploitation of agarwood. To meet the demand for a rapid detection system, she applied molecular markers, DNA barcodes and tested various PCR-based techniques, and successfully traced agarwood in finished products. She contributed a significant amount of data to the research community by sequencing the complete chloroplast genome of eight *Aquilaria* species. The high-quality reference genomes serve as a resource for scientists to develop species-specific molecular markers for conservation of threatened agarwood resources, and for taxonomic and systematic studies. She helped expand our knowledge on the molecular mechanism of agarwood synthesis by providing transcriptomic data. In addition, she believes in knowledge dissemination and exchange of ideas with stakeholders. To achieve this, she was responsible for the inception of the International Scientific Symposium on Agarwood (ISSA) that provided a discussion platform for agarwood scientists and industry players. From her efforts as an editor, the first book that compiled our present scientific knowledge on agarwood was published in 2016. One of her most celebrated research achievements was the rediscovery of the elusive *Aquilaria rostrata*, endemic to Malaysia, and which was thought to have gone extinct. She hopes that her achievements would contribute to the safeguarding of *Aquilaria* resources everywhere in the world.

*Prof. Dr Antje Potthast*, Full Professor, University of Natural Resources and Life Sciences, Vienna (BOKU), Austria.



**Curriculum Vitae:** 2003 Habilitation (*venia docendi*) "Wood Chemistry", BOKU, Vienna; 1998 Dr. rer. nat., Dresden University of Technology, Germany; 1994 Dipl.Chem., Dresden University of Technology, Germany; Previous and current positions: 1994-1995 Visiting scholar at NC State University, Raleigh, USA; 1997-1998 Junior Researcher at the Institute of Plant and Wood Chemistry, TU Dresden; 1998 Postdoctoral fellow, NC State University, Raleigh, USA; 1998-2001 Researcher and lecturer at the Christian-Doppler-Laboratory, BOKU, Vienna; Assistant Professor at the Institute of Chemistry, BOKU; 2003 Associate Professor at the Department of Chemistry, BOKU; 2003-2004 Maternal leave; since 2005, part - time work (50-90%), Associate Professor at the DCh, BOKU, Vienna; 2008 - 2015, Director (together with T. Rosenau) of the Christian-Doppler-Laboratory "Advance cellulose chemistry and analytics"; 2011-2012, Marie Curie visiting scientist, STEP-ITN, University Innsbruck; 2013, Key-researcher Wood Kplus Module "Wood chemistry";

2018, Leader (together with T. Rosenau) Austrian Biorefinery Center Tulln; 2018 -, Full Professor, 2018 -, Speaker ABCM Doctoral program at BOKU.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: Awards: 2012, Hayashi Jisuke International Cellulose Award, Japan; 2012, Houska Anerkennnungspreis, B&C Privatstiftung (Team CDL); 2010, Winner KUR-Slam, Halle, Germany; 2005 Zellcheming Young Scientist Award; 1999, Hermann-Kolbe Award 1998 (German Chemical Society); 1995-1997, PhD scholarship from "Fond der Chemischen Industrie", Germany ; 1994-1995, DAAD Scholarship (USA); 1994, Gotthelf-Lohrmann Medal (Dresden University of Technology). Journals: Cellulose (Assoc. Editior); Editorial board memberships: Restaurator; Wood Science and Technology, Holzforschung, Current Chromatography. Visiting positions: 2011-2012: Marie Curie visiting scientist, STEP-ITN, University Innsbruck; 2019: Erasmus Mundus Master of Science ASC lecturer, University of Helsinki, Finland. National representative for COST actions: E41; E54, Vice chair COST Action FP0901, LignoCost, Wood Kplus Board member, Member ISO/TC 46/SC 10 Committee for Austria, Short term member SCAR 4 expert group European Commission 2014/2015.

**Principal Wood Science Achievements:** Prof. Potthast's research focuses on the development and application of chemical and analytical methods for the most important wood components: cellulose, lignin, hemicellulose and extractives. Topics range from cellulose in historical papers and its stabilization in cooperation with libraries and museums, to modification of tissue paper surfaces to advanced technical applications. Extensive research on cellulose fibers is carried out, i.e. for various solvent systems including NMMO and ionic liquids and for subsequent applications to produce intelligent fibers, fabrics or nanocelluloses.

In general, the application of state-of-the-art analytical techniques (online light scattering methods, field flow fractionation, isotope dilution coupled to head-space GCMS, supercritical liquid chromatography, hyphenation techniques in general) to wood polymers or oligomers is a foundation of her current research.

In the field of lignin, the development of analytical methods is in the foreground, with emphasis on general applicability, speed and chemometrics. As to technical lignins, focus is on fundamental aspects of structure and on understanding structure-property relationships for technical lignin applications and how this can help to introduce them into product materials.

*Prof. Dr Scott Renneckar*, Professor; Department of Wood Science at the University of British Columbia, Vancouver, Canada.



**Curriculum Vitae:** 2020, Professor (tenured) of Wood Science, University of British Columbia; 2019-2020, Interim Director, Bioproducts Institute, University of British Columbia; 2017-, Program Director, Forest Bioeconomy Sciences and Technology degree program; 2014-2020, Associate Professor (tenured) of Wood Science, University of British Columbia; 2011-2014, Associate Professor (tenured) of Wood Science/Sustainable Biomaterials, Virginia Tech; 2005-2011, Assistant Professor of Wood Science/Sustainable Biomaterials, Virginia Tech; 2004-2005, Postdoctoral Researcher, Wood Chemistry Lab, Virginia Tech, Blacksburg VA.; 2000-2004, Ph.D., Wood Science, Virginia Tech, Blacksburg, VA. (advisors W. Glasser and A. Zink-Sharp); 1998-1999, M.S., Wood Science, University of California, Berkeley, CA. (advisor. F. Beall); 1994-1997, B.Sc. Wood Science, Chemistry (minor), Virginia Tech, Blacksburg, VA.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: 2019, Chair Elect of the Cellulose and Renewable Materials Division of the American Chemical Society; 2019, Canada Research Chair, Tier 2 Award for Advanced Renewable Materials (reappointment); 2019, Interim Director, UBC Bioproducts Institute; 2015-2018, Editorial Board of Journal of Wood and Fiber Science; 2014, Canada Research Chair, Tier 2 Award for Advanced Renewable Materials; 2014, Affiliate Appointment in Department of Chemical and Biological Engineering, UBC; 2012, Elected Councilor American Chemical Society, Division of Cellulose & Renewable Materials; 2010, Invited lecturer for Wallenburg Wood Science Center course on Lignin Materials (Stockholm).

Principal Wood Science Achievements: Prof. Renneckar's research program on polymer science aspects of wood, focuses on understanding the molecular structure and the conversion and modification of wood and wood biopolymers (cellulose, hemicellulose, and lignin) into useful materials (bioadhesives, bioplastics, and biocomposites) for society using green chemistry principles. In this process, his research group has generated fundamental knowledge on sustainable renewable biomass conversion systems (Zhang et al. 2015) with the concept of denaturing biomass and simply extracting out the different components with extrusion/melt compounding equipment. Further, he developed a novel heterogeneous catalyst to oxidize cellulose that provided a unique method of recycling the catalyst (Patnakar and Renneckar 2017). His research group has contributed to the internationally growing body of work, showing the ability to isolate molecularly thin (Å thick) sheets of native cellulose ribbons, dispersed in aqueous systems, after TEMPO treatment combined with intensive ultrasonication (Li et al. 2011). This scale of cellulose nanoparticle had never been previously analyzed before our pioneering work. He has also had significant contributions to the field of lignin chemistry. Working from a general concept of thermal modification of lignin for crosslinking and carbonization (Cho et al. 2017) he revealed how a controlled heating rate could be used to crosslink a lyophilized suspension of lignin fibre fragments and further carbonized into elastic and multifunctional lightweight materials (Cho et al. 2018) that are 99% lignin in composition. Finally, he has created a simplified method to synthesize hydroxylethyl lignin derivatives and esterified analogs utilizing technical softwood kraft lignin (Liu et al. 2019).

**Prof. Dr Jinquan Wan**, Professor State Key Laboratory of Pulp and Paper Engineering South China University of Technology #501 Pulp and Paper Building, Wushan Road, Guangzhou, China.



**Curriculum Vitae**: Education: 1998-1999, University of Toronto, Pulp and Paper Center, Toronto, Canada, Postdoctoral/Pulp & Paper; 1990-1993, South China University of Technology, Institute of Light Chemical Engineering, Guangzhou, China Ph.D./Pulp & Paper; 1987-1990, Shanxi University of Science & Technology, Department of Applied Chemistry, Xi 'an, China, M.Sc./Applied Chemical Engineering; 1983-1987, Qilu University of Technology, Department of Light Chemical Industry, Jinan, China, B.Sc./Pulp & Paper. Work Experience: 2008-present, State Key Laboratory of Pulp and Paper Engineering, South China University of Technology, Guangzhou, China, Professor; 2004-present, School of Environment and Energy, South China University of Technology, Guangzhou, China, Professor; 1997-2004, School of Paper and Environment, South China University of Technology, Guangzhou, China, Associate Professor; 1993-1997, School of Light Industry and Food, South China University of Technology, Guangzhou, China, Lecturer.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: 2007, Provincial Award for Science and Technology Progress of Guangdong People's Government of Guangdong Province China application technology of closed circulation of wastewater from waste paper papermaking, First Prize; 2010, China Patent Excellence Award, National Intellectual Property Administration, China, A method for treatment of wastewater from waste paper papermaking; 2010, Honour Association of science and technology of China, National Excellent Scientist; 2013, Honour State Council of People's Republic of China, Expert with special allowance from the State Council; 2014, China Papermaking Science and Technology Cailun Award, China Technical Association of Paper Industry In recognition of long-term research in pulp and paper technology, outstanding contributions to pulp and paper industry; 2015, Patent Inventor Award, People's Government of Guangdong Province China, Patent Inventor of Guangdong Province, China; 2016, National Award for Natural Science Research, Ministry of Education, People's Republic of China, Second prize;2017, National Award for Science and technology invention, China Light Industry Council, Key technologies and industrialization of efficient utilization of waste paper fibers based on plant fiber ultrastructure control, First prize; 2019, China Patent Excellence Award, National Intellectual Property Administration, China. 2016-present, Professional Committee on Water Treatment and Reuse of Chinese Society for Environmental Sciences; 2016-present, Professional Committee of China Paper Association. 2016-present, Editorial Board Member of China Pulp & Paper Industry; 2018-present, Editorial Board Member of Advances in Polymer Technology.

**Principal Wood Science Achievements:** Prof. Wan has made significant contributions to pulp and paper (P&P) and novel use of wood fibres over his 30+ year career. He has been in charge of nearly twenty research projects, including the National 863 Project and two National Natural Science Foundation Projects in China. He revealed the decay mechanism of wood fibres in P&P processes, and invented technologies for decay suppression, improvement in paper quality and efficient use of plant fibres, which saved energy and increased cycles of fibre reuse and paper strength from recycled fibres. He developed new technologies for deep treatment of P&P wastewater by analysing the characteristics of pollutants in P&P wastewater and investigation into the conversion mechanism, including persulphate acid-free advanced oxidation, Fenton advanced oxidation, and a combined model of soft-sensing and a full process control for P&P wastewater treatment. The technologies he developed have been widely used in P&P. His work has helped promote green and sustainable development of P&P industry in China. He has received 12 awards in science and technology from provincial and central government (2009), National Award for Natural Science Research of China (2016), the Expert with Special Allowance from the Government of the State Council China (2013), the China's Cailun Prize for Papermaking (2014). He has supervised/co-supervised over 110 postgraduate students in P&P.

*Prof. Dr Shuangfei Wang*, Professor, College of Light Industry and Food Engineering, Guangxi University, No. 100 Daxue Road, Nanning, Guangxi, China.



**Curriculum Vitae:** Education: 1981-1984, B.Sc. (Hon.), College of Hunan Light Industry, Pulp and Paper, Changsha China; 1988-1991, M.Sc., Shaanxi University of Science and Technology, Pulp and Paper, Xi'an China; 1992-1995, Ph.D., South China University of Technology, Pulp and Paper, Guangzhou China. Work Experience: 1984-1988. Production Techn. Leader, Assist. Engineer, Hunan Hengyang Paper Mill, Hengyang China; 1991-1992, Teacher, Lecturer, Hubei University of Technology, Wuhan China; 1995-1998, Associate Professor, Guangxi University (GXU), Nanning China; 1998-2014, Professor, Dean, GXU, Nanning China; 2001-2003, Postdoctoral Fellow, Institute of Paper Science and Technology, Atlanta USA. 2007-2008, Senior Visiting Scholar, University of British Columbia, Vancouver Canada; 2014-present, Professor, GXU, Nanning China.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: Science and Technology Progress Award, 1st Prize, Light Industry Council, China, 2013; Science and Technology Progress Award, 1st Prize, Ministry of Education, China, 2013; Science and Technology Progress Award, 1st Prize, Guangxi Zhuang Autonomous Region, China, 2015; National Science and Technology Progress Award, 2nd Prize, The State Council, China, 2016; Guangxi Science and Technology Award, Special award, Guangxi Zhuang Autonomous Region, China, 2018; Technology Invention Award, 1st Prize, Ministry of Education, China, 2018; Technology Invention Award, 1st Prize, Light Industry Council, China, 2018; National Technology Invention Award, 2nd Prize, The State Council, China, 2019; 2007-2008, Senior Visiting Scholar, University of British Columbia, Vancouver, Canada; 1995present, China Technical Association of Paper Industry, Beijing China; 1995-present, Guangxi Technical Association of Pulp and Paper Industry, Nanning China; 2002-2010, Technical Association of the Pulp and Paper Industry (Tappi), GA USA; 2017-present, Co-editor, Journal of Biobased Materials and Bioenergy, Syracuse, New York, USA; 2007-2016, Chairman, Guangxi TAPPI/Guangxi Paper Society, Nanning China; 2017-present, Honorary Chairman, Guangxi TAPPI/ Guangxi Paper Society, Nanning China; 2008-present, Member, 6th and 7th Academic Degrees Committee of the State Council, Beijing China; 2008-2018, Executive director, China Technical Association of Paper Industry, Beijing China; 2018-present, Member, Guangxi Zhuang Autonomous Region Degree Committee, Nanning China; 2018-present, Member, Academic Committee of State Key Lab of Bio-based Mater. & Green Paper, Jinan China; 2019-present, Chairman, Academic Committee of Jiangsu Key Lab of P&P Sci. & Tech., Nanning China.

**Principal Wood Science Achievements:** Over his 35 year career, Prof. Wan has made outstanding contributions to pulp and paper (P&P) and efficient use of wood fibres. He has been in charge of fifteen research projects including one National 863 project and five National Natural Science Foundation projects in China. He has developed theory and equipment for anaerobic treatment of P&P wastewater and solved problem of "anaerobic granular sludge calcification" in wastewater from recycling wastepaper since 2007. The technology has been widely used in P&P and other industries in Asia, reducing total of 8+ million tons of Chemical Oxygen Demand (COD) discharged, and producing 4+ billion m<sup>3</sup> of biogas. He has also developed ClO2 preparation and high-temperature ClO2 bleaching technology by inhibiting Absorbable Organic Halides (AOX) to meet requirements of P&P with annual capacity from 100,000 to 1,500,000 tonnes. The technology has been used in 10+ countries including China and India since 2009, with totally 15+ million tonnes of bleached pulps produced, and total reduction of 30,000+ tonnes of AOX, achieving ultra-low emission of AOX for P&P in China and other countries. His work has promoted sustainable development of P&P and efficient use of wood fibres. He has received eight awards in science and technology from provincial and central government of China, including one 2nd prize of National Science and Technology Progress Award (2016), and one 2nd prize of National Technology Invention Award (2019) by The State Council China. He supervised 100+ postgraduates, has 400+ papers and reports, 5 books, 100+ patents issued.

**Prof. Dr Zhihui Wu**, Professor, College of Furniture and Industrial Design, Nanjing Forestry University, China.



**Curriculum Vitae:** 1981-1985, Bachelor degree of Engineer in Wood Processing, Nanjing Forestry University (NFU), China; 1985-1988, Master degree of Science in Wood Processing, NFU, China; 1996-1997, Special research scholar in Bioresources Engineering, Shimane University, Japan; 1997-1999, PhD degree in Bioproduction Science, Tottori University, Japan 1988-1991, Assistant Professor of College of Wood Science and Technology, NFU, China; 1991-1995, Lecturer of College of Wood Science and Technology, NFU, China; 1995-2000, Associate Professor of College of Wood Science and Technology, NFU, China; 2000-2008, Professor of College of Wood Science and Technology, NFU, China; 2008-present, Professor of College of Furniture and Industrial Design, NFU, China.

Major awards and honors, leading positions, visiting positions, significant memberships, editorial boards and consultancies: Outstanding Contribution Award of the National Technology Innovation Alliance of Wood/Bamboo Industry in 2015;

Outstanding Contribution Award for China Furniture Industry in the 30th anniversary of China National Furniture Association in 2019; Outstanding Individual Award for China Forest Products Industry in the 30th anniversary of China National Forest Products Industry Association in 2019; Visiting professor of The University of Tokyo, Japan (2008-2008); Adjunct professor of Mississippi State University since 2011; Specially-appointed researcher of Research Institute of Wood Industry, Chinese Academy of Forestry since 2019; Director-general of Furniture and Integrated Furnishings Branch, Chinese Society of Forestry (CSF-FIFB); Vice-director of expert committee of the National Technology Innovation Alliance of Wood/Bamboo Industry; Honorary chairman and director of expert committee of the National Custom Home-furnishings Innovation Alliance, National State Forestry and Grassland Administration; Committee member of the ISO/TC 136/WG3 (Storage units); Commissioner of National Technical Committee 480 on Furniture of Standardization Administration of China; Vice-director of expert committee of China National Furniture Association (CNFA); Director of Jiangsu Furniture and Home Furnishings R&D Center; Vice-chairman of Jiangsu Province Furniture Association; Vice-president of Jiangsu Province Industrial Design Association (JSIDA); Associate editor and column executive chief editor of Journal of Forestry Engineering; Editorial director of Furniture; Managing editor of Interior Design and Construction; Scientific special commissioner of Guangdong Province and Ministry of Science and Technology, Ministry of Education of the People's Republic China (for Guangdong Yihua Timber Industry Co., Ltd.).

**Principal Wood Science Achievements:** Prof. Wu has been dedicated to teaching, researching, and technical services in the following areas: design and manufacture of furniture and wood/bamboo products, custom furniture and intelligent manufacturing, green manufacturing of furniture and wood/bamboo products, integrated home-furnishings and interior decoration, furniture culture and traditional furniture style art.

To name a few of his scientific research and technical services projects, he has been working on bleaching processing and manufacturing technology of wood fan imitated ivory tint, manufacturing technology of laminated veneer bend furniture made from fast-growing poplar and Masson pine, solid wood furniture design and manufacturing technology made from modified wood of fast-growing poplar, 3D digital wood grain and UV ink-jet printing technology used for decoration of furniture and wood products, intelligent manufacturing technology of mass customization furniture, green furniture technology system and evaluation method based on the product lifecycle management, bamboo/ rattan furniture manufacturing technology. Over the years, he has focused on promoting industry-college-institute collaborative innovation.

### Election of new Board members 2021

Four new board members were elected and will start their 6 year term from June 1 2021.



**Prof. Dr. Ingo Burgert,** Chair of Wood Materials Science, Institute for Building Materials, D-BAUG, ETH Zurich & Group leader WoodTec, Cellulose and Wood Materials Laboratory, Empa, Switzerland.

**Prof. Dr Shusheng Pang,** Professor, Department of Chemical and Process Engineering, Director of Wood Technology Research Centre, University of Canterbury, Christchurch, New Zealand.





**Prof. Dr Shawn D. Mansfield,** Professor and Canada Research Chair in Wood Quality and Biotechnology, Department of Wood Science, Faculty of Forestry, University of British Columbia, Canada.

**Prof. Dr Junji Sugiyama,** Professor, Division of Forestry and Biomaterials Science, Faculty / Graduate School of Agriculture, Kyoto University, Kyoto, Japan. Distinguished Professor, Nanjing Forestry University, College of Materials Science and Engineering, Nanjing Forestry University, Nanjing, China.



### New Affiliate Members 2021

#### **International Association of Wood Anatomists**



#### INTERNATIONAL ASSOCIATION OF WOOD ANATOMISTS

The International Association of Wood Anatomists (IAWA) was founded in 1931.

Objectives of the IAWA

- To create awareness of the place of wood anatomy in science, technology and conservation of natural resources, for the public good
- To exchange ideas and information through correspondence and meetings
- To facilitate collection, storage and exchange of research materials
- To provide rational bases for the consistent use of terminology in descriptions of wood and bark, and to cooperate with others having similar aims in other related fields of plant anatomy
- To stimulate the publication of scientific articles on wood anatomy and related fields (including bark anatomy, "woody" monocotyledons)
- To encourage and assist the study and teaching of wood anatomy and related fields
- To promote research in wood anatomy and related fields and to engage in any other activity consistent with the
  objectives of the Association

#### **Korean Society of Wood Science & Technology**



The KWST is a non-profit organization that has been serving for about fifty years as a leading society contributing to sharing activities and communications on academic, research, science and technologies by holding spring and fall annual meetings, seminars, conference or forums on wood science and engineering or forest products technologies for more than 500 members. In addition, the KSWST is also continuously working on making progress in academic, technological and industrial advancement in Wood Science and Engineering.

As renewable bioresources, wood and wood based materials are very important in the process of transition from carbon -based economy to bioeconomy in advancing to the carbon-neutral society as a response to climate change caused by petroleum or petro-chemicals that have been used for more than 80 years. The KSWST is performing a pivotal role by providing a communication field in making progress on new knowledge and cutting technologies on the use and extended application of wood and wood based products via sharing research and technology for the members. The KSWST is always open to non-member professionals who are involved in wood science and engineering and expecting to welcome as a new member of the society.

#### South-West Forestry University, China





The College of Materials Science and Engineering, formerly known as the College of Forest Engineering, the College of Forestry Engineering, the College of Wood Science, Interior Decoration Engineering, and Materials Engineering, presently consists of the department of furniture engineering, wood science and engineering and the department of material engineering with total staff number of 53 people, including faculty member of 42. Among these faculty members, 10 of them hold professor positions, 20 associate professors, 2 full-time foreign experts; 6 of them are directing Ph.D. students, and 29 of them are directing master degree students; 33 of them are with doctorate or are PhD candidates. Within the college, there are two teams built at the provincial level, one for teaching and one for research, and two provincial experts work stations. In addition, among the faculty members, there are 2 academicians of the International Wood Academy of Sciences, 6 people have been awarded national talent titles, and 20 people have been awarded other provincial talent titles. The College also employs well-known experts from famous universities and research institutes home and abroad as part-time professors.

Now there are 4 undergraduate programs for bachelor degree purpose in the College, namely, Wood Science and Engineering, Polymer Materials and Engineering, Material Science and Engineering, and Packaging Engineering. The major of Wood Science and Engineering of the College is further divided into 3 directions or concentrations: Material Engineering, Furniture Engineering, and Wood Structure and Building Engineering. The Wood Science and Engineering major at the College is listed as national and provincial excellent engineer specialty program, a national class II characteristic specialty program, and a key specialty program of Yunnan Province, China.

#### National Institute of Forest Science, Korea



National Institute of Forest Science

The National Institute of Forest Science has steadily conducted various researches on forest, forestry and wood industry as the sole national research institute under the Korea Forest Service, with an objective to develop and disseminate forest science and technology for people's wellbeing, healthy environment and global forestation, leading the green growth.

As the National Institute of Forest Science to lead research and development of the forest science field, the National Institute of Forest Science has set and implemented R&D strategies well-reflecting not only the global research trend, but also the public's demand for research, the national science and technologies map, and the forest science and technology master plan. In other words, researches conducted at NIFoS have focused on as follows: 1) conserving the global environment against the climate change and desertification, and for biodiversity conservation, 2) improving the customer-tailored forest welfare services including forest therapy and recreation, 3) securing national safety from the forest disaster including forest fire and landslide, and 4) advancing high-tech convergence researches including IT, NT and BT. Also, NIFoS pursues researches to contribute to the promotion of forest resources, enhancement of both forest owners and those who are engaged in forestry, and development of forest industry and local community through the utilization of high added value forest products.

Vision - Research institute for the people to create future value of forest through innovation in the forest science and technology

Mission - Research and development of forest science and technology leading the national happiness through enhanced forest value chains

### IAWS Symposium 2021

The 2021 World Wood Day Virtual Symposium and The Third IUFRO Forest Products Culture Colloquium was held online for the first time due to the COVID-19 pandemic. Approximately 850 participants and audiences from 51 countries and regions joined on Zoom, YouTube and Bilibili (Mainland China) from March 21-22. Thirty nine presentations including 9 keynote speeches delivered by 41 speakers and moderated by 7 session chairs have explored the six topics covering a wide range of research fields including carbon storage and climate change mitigation, constructions and protection needs, furniture and musical instruments, education on sustainability and wood culture, challenges for sustainability in forest-wood chain, and wood biotechnology. The discussion and exchange of ideas were carried out both orally and in text at the online platforms.

	Topic 6: Wood Products and Wood Biotechnology (IAWS Special Session) Chair: Prof. Stavros Avramidis, University of British Columbia (UBC) / IAWS Vice President		
03:30- 04:05	Keynote - Containing carbon in wood used for coastal defense and marine construction	Philip D. Evans University of British Columbia (UBC)	
04:05- 04:25	How do trees grow upright?	Lloyd Donaldson Scion	
04:25- 04:45	Enhancing tree growth and wood production with plant hormones	Roni ALONI School of Plant Sciences and Food Security, Tel Aviv University	
04:45- 05:05	Recent Progress on The Formaldehyde Emission from Bonded-Wood Products	Byung-Dae PARK Department of Wood Science and Technology, Kyungpook National University	
05:05- 05:20	Coffee Break		
05:20- 05:40	Particleboard: A New Feed Stock from Tropical Rapid Growth and Aggressive Coppicing	Wan Mohd Nazri Wan Abdul Rahman Universiti Teknologi MARA	
05:40- 06:00	Research of Wood Shape Memory Effect at Low Temperatures	Galina Gorbacheva Bauman Moscow State Technical University, Mytishchi Branch	
06:00- 06:20	Liquefaction of lignocellulosic biomass and its applications for wood adhesives	Stergios Adamopoulos Swedish University of Agricultural Sciences	
06:20- 06:40	Valorization of beech wood through the development of innovative and environmentally friendly chemical modification treatments	Mahdi MUBAROK Forest Product Department, Faculty of Forestry and Environment, IPB University	
06:40- 07:00	Richter K, Windeisen E, Özparpucu M 2021: Interactions of wood extractives and structural wood adhesives and their effects on wood bonding performance	Klaus Richter Technical University of Munich	

Recordings of the presentations can be viewed at this link:

http://www.worldwoodday.org/2021/regions\_event/39#videos

### **New IAWS Website**



The International Academy of Wood Science is a non-profit assembly of wood scientists, recognizing all fields of wood science with their associated technological domains, and securing a worldwide representation.

It is represented by Prof. Yoon Soo Kim, President of the International Academy of Wood Science, and Prof. Stavros Avramidis, Vice-President of the International Academy of Wood Science.

#### LATEST NEWS







IAWS has a brand new website professionally developed by CG Design in New Zealand. We have moved the domain from Germany to New Zealand but the address remains the same:

https://www.iaws-web.org/

If you get a 'page not found error' just go to the homepage and save a new bookmark. If you had a login password for the old site you can delete this as login is no longer required. We hope to add non-English language versions in the future.

### **Financial Report**

Following is the audited Treasurer's Report for the calendar year 2020, dated January 24, 2021. The dues have been broken down into several categories. The net change for 2020 was \$17,890. At the end of 2020, 97 of the 117 (83%) Active and Retired fellows and 20 out of 25 of the Affiliate Members were current in their dues. Our CD and mutual fund totals \$132,855 and have been invested in less secure and longer-term investments to obtain higher rates of return. Our difference between 2020 and 2019 of \$17,890; mostly due to a significant increase in our indexed mutual fund and no meeting costs because of covid-19 restrictions on travel. Website costs have increased as we move our IAWS website from Germany to New Zealand.

So far as of May of 2021, we have approximately \$55,000 in Capital One Bank and \$3,500 in our PayPal account. Added to our \$143,200 in investments, we have a total of approximately \$201,700 in assets. So far, 12 of our 25 Affiliate Members have paid 2021 dues and 55% of our Active and Retired members have paid this year. As was true last year, I think dues payments are a little slower this year because of the coronavirus pandemic. We continually need funds to support our website, the PhD Thesis/Dissertation Award, the Distinguished Service Award, and technical conferences. Our finances continue to be very good.

Howard Rosen



### **Financial Report**

#### IAWS Expenses and Revenues--Calendar Year 2020

Total	\$8,782.00
Donations (3)	180.00
Affiliate member dues (22)	4,402.00
Lifetime dues (0)	0.00
Active dues (76)	3,800.00
Retired dues (20)	400.00
Revenues (E – extra years paid by a member)	

#### Expenses

Supplies	10.00
Web Site Revision/Managing	3,574.66
Awards	1,000.00
Meetings	0.00
Wire fees Capital One	135.00
PayPal Fees	272.65
Total	\$4,992.31

#### *Income* = \$**8,782** - \$**4,992** = *\$3,790*

End Balance December 31, 2020	\$38,014.96
- PayPal	-1922.19
– Checks	0.00
– Wires	-1558 .74
Withdrawal – Fees	-135.00
Interest	19.85
Transfers from PayPal	0.00
Incoming bank wires	1,652.00
Deposits by H. Rosen	950.00
Beginning balance January 1, 2019	39,009.04
Capital One Account	

### **Financial Report**

End Balance December 31, 2019	\$11,645.60
Fees	-273.83
Payments	-1,093.73
Daymonto	1 002 72
Transfers	-0.00
Donation	80.00
Deposits (65 active, 17 retired, 13 Affiliate)	6,190.00
Beginning balance January 1, 2020	6,743.16

#### **Total Assets**

**PayPal Account** 

CD Bank Sandy Spring Bank \$36,422.23

-renewed 10/12/18 at 2.75% for 35 months

-interest is accumulated

Vanguard Dividend Appreciations Index Fund \$96,432.61

-opened 5/23/13

-dividends are reinvested

Checking + PayPal Accounts = \$49,660.56 Total Assets = \$182,515

\$164,625 (2019)

Net change **2020 – 2019** 

\$17,890

I have examined the books of the IAWS Treasury Account for 2020 and have found all the details in satisfactory order.

Frank C. Beall

Frank C. Beall, Fellow, IAWS **Professor Emeritus, UC Berkeley** Date 2/24/2021

#### Aloni R (2020) Vascular Differentiation and Plant Hormones.

Springer, ISBN 978-3-030-53202-4.

The book (above 300 pages) focuses on **wood development and its hormonal control in trees**. Was written for students and faculty members studying and working on wood. The book was written as a textbook for courses on wood structure, development, physiology and production.

• The book covers the field from the initial studies conducted more than a century ago up to recent studies with up-to-date explanations

• Describes in details the structure, development, physiology and basic molecular biology of plants' vascular tissues, their function, regeneration and environmental adaptation

• Explores the controlling mechanisms of plant vascular differentiation by continuously moving hormonal signals and their precursors

• Discusses the regulation of stem cells and cambium, control of gradients in vascular cell size along the plant, juvenile-adult transition and rejuvenation, grafting, mechanisms of recovery from bending by reaction wood, evolution of vessels and fibers from tracheids, regulation of ring-porous wood evolution, protecting mechanisms against insects and pathogens, parasitism, plant cancer, and more

• Helps readers understand the scope and breadth of plant vascular systems in 20 detailed, high-quality chapters

• Includes a wealth of outstanding original color photographs and illustrations documenting the formation of vascular tissues, focusing on wood development

 Provides an in-depth understanding of plant biology by studying their vascular tissues.

#### https://www.springer.com/us/book/9783030532017

#### Roni Aloni Vascular Differentiation and Plant Hormones

The book is intended as a guide for molecular biology students, equipping them to successfully study plants. It pursues a holistic approach, viewing the whole plant as an integrated operating organism, and is written in a straightforward manner, making it appealing to anyone interested in plants. Further, it reflects the latest findings for scien-tists and students in the fields of plant sciences, biology, agriculture, forestry, ecology, vascular medicine and cancer, discussing e.g. how hormonal signals induce and regulate simple and complex patterns in plants vascular tissues, their adaptation and evolution.

- written by a world-renowned expert who has worked in the field for 50 years
   covers the field from the initial studies conducted more than a century ago up to recent studies with up-to-date explanations
   describes in details the structure, development, physiology and basic molecular biology of plant's vascular tissues, their function, regeneration and environmental adaptation
   explores the controlling mechanisms of plant vascular differentiation by continuously moving hormonal signals and their precursors
   discusses the regulation of stem cells and cambium, control of gradients in vascular cell size along the plant, juvenile-adult transition and rejuvenation, grafting, mechanisms of recovery from bending by reaction wood, evolution of vessels and fibers from tracheds, regulation of ring-porous wood evolution, protecting mechanisms against insects and pathogens, parasitism, plant cancer, and more
- plant callet, and inve helps readers understand the scope and breadth of plant vascular systems in 20 detailed, high-quality chapters includes a wealth of outstanding original color photographs and illustrations
- documenting the formation of vascular tissues provides an in-depth understanding of plant biology by studying their









Vascular Differentiation and Plant Hormones

2

Aloni

Roni Aloni Vascular Differentiation and Plant Hormones



### Opinion On the doubtful merits of woody biomass for energy

#### Pieter Baas

Emeritus Professor of Systematic Botany, Leiden University and Naturalis Biodiversity Center, The Netherlands (pieter.baas@naturalis.nl).

On 11 February of this year a group of 500 scientists from around the world signed a letter to the Presidents and/or Prime Ministers of the European Union, the United States of America, Japan and South Korea urging them to stop subsidising the use of wood biomass for power generation and to recognise that (woody) biofuels are in general far from carbon-neutral. Among the signatories were many representatives of National Academies of Science, forest ecologists, tree biologists and economists, but as far as I could judge not too many wood scientists. In this opinion piece, I invite IAWS Fellows to join the debate and face the great environmental hazards of using wood pellets in powerplants as the main or additional source of energy for electricity generation. Our letter (with as first signatory Peter Raven, Emeritus Director of the Missouri Botanical Garden and former President of the American Association for Advancement of Science) makes the point that although using forestry and sawmill waste for bioenergy can be sustainable, the recent trend to divert large portions of stem wood for bioenergy increases carbon emissions and air pollution, with untold damage to forest ecosystems and associated biodiversity. This is stimulated by high subsidies for using wood pellets to replace or complement fossil energy sources in power plants in several countries in the EU, the UK, S.Korea, and Japan in their attempts to transition from fossil fuel to carbon neutral energy sources. Although in theory the use of wood produced by sustainably grown and timely replanted trees is carbon neutral in the long term, the actual practice of producing and burning wood pellets from stemwood is not. For the following reasons: 1) The "carbon debt", i.e. the number of years to replace the harvested and burnt wood by replanted trees runs into many decades – for that period the carbon emission per unit of energy of wood pellets is very much higher than that of fossil fuel; 2) In practice, reforestation commitments are often not met, or good mixed forests are replaced by monocultures poor in biodiversity; 3) The high government subsidies – well-intended to quickly reaching the Paris goals for reducing carbon emissions – provide perverse incentives for the accelerated cutting down of forests leading to a sharp decrease in the amount of stored carbon, a loss of biodiversity from the landscape down to the species level, and a significant increase in carbon emissions which our planet cannot afford in these years of significant global warming and extreme weather events; 4) The pellet industry and transoceanic transport of pellets are costly in energy and create serious pollution at both the manufacturing and consuming end. The letter also points to the danger of using vegetable oil such as palm and soybean oil for biofuel : the large-scale land clearing needed to grow these crops also reduces the carbon sink. The world is simply too small for growing plants for bioenergy as many studies have demonstrated.

Advocates of the wood pellet use in the IEA Bioenergy network have criticise the "current media campaign and publications questioning the use of woody biomass for renewable energy production". They point out that sustainable forest management practices can result in a balanced carbon-neutral (and with CO2 capture even carbon negative) production of both high timber and wood biofuel, and a multitude of other wood based products and chemicals, while maintaining high levels of biodiversity and other vital ecoservices. Yes they can, and it is an ideal goal many wood and forest scientists, including myself, will subscribe to. But do they in practice? There are many well-documented reports that the wood pellet industry benefitting EU Countries in for instance the Southeastern USA (North Carolina and adjoining states) and the Baltic States is unsustainable and has harmed major forest ecosystems. The sting is in the national subsidies that provide perverse incentives in countries like the Netherlands and the UK to build power stations (co)fueled by wood pellets imported from overseas. The energy generated in the pellet-burning country is falsely booked as carbon neutral, because the harvest of biomass has been assigned to the country of origin. The inconvenient truth is that the current industrial use of wood for biofuels is far from carbon-neutral and a disaster for biodiversity. The financial interests of the forestry sector and timber industry in some countries are collossal and capable of financing strong lobbies in support of woody biofuels. It would be to the credit of the fellowship of the International Academy of Wood Science if it would raise its voice, together with other Academies of Science against this unsustainable source of energy.

#### Editor

We welcome further comments from fellows and affiliated members on this topic to be published in the next issue of the bulletin.

#### Marcus Wallenberg Prize—Call for Nominations

The Board of the Marcus Wallenberg Foundation and its Selection Committee invite individuals and institutions, to nominate candidates for the Marcus Wallenberg Prize. The call is open until 31 May 2021. Please see our nomination web page https://mwp.org/nominate/

The Prize is awarded to recognize, encourage and stimulate path-breaking scientific achievements which contribute significantly to broader knowledge and/or technical development within all subjects relevant to the forest-based sector all over the world. The achievements may be of widely different characters and relate to subjects ranging from forest ecosystem conservation and management through process, product and service developments contributing to the sustainable development of society. The prize sum is SEK 2 million.

Mikael Hannus Executive Secretary of The Marcus Wallenberg Foundation Phone: +46(0)70-3775702, e-mail: mikael.hannus@mwp.org

#### **Obituary**—Professor Dr.-Ing. Edmone Roffael

We are deeply saddened by the death of fellow Prof. Dr.-Ing. Edmone Roffael who passed away on 14th of January 2021 at the age of 81. Prof. Roffael was professor of Wood Science at the Faculty of Forestry and Forest Ecology and headed the Department of Wood Chemistry and Wood Technology. A detailed obituary can be found in Eur. J. Wood & Wood Prod. 79, 509–510 (2021). https://doi.org/10.1007/s00107-021-01693-3. We would like to express our sorrow and deepest condolences to his family.



### Nominations for PhD Award & Medal

The International Academy of Wood Science (IAWS) wishes to provide recognition to outstanding thesis/dissertation research at the PhD level by students throughout the world. I would like you know that the IAWS PhD Dissertation Award for 2021 is still open to receive nominations and/or applications. The deadline is **June 15, 2021**. Please consider to nominate your students. Nomination can be made by anyone and is not limited to IAWS Fellows.

Here are the detailed rules:

- The competition is limited to students receiving their degrees in other than their native country.
- The purpose is to foster and recognize cross-national interaction.
- The submission shall be no more than 2 pages of an extended abstract (in English) of the thesis/dissertation and a one-page CV of the student.
- The submission can be by the student and/or the student's advisor.
- The thesis/dissertation must have been completed within one year prior to the yearly announcement.
- The documentation shall be sent by email to the president and secretary.

### Fellows Report Distribution of Fellows by Country

### Geographic Distribution of Fellows



#### Affiliated Members elected in 2021

International Association of Wood Anatomists Korean Society of Wood Science & Technology, Korea South West Forestry University, China National Institute of Forest Science, Korea

#### Affiliated Members elected in 2017

International Wood Culture Society, USA Department of Wood Science – UBC, Canada

#### Fellows elected in 2019

Voichita Bucur (Australia) Bertrand Charrier (France) Jozica Gricar (Slovenia) Keiko Kuroda (Japan) Jean-Michel Leban (France) Roger Moya-Roque (Costa Rica) Shri Ramaswamy (USA) Sabine Rosner (Austria) Ute Sass-Klaassen (Netherlands) Rita Scheel-Ybert (Brazil) Tatjana Stevanovic Janezic (Canada) Maija Tenkanen (Finland) Teresa Terrazas (Mexico) Brenda Wingfield (South Africa) Tomoya Yokoyama (Japan) Makoto Yoshida (Japan) Timothy Young (USA) Amy Zanne (USA) Meiyun Zhang (China) Xiaoyan Zhou (China) Tanya Zimmerman (Switzerland)

#### Fellows elected in 2018

Alfredo Aguilera, (Chile) Paul Gatenholm, (Sweden) Galina A. Gorbacheva, (Russian Federation) Chunde Jin, (China) Nam Hun Kim, (Korea, South) Per Tomas Larsson, (Sweden) Seung-Hwan Lee, (Korea, South) Alex C. Wiedenhoeft, (USA) Yafang Yin, (China) Joe R. H. Zhao, (Canada)

#### Chair of Academic Board elected in 2019 Sigun Wang USA

#### Fellows deceased in 2020

Fritz SCHWEINGRUBER, (Switzerland)

#### Fellows deceased in 2019

Marian BABIAK, Slovakia Robert KENNEDY, Canada

#### Fellows deceased in 2018

Mikhail ZARUBIN, Russian Federation Hikaru SASAKI, Japan Wayne WILCOX, USA

#### Fellows deceased in 2017

Peter ALBERSHEIM, USA Kazumi FUKAZAWA, Japan Takayoshi HIGUCHI, Japan Peter F. NELSON, Australia Dereck H. PAGE, Canada.

#### Deceased Fellows (2010 - 2015)

John M. HARRIS (2010) New Zealand Shinji HIRAI (2010) Japan Tamio KONDO (2010) Japan Otto R. GOTTLIEB (2011) Brazil Huntly HIGGINS (2011) Australia Knut O. LUNDQUIST (2011) Sweden Hubert POLGE (2011) France Stanley K. SUDDARTH (2011) USA Jerzy WAZNY (2011) Poland Abraham FAHN (2012) Israel Wolfgang KNIGGE (2012) Germany Harold TARKOW (2012) USA Anne-Marie CATESSON (2012) France Eugene ZAVARIN (2012) USA B.J. ZOBEL (2012) USA Wilfred A. CÔTÉ (2012) USA Horst H. NIMZ (2013) Germany John D. BRAZIER (2013) United Kingdom Fernand BARNOUD (2013) France Gösta BRUNOW (2013) Sweden Shigeo ISHIDA (2013) Japan Thomas M. MALONEY (2014) USA Sandor MOLNAR (2014) Hungary Geza IFJU (2014) USA John ERICKSON (2014) USA Paul KIBBLEWHITE (2015) New Zealand Börje K. STEENBERG (2015) Sweden Boris N. UGOLEV (2015) Russia Rolf BIRKELAND (2015) Norway

### Affiliate Members

Affiliate Members shall be educational, research, industrial, or governmental organizations and individuals, who are actively engaged in carrying out or promoting research in wood science or the enhanced utilization of wood on the

basis of scientific or technological principles and practices. The importance of Affiliates to the Academy is two-fold:

• The Academy derives direct contact with organizations and individuals actively engaged in the utilization of wood and wood products.

• The Academy receives financial support for its activities from these members.

Contact details are available on the IAWS website.

#### AFFILIATE MEMBERS LIST

BAUMAN MOSCOW STATE TECHNICAL UNIVERSITY/MYTISHCHI BRANCH, Russia, www.bmstu.ru/en CHINESE ACADEMY of FORESTRY (CAF), China, www.caf.ac.cn CIRAD FORETS (French Agricultural Research Center for International Development), France, www.ur-bois-tropicaux.cirad.fr DEPARTMENT OF WOOD SCIENCE – UBC, Canada, www.wood.ubc.ca/ ESB- ECOLE SUPÉRIEURE DU BOIS, France, www.ecoledubois.com FORESTRY & FOREST PRODUCTS RESEARCH INSTITUTE, Japan, www.ffpri.affrc.go.jp FP INNOVATIONS, Canada, www.fpinnovations.ca FRAUNHOFER-INSTITUTE OF WOOD RESEARCH, Germany, www.wki.fraunhofer.de HOLZFORSCHUNG MÜNCHEN, Germany, www.holz.wzw.tum.de INTERNATIONAL ASSOCIATION OF WOOD ANATOMISTS, www.iawa-website.org INTERNATIONAL CENTRE OF BAMBOO AND RATTAN, China, www.icbr.ac.cn/en INTERNATIONAL WOOD CULTURE SOCIETY, USA, www.iwcs.com KOREAN SOCIETY OF WOOD SCIENCE & TECHNOLOGY, Korea KYOTO UNIVERSITY, Japan, www.rish.kyoto-u.ac.jp MISSISSIPPI STATE UNIVERSITY, USA, www.cfr.msstate.edu/forestp NATIONAL INSTITUTE OF FOREST SCIENCE, Korea, OREGON STATE UNIVERSITY, USA, www.woodscience.oregonstate.edu RISE - RESEARCH INSTITUTES OF SWEDEN, Sweden, www.ri.se/en SOUTHWEST FORESTRY UNIVERSITY, China SCION, New Zealand, www.scionresearch.com SEOUL NATIONAL UNIVERSITY, Republic of Korea www.adhesion.org STATE UNIVERSITY OF NEW YORK, USA, www.fla.esf.edu TECHNICAL UNIVERSITY in ZVOLEN, Slovakia, www.tuzvo.sk/en THÜNEN INSTITUTE, Germany, https://www.thuenen.de/new/ UNIVERSITE LAVAL, Canada, www.xylo.sbf.ulaval.ca UNIVERSITY OF GÖTTINGEN, Germany, www.holz.uni-goettingen.de UNIVERSITY OF MINNESOTA, USA, www.bbe.umn.edu US FOREST PRODUCTS LABORATORY, USA, www.fpl.fs.fed.us VIETNAM NATIONAL UNIVERSITY OF FORESTRY, Vietnam, www.vfu.edu.vn WOOD TECHNOLOGY INSTITUTE, Poland, www.itd.poznan.pl

### **Guidelines for Highlights**

The purpose of the Highlights, published in the Bulletin, is to promote the integration of the fields of wood science. Fellows are encouraged to submit Highlights to any of the Officers.

Highlights should:

- Be free of jargon and highly technical language and (unexplained) acronyms, and be readily
- understood by wood scientists in other fields
- Be no more than 1000 words (roughly 4 pages in the Bulletin)
- Begin by providing a brief background or framework to put the report in perspective
- Contain important references to the literature for further reading
- Give due credit to the work of others in the field, not just summarize the author's work
- Finish with a statement of future direction in the area

### Nomination for Election of Fellows

The nomination process is relatively simple; all you need to do is fill in the Nomination form and send it to me. For those to be considered in the next election, the deadline for receipt of nominations is **1** August.

I then contact the nominee, confirm their willingness to stand for election, and then have them complete the more detailed application form. The Executive Committee reviews the nominees to determine if their applications are complete, and then, in early September submits the completed applications to the membership for ballot.

Typically, scientists who are nominated are either mid-career, showing great promise and accomplishments, or near the end of their career, when their peers feel that they have made major continuing contributions over their professional life.

There are two areas of Fellowship that are under-represented in IAWS. One is Fellows from developing countries, where the number of refereed scientific contributions, as viewed by the developing world, may be somewhat lacking because of the past or current inability to publish in the leading journals, and/or difficulty with the English language. The other area relates to the few numbers in certain scientific disciplines; if you are in one of those, you are aware of that. The Executive Committee is also interested in election of wood science managers who have had a major impact through their oversight of research activities, without necessarily having the expected number of refereed publications.

Please spend some time thinking about potential nominees, perhaps looking through the Directory and the listing of Fellows by countries. Since we do not "promote" ourselves to gain members, it is up to the Fellows in the Academy to provide the basis for this recognition.

Yoon Soo Kim

#### NOMINATION FORM

Nomination for Fellowship of the International Academy of Wood Science

Name of Candidate: Position of Candidate: Candidate Mailing Address:

Candidate email address (required!): Candidate's Background (maximum 100 words):

Reasons for the candidate's nomination (outstanding in his/her field; substantial contributions to wood science; major results in management of research; etc):

Date: Nominator name: Email address: Telephone:

Please return to: Yoon Soo Kim and Lloyd Donaldson



# IAWS

### www.iaws-web.org

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