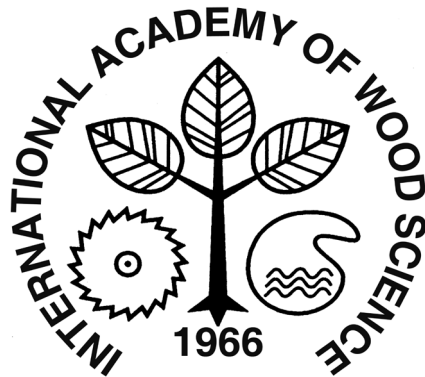


**INTERNATIONAL
ACADEMY
OF
WOOD SCIENCE**

**BULLETIN
2014-II**



www.iaws-web.org/

November 2014

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MESSAGE FROM THE PRESIDENT

As the new President of the IAWS, it is my sincere wish to first thank Lennart Salmén for his excellent work in leading our Academy during the past three years as President. I am happy that Lennart as Past President is still available with his experience. During his presidency, Lennart continued to improve the visibility of our Academy. Besides our annual meetings, which are well acknowledged by the scientific community, we also tried to improve our webpage and to install our award system with the annual PhD award and the new Distinguished Service Award. During our 2013 annual meeting in Nanjing/China for the first time we dedicated the DSA to Madame Jiang Zehui from China for her extraordinary and continuous support of the IAWS. My sincere thanks are also going to our former presidents Frank Beall and John Barnett who served the Academy for many years. They both left the EC this summer and the gaps they left are not easy to close. However, I am very optimistic because we have two new EC members, Yoon Soo Kim from Korea as new Secretary and Roberta Farrell from New Zealand who took over as editor of the Bulletin. Their enthusiasm is highly appreciated. During the next three years we hope to advance our Academy together with the new Vice-President and former Secretary Rob Evans, our long-year treasurer Howard Rosen and Holger Militz as chair of the Academy Board.

During our recent EC meetings in Hamburg and Sopron/Hungary we decided to establish a new Supporting Member Subcommittee. The reason for the formation of this subcommittee is the dramatic loss of Supporting Members (SM). We hope that in future several actions, such as increasing the visibility of SM on the webpage, in our Bulletin, during meetings etc. and improvement of the correspondence may help to strengthen relationships of SM to the Academy and to recruit new SM. Fortunately, Frank Beall agreed to chair the new subcommittee and with his support I am sure that we will be very successful.

Planning future meetings has sometimes led to a general discussion on whether we should have joint or own meetings. Most of our past meetings were held as joint meetings, e.g. in 2013 together with IAWA in Nanjing/China and in 2014 together with the Hardwood Conference in Sopron/Hungary. These two meetings stand for a series of meetings and all of them were highly successful. For 2015 we already defined to hold our annual meeting again as a joint meeting together with the 2015 ISCHP Conference (International Scientific Conference on Hardwood Processing) in Québec/Canada from 15-18 September. As this meeting is largely focused on technological aspects of hardwood utilization, we will have a special IAWS session covering all aspects of wood science so that more Fellows are attracted to participate. The deadline for submitting abstracts is already approaching (5 December), please read more on the meeting webpage (www.ischp2015.org).

The year 2016 will be a challenge for the Academy as we have our 50th anniversary. Our plans are to organize a meeting in Paris where the Academy was founded in 1966. Together with our French Fellows we hopefully can establish an organizing committee to soon start with the work. This meeting should definitely be an extraordinary IAWS meeting combining our history with excellent science from our Fellows.

Finally, I encourage you to actively contribute in bringing our Academy forward. Without your support it will be very difficult to make the next steps.

Uwe Schmitt

HONOURS AWARDED TO FELLOWS



Professor Dr. S. Nami Kartal of Faculty of Forestry, Istanbul University, Turkey received International Scientific Research Fellowship from TÜBİTAK (The Scientific and Technological Research Council of Turkey) to perform a research project on bioefficacy of nano and micronized particles against wood degrading and staining fungi at Aalto University, Department of Forest Products Technology, Espoo, Finland between 3 August – 2 October 2014.

Professor Dr. S. Nami Kartal of Faculty of Forestry, Istanbul University, Turkey has recently received a Fellowship from Visiting Professorship Program, RISH (Research Institute for Sustainable Humanosphere), Kyoto University, Japan to carry out a study on evaluation of various nano-oxides to protect wood between 15 July – 15 October 2015.



Professor Dr.-Ing.habil. Dr.h.c. Peter Niemz of the Institute for Building Materials at the ETH Zürich was awarded the Wilhelm Klauditz Medal in June 2014 from internationaler Verein für Technische Holzfragen (iVTH), Germany.

Peter Niemz with award, standing between Prof Werner Klaffke (Bayer Innovativ) and Rainer Marutzky (iVTH).

A BRIEF SURVEY CONCERNING ALL FELLOWS

The following survey question is directed to all Fellows:

What do Fellows expect or want from IAWS?

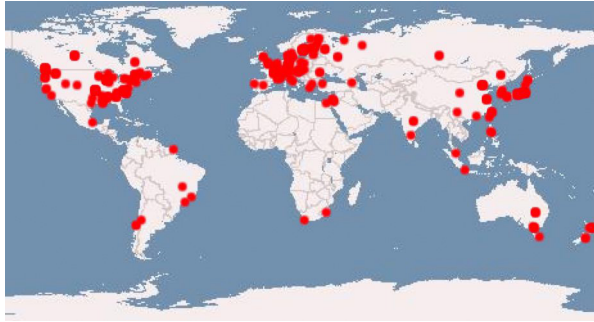
Please send your answer and comments by email to the Editor (rfarrell@waikato.ac.nz). The results of the Survey will be published in the Bulletin 2015-I. We want to emphasise - there are no wrong answers.

The reason for the survey is that the Academy Board and Executive Committee often make plans concerning Fellows but it's not really known how the majority of Fellows view their Fellowship. For example, many would feel that Fellowship is an acknowledgement and reward for a successful career and do not wish to be active in any way; not a problem of course, as there are no such obligations. Some may have started out being active but later changed their interests. IAWS Fellowship is, after all, a true lifetime honour. For this reason, our idea is to have a brief survey asking what the Fellowship expects and wants of the Academy; ideally, the same survey will be made every 5-10 years.

What are some of the aspects to consider regarding the Fellowship? Voting for new Fellows and for office bearers usually indicates that less than 1/3rd of the Fellows are taking an active interest. In addition, not many of the Fellows have established a profile on our web page though this is a requirement for new Fellows. This makes it difficult for Fellows to get to know each other and for such initiatives as the 'expertise directory' that was intended to provide expert answers to questions on wood science from outside the Academy and from Supporting Members.

To accommodate those who are genuinely inactive, a valid response to the survey is to decline to participate in it (and we want to make it clear that this is fine with us). Another valid response to the survey for those that are active and keen, is to suggest ideas that can be sponsored by the Academy for furthering wood science around the world in industry, academia and government (in addition to the organisation of conferences).

Another question: ***should we elect a higher number of Fellows per year (which means that the number of Fellows will increase distinctly) in order to achieve a greater balance of the constituency of the Fellowship, and potentially a more active Fellowship?*** Forty countries are represented by 373 Fellows, with broad coverage around the globe, though African and South American countries, as well as many others, are under-represented – see below the distribution of Fellows (red dots) in the world as appears on the IAWS website. The gender representation is, putting it simply, not balanced. The highest standards for



election as a Fellow elects many Fellows towards the end of their career and near retirement, and potentially retiring also from interest in the Academy. However, the Academy to promote a high standard of research and other appropriate activities, to a large amount, depends on Fellows still being active and potentially in leading positions. **Do you have ideas on achieving a more active, and greater geographic and gender distribution, of the Academy?**

Robert Evans and Roberta Farrell

NEWS ITEMS FROM FELLOWS

Accreditation

The Undergraduate Program of Forest Industrial Engineering at **Faculty of Forestry, Istanbul University, Turkey** has been accredited by MÜDEK (Association for Evaluation and Accreditation of Engineering Programs) and the program has been certified by the EUR-ACE Framework Standards for Accreditation of Engineering Programmes for the period of 01 May 2014 – 30 September 2016. Therefore the program is accepted as a European-Accredited Engineering Bachelor Degree Programme. The engineering program at Faculty of Forestry, Istanbul University is the first accredited Forest Industrial Engineering program in the country among ten other similar programs.

New Book: The Biology of Reaction Wood

Barry Gardiner, John Barnett, Pekka Saranpää and Joseph Gril (eds). 2014. Ix + 274pp. Springer Series in Wood Science. ISSN 1431-8563, ISBN 978-3-642-10813-6. Price EUR 148.39 (hardcover), EUR 118.99 (eBook)

This book was produced by the scientists involved in a European COST Action programme “Cell Wall Macromolecules and Reaction Wood” which ran from 2005-2009 and brought together wood scientists from 19 countries. The Action covered the whole range of issues related to reaction wood from cell wall biosynthesis to forest management and wood processing. The idea for a book as one product of the Action arose because of the realisation that there was no synthesis in one place of the range of aspects of reaction wood, and because the seminal work on compression wood by Tor Timell was more than twenty years old. Participants in the Action were therefore approached to write chapters on their specialism for inclusion in the book which consequently covers everything from reaction wood morphology, anatomy, ultrastructure and cell wall polymers to the molecular mechanisms of reaction wood induction and the biomechanical action and mechanical properties of reaction wood. In addition the physical and mechanical properties of reaction wood at all levels are discussed, focusing in particular on the impact of these properties on utilisation. There are also chapters dealing with detection of reaction wood, the commercial implications and the influence of forest management.

Research Partner in the Field of Natural Aromatic Compounds

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Technical University of Iasi is one of the best universities in Romania concerning the scientific performances. In this university there is only department in Romania in the field of pulp and paper which was founded over 60 years ago. The main research aspects approached in this department refers to the characterization and processing of the renewable and recyclable resources. One of the main directions of studies is connected with polyphenols and lignins. The subject was approached 30 years ago as teaching (course of Technologies of lignin upgrading was introduced in the curricula of the students) and research activities (master and PhD programs-34 theses were defended, internal and European projects –Sponge, Euro lignin, Ecobinders, EPPIC, EPNOE, SCIEX-cooperation program Romania-Switzerland, COST actions-, more than 100 papers and 5 books were published in the field, 4 patents were obtained). The basic and applied researches were connected with the separation, modification characterization and utilization of polyphenols, different types of lignins and polyphenols (alkali lignins, lignosulfonates, lignocelluloses resulted from furfural manufacture, polyphenols extracted from different sources – wood bark, wine stems, grape seeds, latex bearing plants). The lignins and polyphenols, non-modified or modified by substitution, condensation, oxidation reactions were tested from view point of their utilization in the large application fields (adhesives, antioxidants, plant growth regulators, composite

structures, wood protection agents, dyestuffs, bioremediation agents, a.s.o.). A technology for biomass complex processing (biorefining) which allow recovering both secondary and main components was proposed.

New Review: Ecophysiological implications of vascular differentiation and plant evolution

Published on line by Springer-Verlag Berlin 2014 DOI 10.1007/s00468-014-1070-6

The Key message of the Review: Environmental cues regulate plant vascular differentiation and plant evolution through simple hormonal mechanisms of a single or a few moving signals.

R. Aloni, Department of Molecular Biology and Ecology of Plants, Tel Aviv University, Tel Aviv 69978, Israel

INTERVIEW WITH THE OUT-GOING PRESIDENT LENNART SALMÉN



In front of a Baobab tree at a recent trip in October to Madagascar

1. What attracted you to work in wood science?

When starting out studies as a young chemical engineer in the early 70ties we were told that it did not matter what specialty you chose, 75% of you would anyhow end up in the forestry related industry; that was the importance in Sweden at the time. I was determined to do something else. However, the work and scientific challenges offered at the former STFI, now Innventia, was too tempting to disregard. Over the years I have had the opportunity to work on many different subjects in the area of wood science and have had the freedom to develop my own research agenda which I am very grateful for as it nowadays is much more difficult to have such an opportunity. The fact that I have been involved in the utilization of a renewable material for the benefit of the society is a fact that has always been close to me. (One could though not disregard the heritage; my father, grandfather and grand grandfather all made their careers in the wood industry).

2. *What did you enjoy most about your time as President of IAWS?*

With my engagement in the Academy I have had the opportunity to meet a large number of interesting scientists in fields of research that I have not been involved in earlier. At the time of joining the Academy it seemed to have a bit of an anonymous status. In this matter it has been a challenging as well as rewarding work to get the Academy more exposed and involved, in particular with regard to young scientists, specifically with the instigation of the Academy PhD award. The fact that we have also opened up for recognizing the administrative skills in our society through the Distinguished Service Award is something that I am very glad for. Of course I have also very much enjoyed the good partner- and friendship within the Executive Committee.

3. *What do you think is important for future Presidents of IAWS?*

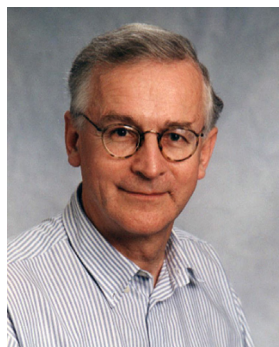
For the future the Academy has to follow up with the development of wood science, being engaged in the new disciplines evolving in the wood related area as well as providing the exposure of the Academy within the social media. A continued engagement of promoting young scientists to join this area of research is highly important. In the future much of the green economy will be based on the utilization of wood resources and I think it is of importance for the Academy to join in the efforts in promoting this development. The Academies' continued engagement in enhancing the scientific excellence in developing countries I also see as a very important issue.

4. *What do you see happening in your own future, professionally and personally?*

We presently see large changes in our industry and I am personally challenged by taking part in the development of new products based both on the cellulose and lignin raw material. I hope to continue to be part of these highly interesting research efforts for some time.

On the personal plane I hopefully may continue to travel and explore different places around the world, as shown in my accompanying photo.

OBITUARIES AND MEMORIAL

**GÖSTA BRUNOW (1936-2013)**

On July 10, 2013, Gösta Brunow passed away following a long period of severe illness. Throughout his career, Brunow worked in the Department of Organic Chemistry at the University of Helsinki. His specialty was wood chemistry and lignin chemistry where he continued the long-standing tradition of the university with pioneers such as Terje Enkvist and Johan Lindberg. Gösta Brunow was born in Hamburg, Germany, but came as young child to Kotka in Finland where he grew up and went to school. He then continued with undergraduate and graduate studies at the University of Helsinki where he received his Ph.D. in 1967 on a thesis entitled “Lignan groups in lignin; a study with model compounds”. Shortly after (1968–1969), he went to Chalmers Technical University in Gothenburg, Sweden, where he joined the famous lignin group of Erich Adler. There he was introduced to Gerhard Miksche and Knut Lundquist, two of the leading chemists of that group. Together with Miksche, several publications appeared on kraft pulping chemistry of lignin with emphasis on the role of sulfur and met with great interest from both the industry and the international lignin chemistry community. In parallel, Brunow also started a new line of research in Helsinki; photo-oxidation of lignin and the involvement of singlet oxygen in such oxidations. In 1973, Brunow was appointed professor in organic chemistry at the University of Helsinki where he continued his work on pulping chemistry and photo-oxidation. Following a period as a visiting scientist with Kent Kirk in Madison, Wisconsin (1976), Brunow also moved into a new line of research: enzymatic degradation of lignin.

The development of spectroscopic methods in the late 1970s, notably NMR, resulted in fast-growing knowledge about lignin structure and lignin reactions, which is still continuing. Brunow took part in this development and during a 20-year period several papers appeared on that subject. To learn more about modern NMR methods, he spent some months at the Centre d’Etudes Nucleaires in Grenoble (1983). Around 1980, Brunow also went into a more close cooperation with Knut Lundquist which is manifested in joint publications throughout the remainder of their careers. The breadth of Brunow’s scientific interests was further manifested in a series of papers during a 10-year period together with the Department of Clinical Chemistry at the University of Helsinki centered on the analysis of lignans and other natural products in human secrets. In the late 1980s, Brunow also became interested in the biosynthesis of lignin; an area which remained as a major focus for the rest of his life. The formation of native lignin and its various substructures has been rather well known since the early work of Freudenberg, Adler, Nimz, and others. Therefore, it came

as a big surprise when Brunow in 1995 presented a completely new type of inter-unit lignin linkage: the dibenzodioxocin structure. The finding was presented at the International Symposium on Wood and Pulp Chemistry in Helsinki and was one of the highlights of that meeting. By this finding, an important link in the understanding of lignin structure was completed as this particular structure should give lignin a higher degree of rigidity. The structure also fulfills all requirements needed in the generally accepted mode for lignin formation by end-wise polymerization of monolignols like coniferyl alcohol. Brunow and his coworkers showed that the structure of lignin like dehydrogenation products (DHPs) is more similar to lignin if produced at lower pH. In the late 1990s, a controversial discussion began about the way how nature produces lignin, when it was suggested that a direct enzymatic control plays a pivotal role for the macromolecular structure rather than random chemical reactions between monolignols. Despite the lack of convincing experimental evidence for an enzymatic pathway, that suggestion gained followers and a hard scientific debate began. Brunow took an active part on the traditional side (“chemically controlled radical polymerization occurs”) together with many leading lignin chemists.

Based on experimental evidence, some key papers were published to conclude that lignins are formed by oxidative coupling without involvement of enzymes. The “lignin war” was described in Chemical and Engineering News (No 14, 2001) where Brunow concluded “*But in experimental science, it is customary to present experimental evidence when debunking old notions and setting winds of change ablowing*”—a comment, typical of Brunow’s mild irony.

During his career, Brunow got several pieces of appreciation. In 1985, he was appointed Fellow of the International Academy of Wood Science and in 2003, he was invited to give an Academy Lecture. At the International Symposium on Wood and Pulp Chemistry in Madison, he received the “Notable Achievement Award”. To honor his research and his importance for the university, the University of Helsinki in 2007 arranged a seminar entitled “Wood and Lignin Chemistry in Finland; Past, Present and Future; A tribute to the science of Professor Gösta Brunow”. The gentle character that was Gösta Brunow’s signature was most likely developed early through his positive attitude towards nature. After his marriage, the family moved to the archipelago west of Helsinki where he loved to sail in the summer months. He was fascinated by bee-keeping and kept bees until his wife developed a serious allergy. Together with families in the neighborhood, he started a sheep project. The aim was to preserve the openness of the surrounding landscape of meadows and fields. When the sheep became too many and the land too small, the family moved to a real farm with good outbuildings still not too far from the university. The rural life gave Brunow 18 years of healthy exercise in combination with the intellectual work at the university. After his retirement in 1999, Brunow and his wife moved to Sweden (2002) but he continued his work at the university until 2009. He also continued to take an active part in science by reviewing

manuscripts for several international journals, also for *Holzforschung*, until the end of his life.

The international community of wood and lignin chemists will not only miss the smile of Gösta Brunow but also the sharp intellect and the delicate sense of humor that were his signature.

On behalf of many friends and colleagues around the world. (Obituary appeared in *Holzforschung* 2014 Volume 68 (2): 253-254)

Göran Gellerstedt



JOHN ERICKSON (1934-2014)

John Erickson, retired Director of the USDA Forest Products Laboratory (FPL), passed away on August 14, 2014. John was born in Sidnaw, Michigan, USA, on January 8, 1934, the son of the late John A. and Aileen (Hendrickson) Erickson. He attended school in Stambaugh, Michigan, graduating from Stambaugh High School with the Class of 1952. He was an excellent student and a multi-sport, letter winning athlete. He attended Michigan Technological University, receiving both BS and MS degrees in Mechanical Engineering (1956, 1968). He was a licensed Professional Engineer (PE) in the States of Michigan and Wisconsin.

professional Engineer (PE) in the States of Michigan and Wisconsin.

John began his career with the Ladish Company, Wisconsin, working as an engineer on the design of large equipment for the defense and agricultural industries. He began a long, productive career in forest and wood engineering research with the USDA Forest Service in 1962 when he was appointed Project Leader, Forest Engineering Research, at the North Central Forest Experiment Station in Houghton, Michigan. A long list of innovations in the forest harvesting area were developed under his leadership of the Houghton laboratory, many now widely used in forest operations around the world. He transferred to the Forest Service's headquarters in Washington, D.C., in 1975, and was appointed Director of Forest Products Engineering Research in 1980. In this role, he oversaw all forest products, utilization, and forest engineering research for the Forest Service. He was appointed Deputy Director of the Forest Products Laboratory in 1983, and in 1985 became the ninth Director of FPL.

John guided the FPL through numerous changes, including the initiation of International Forestry and Technology Marketing Units. He initiated new research initiatives in recycling, green technologies, biotechnology, and ecosystem management. During this time, FPL provided critical technical support to the Forest Service, wood products industry, and various government agencies, including the Department of Defense, Department of Energy, National Park Service, and Department of Housing and Urban Development.

He retired from the Forest Service in 1993. He remained active as a consulting engineer, and in 1998 joined the staff at Michigan Technological University (Michigan Tech). During his tenure at Michigan Tech he led a research and technology transfer program on the use of undervalued hardwood resources in engineering applications. The results of that effort are summarized in the book he co-authored, *Undervalued Hardwoods for Engineered Materials and Components*, published by the Forest Products Society. While at Michigan Tech, he also worked on the development of advanced tree and log assessment and grading technologies that have been adapted for use worldwide.

John was the author of approximately 100 publications and technical reports, and holds patents in Australia, Canada, Finland, Germany, Great Britain, Italy, Sweden, and the United States. His research findings have been cited by researchers from around the globe. He had considerable international experience through the North American Forestry Commission and the US/Japan Forest Products Trade Committee, and in the development of scientific and technical collaboration with Brazil. John was a member of the Forest Products Society and the International Union of Forestry Research Organizations, and was a Fellow in the International Academy of Wood Science. He was inducted into Michigan Tech's School of Forest Resources and Environmental Science Honor Academy in 1996. During his career, he and his staff received numerous awards for technical contributions and leadership from a wide range of organizations, including the USDA, Federal Laboratory Consortium for Technology Transfer, Forest Service, Society of Wood Science and Technology, and the Forest Products Society.

His life revolved around his family, and he loved fishing, hunting, gardening, and wood-working. John is survived by his wife, Marion; children, Kim (Ken) Maki of Houghton, Michigan, John (Nancy) Erickson of Ashburn, Virginia, Beth Erickson (Gary Ziegler) of McFarland, Wisconsin, and Jim (Kim) Erickson of Phoenix, Maryland; grandchildren, Jessica, Jeffrey, Jennifer, Elise, Amanda, Robert, Danya, Danny, Samantha, Tyler, and Madison; eight great grandchildren; sister, Ruth Thibodeau of Crystal Falls; and numerous nieces, nephews, and extended family. He was preceded in death by his brother, Ernest Erickson.

Robert J. Ross



HORST NIMZ (1930-2013)

Scientists dedicated more to tough experimental work in the laboratory and organisation work, instead to travelling from congress to congress, are more frequently underestimated. Horst Nimz belong also to this type of hardworking modest scientist. I was lucky to be able to learn from him, first from the distance Hamburg to Karlsruhe (1970-1981) and later in the closest adjacency in Hamburg (1981-1995) as his coworker. It is an honour for me to be asked to remember him on the occasion of the first year of his passing away.

He died on November 22, 2013 after short illness. In his lifetime, he enjoyed a worldwide reputation as a versatile and creative chemist, who discovered new types of intermonomeric lignin linkages and published a representative scheme of a hardwood lignin, and who developed organosolv type pulping processes. He was a good teacher, an active member of the scientific community, and last but not least ten years Editor-in-Chief of the Journal "Holzforschung". His curriculum is also a typical "German curriculum" coined by the tragic events before, during, and after the Second World War. In confidential conversation atmosphere, in late hours, he told sometimes about the dramatic and nightmarish events occurred during his getaway from the eastern part of Germany, as a fourteen years old boy alone without family, in the last days of the war in 1945. But this was not the only typical German key moment in his life. On the other hand, he counted to the assets of his life the opportunity to learn from the traditional German chemist generation from the early 20th century. But let us approach to him step by step.

Horst Nimz, the eldest of three brothers, was born in 1930 in Gellen, Pomerania (now in Poland). He was brought up here and later in Stralsund and Lübeck (North Germany). Due to the war and post-war turmoil his youth and school education was far from being idyllic. However, extraordinary times form extraordinary people. This is also true to H. Nimz, who probably developed at that time his "never-give-up" attitude. Toughness, perseverance, pertinacity belonged to his marked characteristic features, qualities which are also necessary to be a successful scientist.

After receiving his high school graduation in Stralsund in 1950, he studied chemistry at the University of Rostock and graduated in 1956 with the diploma-thesis "Preparation of mercapto acetic acid derivatives of D-glucose, D-galactose, and D-mannose *via* nitrobenzoylation of D-ribosemercaptals". Maybe, some scientists will be astonished: "Was he not always working about lignin?" Not at all! His PhD thesis "Synthesis of acetals and benzoates of 2-deoxy-D-ribosemercaptals" finished at the University of Rostock in 1958, dealt with carbohydrates. His life long "affair" with lignin chemistry started later, in 1961, as he

managed to move from Rostock to Heidelberg – another typical German experience – into the famous laboratory of Karl Freudenberg. People familiar with the post-war situation in Germany know what it meant to move from East to West in the country. It was a start to a complete new life. But Horst Nimz “did it”, and K. Freudenberg, the “lignin pope” at that time, recognized his talent and promoted his development. Later on, he was proud to say that he was one of the scientific grandchildren of the second Nobel Prize winner in chemistry Emil Fischer in 1902, because K. Freudenberg was the last PhD student of E. Fischer.

A few examples may illustrate the beginning of his scientific career. He managed to elucidate the structure of three trimeric intermediates from the random coupling of monomeric precursors, as he was working about lignin biosynthesis *in vitro*. K. Freudenberg made him one of the greatest compliments a professor could make at that time: he offered him the possibility of “habilitation”. Horst Nimz’s name became definitively well known throughout the scientific community after finishing his habilitation thesis “Investigations of lignin degradation”. He succeeded to degrade 20 to 40% of spruce and beech lignin, respectively, by mild hydrolysis in hot water. Again, he executed the “finest chemistry” by elucidating the structure of eight dimeric, two trimeric, and one tetrameric degradation products. These results provided direct insights into the lignin structure and supported the polymerisation hypothesis of lignin precursors formulated and investigated by K. Freudenberg after the war. In this context, another success of H. Nimz should be emphasized: the first complete characterization of a dimeric lignin unit with a β -1 structure. Calling attention to the thermal rearrangement of β -O-4 dilignols to phenylcoumaranes belongs also to his merits at that time.

As owner of the Chair at the Institute for Polymer Chemistry at the University of Karlsruhe in 1969, H. Nimz still focused on the elucidation of lignin structure by chemical degradation. A new degradation technique with thioacetic acid as a derivatizing agent for lignin was developed. The dialkylsulfides (thioethers) formed during the first two steps of this method could easily be degraded in a third step by hydrogenolysis in the presence of Raney-Nickel. It can be considered as a milestone in lignin chemistry that approx. 90% of beech lignin are converted in this way to monomeric, dimeric, and oligomeric degradation products. He would not have been a descendent of Freudenberg’s school, had he not elucidated the structure of these degradation products. What makes this investigation even more remarkable is that he pieced together the puzzle of degradation products and analytical data, and, that he constructed for the first time a constitutional scheme of beech wood (*Fagus sylvatica*) lignin. The paper about this theme in “Angewandte Chemie, International” (1974) is still quoted in all publications dealing with hardwood lignins. With this work he was so much ahead of his time that it took more than ten years until a competing method based on a similar chemistry (thioacidolysis) was described in the literature.

Another achievement, which further strengthened his fame, was recognizing the importance of ^{13}C NMR spectroscopy for lignin chemistry. In the seventies he described in a series of publications together with H.-D. Lüdemann the chemical shifts of more than 50 monomeric and dimeric model compounds, lignin polymer models, and various lignins. These pioneering investigations still serve as a sound basis for the interpretation of lignin ^{13}C NMR spectra, though the NMR technique was considerably improved since that time.

About ten publications from his time in Karlsruhe dealt with the reactions of singlet and triplet oxygen, H_2O_2 , and peracetic acid with lignin. He isolated and characterized hydroperoxides which are formed *via* 1,4-endoperoxides as intermediates from singlet oxygen and lignin: a seemingly fundamental research topic searching for intermediates with short life times. However, this work reveals a hitherto hidden inclination of H. Nimz to applied chemistry, because the practical background of this investigation was the light induced yellowing of pulps and the chlorine-free bleaching. His following publications and patents on lignin utilization as binder for waferboards *via* oxidative coupling in the presence of H_2O_2 and SO_2 are clear manifestations of applied chemistry.

In 1982, H. Nimz became Director of the Institute for Wood Chemistry in Hamburg and Professor at the University of Hamburg. Looking back at his career, it can be stated that he changed the place of his activity about once in a decade. Judged by his professional success, this seems to be a good recipe to remain creative. However, the professional working period in Hamburg was a more profound change of his research activities than the former one. Since 1982 he turned to the development of environmentally friendly pulping processes. In the history of science it is well documented that the pathfinding to inventions, especially to new pulping processes, is sometimes very thorny. The expected and actual difficulties, drawbacks, and lack of appreciation in the pulping industry did not prevent him to pursue his goals. With ardor and toughness, he developed the Acetosolv pulping, in which acetic acid is used as lignin solvent, to a pilot plant scale. The patented Formacell process with 5 to 10 % formic acid added to acetic acid, is a further improvement of the Acetosolv pulping. This is probably the most remarkable achievement of the activities of H. Nimz aiming at the development of new pulping processes. The Formacell pulp is bleached by ozone in acetic acid and peracetic acid in butylacetate. The pulps have high ISO brightnesses and good physical properties. But most importantly, this process can probably be realized in small technical plants with less water consumption than traditional pulping processes.

Horst Nimz' scientific contributions are summarized in more than 100 original publications and several patents. He gave lectures all over the world and he was member of the Editorial Boards of several prestigious journals. His reputation within the scientific community is also reflected by his Fellowship in the International Academy of Wood Science. However, his characterization as a gifted scientist alone is incomplete. Beside his position as Director

of the Institute for Wood Chemistry, he was for 4 years Managing Director of the Federal Research Center for Forestry and Forest Products (BFH). In this position, he was in charge of the reorganization of the BFH and the integration of research capacities from East Germany into the BFH. His merits in this field and as Director of the BFH are highly appreciated both from the Federal Ministry for Food, Agriculture, and Forestry and his colleague scientists.

Scientific achievements are known to have (a sometimes short) half-life time. This is not true for the remembrance of a person as a human being and personality. Kind modesty and readiness to help others are first thoughts on H. Nimz in this context. I have heard frequently from other scientists all over the world: “How is Horst doing? How kind he was to me as I met him as an inexperienced student; he took me seriously and was talking to me as to be equal to him.” Indeed, even in the highest positions he remained a friendly, sensible listener ready to help. He always acted towards his coworkers as *primus inter pares*.

Strength to follow a purpose and power of endurance belonged to his basic properties. An anecdote from his everyday life may illustrate this: as a just arrived guest scientist H.R. from overseas as in the age of 37 on a bicycle was meeting him by chance in the forest during sport without knowing that the running Horst (as he presented himself) is the director of the institute (at that time he was 52). After 15 km, H.R. said that he becomes slowly tired and he will turn back. Horst told him in a fatherly manner without stopping: “That’s OK, just go home, I became just warm, I will finish today my 30 km.” The next day, the astonishment of H.R. was great as he learned that the marathon running Horst is the head of the Institute, who is also equally passionate in bicycling, skiing, and tennis.

He dedicated the decade after his official retirement in 1995 to *Holzforschung* as Editor-in-Chief and the Journal prospered under his leadership. His friends knew that the last decade his life was devoted to the recent German and European history, true to his motto “change every decade your focus”; he investigated historic documents and wrote manuscripts with the same seriousness as he was working on wood chemistry and technology in his active professional life. Beside his family with numerous grandchildren, his grateful former students and coworkers will always remember him with love and honour.

Oskar Faix, on behalf of his former coworkers

REPORTS OF MEETINGS

MINUTES of EXECUTIVE COMMITTEE MEETING**

- held: 29 March 2014 at Thünen Institute Hamburg



From left to right: Frank Beall, Rob Evans, Howard Rosen, Uwe Schmitt, Lennart Salmén, Gerald Koch, Alfred Teischinger, Robert Nemeth

Discussion centered on the attributes required of a Secretary, including the ability to travel and commitment to up to 12 years as a member of the EC. Fellow Rosen strongly supported the appointment of a Fellow from Asia and it was unanimously agreed that Fellow Yoon Soo Kim, would be an excellent candidate. President Salmén undertook to invite Fellow Kim to join the EC as Secretary (*and Fellow Roberta Farrell later agreed to join the EC as Bulletin Editor*).

Treasury and budget report

Fellow Rosen reported that we are in good financial shape and had taken in about \$10,000 already this year. The report was audited by Fellow Bob Young who, at 90, is still happy to contribute his services. A list of Fellows who had not paid dues was discussed and Fellow Rosen offered to send letters to Fellows who have not paid for many years advising them that they would be designated as 'inactive'. Fellow Rosen noted that the list of non-paying Fellows and Supporting Members is relatively short this year, and that we need to be more active in the pursuit of Supporting Members (*see discussion below*)

Web page status

Fellow Schmitt reported that the web page is working well apart from some problems with email, even when the addresses were correct. Suggestions were made for additions to the

web page. Fellow Schmitt added that the distribution of the Bulletin had changed dramatically in recent years. Electronic copies now greatly outnumber hard copies. Only 12 copies are in paper form, compared with 130-140 in 2002. This saves a lot of money for the Institute, which generously covers the cost of paper copy distribution.

Nomination/election processes – status

Eight new Fellows were elected out of 14 nominated. The certificates were sent out by President Salmén. Fellow Evans reported a concern he received regarding the nomination / election process. The EC revisited the guidelines and confirmed that the request for nominations was quite clear and in accordance with the Constitution. It was noted that over 100 Fellows voted in the last election, which was a very good response. Fellow Beall recommended that the Fellows be made more aware of the difference between a No vote and Abstention, as the difference is important in the assessment of the ballot. Perhaps the Ballot paper could use the voting order: YES, ABSTAIN, NO rather than YES, NO, ABSTAIN. Concerning anonymity in the electronic voting process, only the Chair of the Nominations Subcommittee should see the names for purposes of verification, and then delete them before forwarding the anonymous results to the EC.

Distinguished Service Award Nominations

Fellow Rosen asked if the award need be given annually. Fellow Beall reminded us that it was not intended to be strictly annual. President Salmén referred to the relevant section of the Constitution and added that the DSA was intended to allow the recognition of those who had contributed much to the IAWS but were not necessarily candidates for the Academy Lecture (such as those who benefit wood science through outstanding management). Fellow Beall suggested that the Academy Board could be more engaged in the process. Fellow Militz offered to communicate with the Board on this matter

PhD award nominations

Fellow Militz said that the way to get more nominations is to have the Fellows communicate more to the students.

Academy lecturers - planning

President Salmén reported a request by Fellow Argyropoulos to re-institute an Academy Lecture at the International Symposium on Wood, Fiber and Pulping Chemistry (ISWFPC), as there is a lack of visibility of the IAWS in pulping research.

Bulletin and WS&T report

Two bi-monthly IAWS Newsletters have been published in WST. President Salmén noted that the Bulletin Editor was also the writer of IAWS Newsletter. It was agreed that Fellow Evans would continue to send in IAWS news until the new Bulletin Editor is appointed.

Supporting Members – Benefits.

Fellow Beall recommended forming a standing committee to deal with enlisting Supporting Members. The committee would include representatives from existing Supporting Members in order to afford a better insight into the requirements and attitudes of prospective members. President Salmén added that the committee would look after all the requirements of the prospective Supporting Member to make the application process as smooth as pos-

sible. The EC was in agreement, and Fellow Beall undertook to produce an action plan while in Hamburg. It was agreed also that the Supporting Member links would be placed on the opening IAWS webpage and that they would be sent copies of the Bulletin.

Expertise directory

Fellow Beall noted that each member of the EC supplied a comprehensive CV for the Directory to serve as examples. He said that we never developed the exact mechanism by which this system would work. President Salmén commented that 2/3rds of Fellows would probably not respond to external enquiries. He further stated that there are already web sites that deal with research problems. Fellow Militz looked at this issue from a different angle and suggested that the Supporting Members could be contacted through the IAWS website to supply the expertise.

IAWS visibility

President Salmén received a nomination form for the Wallenberg Prize to which the IAWS President is always invited. After some general discussion, it was concluded that the information could be passed on to the IAWS Fellows who may wish to nominate MWP candidates.

Robert Evans

***Abbreviated and edited by Editor*

IUFRO Congress Draws Diverse Audience

I recently attended the 24th IUFRO World Congress in Salt Lake City, Utah, USA. The program included about 2500 delegates from 1000 countries with most delegates coming from North America, Europe, and Asia; but we did have delegates from 21 African and 18



Latin American countries. With 150 technical sessions, over 2000 posters, technical tours, and a very large forestry trade exposition in the exhibition hall; the Congress was a very important forestry meeting. The opening session included dance and music from Native Americans and I am pictured with two of the performers.

Niels Elers Koch from Denmark handed over the presidency of IUFRO to Michael Wingfield from the University of Pretoria in South Africa. Later in the week, the Society of American Foresters and the Canadian Institute of Forestry joined the meeting, added another



1000 delegates; and shared a joint plenary session and all technical sessions were open to all delegates from the 3 organizations.

Wood science fit into three sub-themes of the Congress, “sustaining forests, sustaining people; the role of research.” Several IAWS member attended this meeting besides me, including Rector Victor Sanaev from Moscow State Forestry University shown next to me on the left.

I will briefly comment on the sessions that I organized under the Wood Culture Working Party which included 9 technical oral presentations, 2 posters, 6 wooden craft demonstrations, and live music from wooden instruments including the Baroque lute, alphorn, American Indian flute, Swiss chlefeldi, African drum, and Australian didgeridoo. (Shown below playing in the exhibition hall.) Wood Culture sponsored 4 booths in the exhibition hall (where live music and wood carving demonstrations were provided). The last activity was a post conference tour to observe early wooden structures at 2 Cultural Centers and visit several National Parks to explore forest management in arid conditions. This popular program provided excellent support for the use of wood products throughout the world and the human cultural tie into the importance of wood use.

Howard Rosen



MEETINGS OF INTEREST TO FELLOWS

IRG46 Meeting

The International Research Group on Wood Protection (IRGWP) is the leading global organization for the dissemination of scientific information on wood protection products. The IRG46 meeting of the IRGWP will be held on May 10-14, 2015 at the Hotel del Mar in Viña del Mar, Chile in South America. For more information on conference details and hotels, please read more on the IRG website (www.irg46.com/). For information on the International Group on Wood Protection, based in Stockholm, Sweden, please go to www.irg-wp.com/ to access the organization's website.

SWST Annual Meeting 2015

The Society of Wood Science and Technology (SWST) will hold its 2015 International Convention June 7-12, 2015 at the Jackson Lake Lodge in Grand Teton National Park, Wyoming, USA. Sessions will be dedicated to:

- lignocellulosic material science
- innovation and creativity
- corporate social responsibility
- next generation composites
- nanotechnology of lignocellulosics
- bio energy, fuels, and chemicals
- innovations in wood construction
- business and marketing

Special emphasis will be dedicated to early stage researchers (students and recent graduates) and IUFRO 5.10 Forest Products Marketing and Business Management Research Group will hold a full-day meeting in conjunction with SWST technical sessions. For more information go to <http://swst.org/meetings/AM15/> or contact eric.hansen@oregon-state.edu

ICCS18 - 18th International Conference on Composite Structures

The 18th International Conference on Composite Structures will be held in the beautiful city of Lisbon, Portugal. This event is one of the largest and longest conference on composite materials and structures. The dates of the conference are 15-18 June 2015 and the Venue is Hotel Epic Sana, Lisbon, Portugal. For information on the conference, please go to sites.google.com/site/18thiccs/

Though the website says “Deadline for submission of abstracts: 1 October 2014”, contacting Maria de Jesus Bacalhau of the Congress Department, she has said that abstracts are still being accepted.

IAWS 2015 Annual Meeting

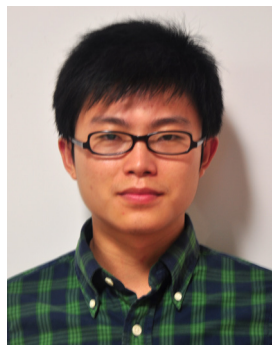
The IAWS 2015 annual meeting will be a joint meeting held with the 2015 ISCHP Conference (International Scientific Conference on Hardwood Processing) in Québec/Canada from 15-18 September 2015. There will be a special IAWS session covering all aspects of wood science and Fellows are encouraged to participate. The deadline for submitting abstracts is 5th December; please read more on the meeting webpage (www.ischp2015.org).

STUDENTS & WOOD SCIENCE

IAWS 2014 PhD Student Award

IAWS wishes to provide recognition to outstanding thesis/dissertation research at the PhD level by students throughout the world. 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 2014 recipient of the IAWS PhD Student Award is Li Shuai. After graduation from University of Wisconsin-Madison, Li worked as Lab director in the Biorefinery Laboratory iR&D center of Vland Biotech Group in China on process development of converting lignocellulosic biomass into sugars and materials for two years. Presently, Li is working in a start-up company on producing dietary fibers from lignocellulosic biomass.



Congratulations Li Shuai, from the Fellows of IAWS.

The following is the abstract from Li Shuai's PhD dissertation.

Transforming Lignocelluloses to Sugars and Liquid Fuels

Li Shuai, Department of Biological Systems Engineering, University of Wisconsin-Madison, 460 Henry Mall, Madison, WI, 53706, United States, shuailiuw@gmail.com

Extensive research has been done on the development of bio-fuel from low-cost and abundant lignocelluloses. Unfortunately, cost-effectively producing sugars and sugar derivatives still remains a barrier to developing a biorefining industry. In order to overcome this barrier, a few innovative processes were developed for converting lignocelluloses into sugars and liquid fuels. First, a sulfite pretreatment (SPORL-Sulfite Pretreatment to Overcome Recalcitrance of Lignocelluloses) was demonstrated to be more effective to enhance enzymatic digestibility of woody biomass like spruce than dilute acid pretreatment (DA). Addition of sulfite along with sulfuric acid partially dissolved lignin and sulfonated residual lignin in the SPORL substrate, which reduced non-productive adsorption of enzymes on lignin. The

buffer effect of sulfite protected cellulose and hemicellulose from extensive acidic hydrolysis and further decomposition.

Therefore, SPORL recovered more fermentable sugars and generated less fermentation inhibitors than DA pretreatment. Second, a polystyrene-based cellulase-mimetic solid acid with both cellulose binding domain (-Cl) and catalytic domain (-SO₃H) was synthesized for cellulose hydrolysis. The binding domain facilitated the association of substrate onto the catalyst surface and therefore accelerated the cellulose hydrolysis. The cellulose hydrolysis catalyzed by the solid acid had much lower apparent activation energy than the ones catalyzed by liquid acids and general solid acids without binding domains. Third, a one-step process was developed for direct saccharification of lignocelluloses at moderate temperature in concentrated metal halide solution without pretreatment. Fed-batch of biomass allowed to produce a concentrated sugar solution for downstream processing. Sugars and the salt were separated through a combination of solvent extraction of salt and ionexchange chromatography or other techniques.

Fourth, a one-pot process was developed for transforming lignocellulose into furan-based precursors for hydrocarbon fuels without pretreatment or saccharification. In a LiBr/acetone system with small amount of acid, unsolvated Li⁺ and Br⁻ rapidly disrupted hydrogen bonds in cellulose crystals and facilitated the hydrolysis of cellulose and hemicellulose. Br⁻ further catalyzed the dehydration of sugars into hydroxymethylfurfural (or furfural), which subsequently reacted with acetone through aldol-condensation to form furan-based precursors with 5-21 carbons in high yield and selectivity. Lignin was extensively depolymerized into low-molecular-weight fragments that can be hydrodeoxygenated together with the precursors into hydrocarbon fuels. The lignin also had good potential for high-value co-products development.

R.W. STEPHENS AWARD

At the 35th Canadian Wood Protection Association Meeting, held in Vancouver, 28-29 October (www.cwpa.ca/meetings/), one of the graduate students of Fellow Philip Evans, Mr Kenny Cheng, received the R. W Stephens Award for the best student paper. Mr Cheng received \$1000 and presented his full paper on optimizing the geometry of surface profiling to reduce the checking of treated wood (see abstract which follows) to the conference. The following is the abstract of the paper. Congratulations Kenny Cheng, from the Fellows of IAWS.

Optimizing profiling to reduce the checking of Pacific Silver Fir decking

Kenneth J. Cheng, Philip D. Evans

We characterize the geometry of the grooves and peaks of ‘profiled’ wooden decking. We classify profiled decking into three groups using the ratio of radii of surface grooves (R1)



Kenny Cheng, winning the R.W. Stephens Award for the best student paper at the Canadian Wood Preservation Association (CWPA) Conference, receiving the award from Paul Dandy, President of CWPA and VP (Canada) for the Swiss Pharma Company, Lonza.

mm were more effective at restricting checking than a ribble profile, which was used commercially in Canada to profile Pacific silver fir. We conclude that it is possible to reduce surface checking of Pacific silver fir decking by altering the geometry of surface profiles. In principal the same approach could be used with other wood species to reduce the negative effects of surface checking on the appearance of wooden decking.

to those of peaks (R2) and propose a new name (ribble) for the profiles whose geometry falls between those of rib ($R1/R2 < 30\%$) and ripple profiles ($R1/R2 > 60\%$). We design new profiles which systematically vary $R1/R2$ and height to width (H/W) ratios of profile peaks and grooves and examine the effect of profile geometry on the checking and planar distortion (cupping) of Pacific silver fir deck boards exposed to the weather. Profiling reduced the width of checks, but increased the cupping of deck boards. There was no entirely consistent trend of $R1/R2$ and H/W ratios on checking, but profiles with small $R1/R2$ ratios (rib profiles) and grooves deeper than 1.5

EDITORIAL: STUDENT NUMBERS IN THE FIELD OF WOOD SCIENCE

Low student numbers in the field of Wood Science remain a problem in the United States, Western Europe and parts of Asia. In the U.S.A., to counter this concern, many programs have undertaken an effort to rebrand with names that stress more environmental or sustainable themes. In many cases, this approach has had some success in attracting students, but in most cases it is still too soon to tell how rebranding will work. One thing that is clear, however, is that any “rebranding” effort has to reflect a change of heart from the way we have done the “business of education” in our field for the last 50+ years. Most of us in the education field in Forest Products are “tone deaf” to the imagery and verbiage that we use that is a turn-off to the majority of student-aged population in the U.S.A. Survey and focus group data show this clearly, but many have not taken to heart limited data available, and

more unbiased studies are needed to explore how our field is perceived by student-aged populations. More, and continuing unbiased surveys and focus groups need to be done to provide useful feedback about how our field is perceived by student-aged populations. In most cases, when surveys and interviews have been done in the past, these have been done with the students already in our programs or with people in select industries that represent traditional forest products groups. As a result, we have just gotten reinforcing feedback that is not representative of the perspective of the majority of college-age students, and the public. The surveys need to be done on the much broader audience that we have not already biased.

Anecdotal information from programs/individuals using imagery and the verbiage that goes with it (in many cases verbiage that apologizes for not really be true wood products anymore) is not beneficial with regard to the recruitment of significant numbers of students. It benefits us to be more inclusive of other bio-based materials and hybrid materials in what we do, and the public is also interested in this. That said, it is difficult for those of us in the field for many years to change our stripes to become better attuned to the broader interests of a public interested in sustainable, renewable themes and the use of related sustainable biomaterials. Of course, use of the correct verbiage has to be backed up with an understanding of what that verbiage means, and creating an education program that embodies sustainable and renewable materials and themes. Too many of our faculty that were educated and trained in traditional forest products areas just do not have an understanding of how to do that well, and it has hurt growth of the field.

Students are more attracted by green sustainable themes, and breadth of technical areas ranging from bioconversion, nanocellulose composites, the use of biomaterials in medicine/medical, business/marketing, bioplastics, biofuels — all of which we can do with wood and other biomaterials. However, images of sawmills, stacks of lumber in mill yards, and dirty industrial processes do not resonate with most students who are looking for something new with a bright future. An analogy is how “Beef” is marketed in the US: Pictures of people having fun and enjoying the final product are used in that marketing, as opposed to the use of images of cows being slaughtered in the packing house. There is a reason why this is done of course, but a reason that seems to elude many of us in the field as we have become inured to our own issues. As noted, it can be very difficult to change how those of us steeped in the traditions of the field for many years do things. It is difficult to make change, and most people are uncomfortable with change. Although rebranding with a name change takes some effort, the real effort to adopt true sustainable environmental content in our courses cuts much deeper and is harder to make. We must change and succeed in that effort though if we are to modify perceptions of our field and find ways of revitalizing and developing the field by bringing in new blood.

Barry Goodell

SUPPORTING MEMBERS

Supporting 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 Supporting Members 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.

List of Supporting Members

CHINESE ACADEMY of FORESTRY (CAF)	www.caf.ac.cn
CIRAD FORETS (French Agricultural Research Center for International Development)	ur-bois-tropicaux.cirad.fr
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
INNVENTIA AB, Sweden	www.innventia.com
KYOTO UNIVERSITY, Japan	www.rish.kyoto-u.ac.jp
MISSISSIPPI STATE UNIVERSITY, USA	www.cfr.msstate.edu/forestp
MOSCOW STATE FOREST UNIVERSITY, Russia	www.mgul.ac.ru/en
OREGON STATE UNIVERSITY, USA	www.woodscience.oregonstate.edu
SCION, New Zealand	www.scionresearch.com
STATE UNIVERSITY OF NEW YORK, USA	www fla.esf.edu
TECHNICAL UNIVERSITY in ZVOLEN, Slovakia	www.tuzvo.sk/en
THÜNEN INSTITUTE, Germany	www.ti.bund.de
UNIVERSITE LAVAL, Canada	www.xylo.sbf.ulaval.ca
UNIVERSITY OF MINNESOTA, USA	www.bbe.umn.edu
US FOREST PRODUCTS LABORATORY, USA	www.fpl.fs.fed.us
WOOD TECHNOLOGY INSTITUTE, Poland	www.itd.poznan.pl

WOOD SCIENCE AND TECHNOLOGY – JOURNAL OF THE IAWS

Each autumn, Springer issues a publisher report with key figures and a performance rating of their journals. In brief: WST is performing well – but there is potential to improve. The 2-years Impact Factor 2013 has been almost unchanged (1.873, -0,58% compared to the previous year). We had 110,441 full-text downloads (+1,8%) and our production volume has increased by 38% (96 articles on 1,334 pages). WST ranks #3 of the top 20 journals in the category Materials Science, Paper & Wood, and #11 of the top 20 journals in the category Forestry. Springer is kind of proud that the average time between receipt of an accepted manuscript at Springer and online first publication has been reduced to 13 days. However, for me as new editor-in-chief another figure is even more important – and still disappointing: the average peer review time of 341 days. Although we are using an efficient electronic submission and management system, it takes in average one year from submitting and online publishing of a finally accepted paper.

How can we reduce this figure, while at the same time further increase the bibliometric quality? One prime strategy is to strengthen the liaison between IAWS Fellows and the journal. Each active fellow should increasingly select WST for publication of their own manuscripts, and encourage, train and supervise their students and staff to only submit manuscripts which follow the principles of good scientific writing, in regards to language, structure, phrasing and accuracy. Fellows should more actively support the review process by accepting requests of a review, acting in good time, or delegating the review to capable members of their work team, in case of own time conflicts. Further, the editorial office has started to create a database categorizing the relevant scientific competence fields of Fellows. Please respond in case we will contact you in this matter in the next weeks. In addition, I will invite three Fellows as become subject editors in order to increase the efficiency of the editorial process, and I will reorganize the editorial board.

WST should aim at publishing high-quality content. The editors in cooperation with the editorial Board members and reviewers safeguard the quality and integrity of this journal. Fellows are cordially invited to support these processes.

Klaus Richter

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
- give due credit to the work of others in the field, not just summarize the author's work
- contain important references to the literature for further reading
- finish with a statement of future directions in the area

NOMINATION PROCEDURE 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 **30 September**.

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 November, 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.

Uwe Schmitt

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: Uwe Schmitt uwe.schmitt@ti.bund.de

IAWS



www.iaws-web.org