

## CMEC Alumni & Friends Newsletter

Tom Maloney, Editor

Suzanne Hamada, Associate Editor

### Comments from the Editor



Tom Maloney

I won't make many comments for this issue. There is a tremendous amount of material being presented in this Newsletter, No. 8. All of this issue presents very positive information with the exception of the passing of two of our long-time faculty and friends: **Dee Strickler** and **R.V. Subramanian**.

Dee was part of the initial group in 1956 that established the foundation of what is now the CMEC. He and his wife Claire were great friends of all of the old

timers. His work is covered in his obituary.

R.V. became part of our group when the Department of Material Science and Engineering was formed in the early 1970s. His expertise was in Polymers but he became a great partner in our research and teaching. As he learned more and more about wood, the greater advocate he became for us. He taught all of our graduate students while he was on our faculty and he participated in many of our research projects. He was a kind, gentle and brilliant colleague. I know he would be greatly excited to see that his area of expertise is being carried on so superbly by **Jinwen Zhang**.

For me personally, this loss of these two great friends, colleagues and experts is a crushing experience. We spent many fruitful and happy years together.

As a final note, I have been informed of the passing of another great friend and supporter, **Ward Williams**. Full information on Ward is provided in this newsletter. Ward attended many of our Symposiums, spoke at them, and provided us with great news stories about all of our activities. His assistance over the years was invaluable. He and I shared countless adventures in many parts of the world. As his obituary notes, he covered composite products development in 40 countries and he never failed to advertise for us.

Be sure and keep up-to-date on all of the Center's activities at the website: [www.cmec.wsu.edu](http://www.cmec.wsu.edu). I close with a Will Rogers quote, "Get someone else to blow your horn and the sound will carry twice as far."

### Alumni Spotlight: Walter L. Plagemann



Photo of Walter Plagemann and his wife, Sandy

In developing our graduate program that we started in 1972, we made a point of going out and recruiting students. We were an unknown operation as far as having a graduate program so we had to "see our program" to potential students. I soon learned to get to know faculty at other universities who could send students our way. One of these was Professor Robert Engelhardt at the University of Wisconsin-Stevens Point. We developed a great relationship over the years. It got so that he only sent us "blue chippers." When he called and said he had another one, my quick answer always was, "Send him."

So, in this issue, I asked one of those students, Wally Plagemann to tell everyone about his career. Wally had been in the service and came to Pullman with his wife, Sandy and two little girls. Here is his story (and I believe, ably assisted by Sandy).

Tom Maloney initially introduced me to Washington State University's Wood Engineering Department in 1979 at the Forest Products Laboratory in Madison, Wisconsin. At the time I was ready to graduate with a Forestry degree from Wisconsin-Stevens Point, but even the best of my three job offers would have put us on food stamps. My advisor, Bob Engelhardt, encouraging me to look into graduate school opportunities, arranged the meeting with Tom at the U.S. Forest Products Laboratory in Madison,

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## Alumni Spotlight: Wally R. Plagemann, continued

Wisconsin. Fresh in my memory from that meeting is Tom saying, "Wally, we're in the College of Engineering at WSU; with a degree from us you can land a job at Boeing." Driving back home to Stevens Point I chuckled, thinking that even a cheese head from Wisconsin knew wooden airplanes were a thing of the past. Still, Sandy and I decided to take the plunge, packed up our belongings and moved with our two young daughters to Pullman.

When we arrived Tom gave me a tour of the laboratories. Showing me all the chippers, flakers and presses, he seemed to think I knew exactly what he was talking about, when in reality I was clueless and wondered what I'd gotten myself into. With the help of his proficient lab staff (John, Marty and Tony) I was soon up to speed and actually contributing. I became interested in particle-board adhesives and began taking polymers, adhesives, and composites courses supplementing the Wood Engineering curriculum, along with the many undergrad math and engineering classes required for an Engineering degree. The most valuable part of my education at WSU, however, was not in the classroom but rather watching Tom run the laboratory on a shoestring budget while handling the politics of maintaining a program that, for all practical purposes, operated independent of University financial support. Tom impressed on me that, no matter your degree, ultimately, being a salesman was essential to succeeding in industry.

Tom's initial comments about Boeing became a reality when, after five years and two advanced degrees at WSU, I was hired as an engineer in the company's Defense and Space program. After six months of employment I became lead engineer for the Chemical/Physical Failure Analysis Group and, eighteen months later, was named manager of the Analytical Engineering Group, including both the Chemical/Physical and Metallurgical Failure Analysis laboratories. The fact that I was given a chance to take on more responsibility within such a short period of time is directly related to the experience I gained at WSU. Boeing's philosophy was that it generally takes 3-5 years for a new engineer to transition from academia to real life employment. The Wood Engineering Laboratory's survival depended on sound business management and it was highly sensitive to and keenly focused on the needs of industry. Learning these important concepts on a practical level automatically put its graduates ahead on the learning curve, providing them both a unique perspective and distinct advantage among other potential hires.

In addition to my duties as manager of Analytical Engineering, I served the company for many years as a university liaison and recruiter. One thing I consistently stressed with department heads was the need to develop graduates better prepared to contribute quickly when shifting from academia into industry.

The main focus of our Analytical Engineering Group was material characterization and failure analysis. We worked extensively with failed parts from both military and commercial airplanes and often worked directly with suppliers to solve the production problems that resulted in chronic failures. A most memorable time for me was when our group was selected to analyze systems and materials from the Long Duration Exposure Facility (LDEF), following eight years in orbit and subsequent retrieval by the space shuttle.

Luckily, I was able to witness a shuttle liftoff at Kennedy Space Center. During my tenure with Analytical Engineering, the group grew from eleven engineers and technicians to over fifty employees and earned the distinction of being the company's primary problem solving group. Like Wood Engineering, we technically received no financial support and faced every year without a firm staff budget. Rather, we survived solely on work brought in from other groups. This is where observing Tom run the Wood Engineering Laboratory and his advice on becoming a salesman were most useful. I've always been grateful for the practical education gained during my years at Pullman and I believe it's one of the main reasons I was able to protect my staff from layoffs.

I remained with Boeing until retirement. Meanwhile Sandy's career included twelve years with Perkins Coie, Seattle's largest law firm, followed by eight years at the then fledgling Amazon.com. She was hired as Amazon's original Office Manager and watched the company grow from 67 employees to more than 10,000 worldwide. Both happily retired, we now live on Alderbrook Golf Course in the scenic little town of Union on Washington's Hood Canal. Sandy spends her free time supporting Anna's Bay Center for Music, singing with a wonderful community choir and studying mandolin. As for me, I blissfully golf. I logged over 200 rounds last year, am on pace for the same this year and serve as vice president on the club's board.

Our oldest daughter Melissa received a Master's degree in piano performance from Indiana U and is now an accomplished opera singer. She performs regularly as a

solo artist, is a member of Seattle Opera, and is on the voice faculty at Pacific Lutheran University. She and her husband Alec brightened our lives last October with our first grandchild, Camille. Our younger daughter Sara is a busy massage therapist specializing in Shiatsu (lucky for us!) and conducts her own successful and thriving practice near Microsoft in Redmond.

We have fond memories of our five years in Pullman. Even after many travels, Sandy maintains that nothing is more beautiful than ripe wheat fields on the Palouse and the patchwork display of late summer crops from the top of Kamiak Butte. As a *last Editor's comment*, over the years I called upon supervisors of many of our alumni and asked them how they were doing but more importantly, "What can we do better in educating our students?" Wally's supervisor at the time said, "I don't know what you are doing but don't change, the ones we have are among our best people."

## SYMPOSIUM No. 45

*Editor's Note: In 1967 when we started the Particleboard Symposium (now the International Wood Composites Symposium), I calculated we had enough material to conduct maybe three Symposia. How wrong I was as No. 45 was just held. No. 45, however, was a joint offering by the CMEC and the APA and FPIInnovations. Following is a review of the meeting provided by Jack Merry of APA that will be published in the October issue of Engineered Wood Journal. This article is presented by permission of the author.*

### JOINT VENTURE

Seattle Event Combines Wood Composites  
and Veneer Processing Symposia  
by Jack Merry

It hasn't been determined yet whether the **Joint International Symposium on Wood Composites & Veneer Processing and Products**, held for the first time last spring, will be repeated as a combined industry event. But the three-day gathering in Seattle certainly proved itself a viable forum for review and discussion of industry trends, issues, challenges and developments.

Approximately 200 attendees from 16 countries were drawn to the conference, which combined the longstanding International Wood Composites Symposium sponsored by Washington State University's Composite Materials & Engineering Center (CMEC) and the biannual International Symposium on Veneer Processing and Products that since 2004 had been held in France, China and Finland. Also sponsoring the latest event were APA and FPIInnovations.

"Our goal is to maintain the symposium as an industry-driven conference rather than a purely scientific one that attracts only researchers," said **Vikram Yadama** of WSU's CMEC in explaining the purpose of combining the two symposia and the sponsorship roles of APA and FPIInnovations. APA helped recruit attendees from

among its North American members while its related supplier organization, the Engineered Wood Technology Association (EWTA), also assisted in soliciting sponsorships from among its members. EWTA member company sponsors included Huntsman Polyurethanes, GreCon, Dieffenbacher, Pallman America, Momentive Specialty Chemicals, Arclin, Flamex, Willamette Valley Company, Siempelkamp, Electronic Wood Systems, USNR, Georgia Pacific Chemicals, Metriguard and Samuel Strapping Systems. Other sponsors included Chem-Trend (now also an EWTA member), Scheuch and MoistTech.

Although plans for next year's event, including possible cosponsors or organizers, are still in development, **Robert Tichy**, also of WSU's CMEC, said he strongly supports broadening the range of products and topics covered and ongoing efforts to attract a larger and more diverse attendance. He noted that adhesives technology and bioenergy, biofuels, co-products from woody biomass and integrated technologies are likely to command greater attention at future symposia. The results of an attendee survey are being used to help plan future events.

The Seattle event, held along that city's waterfront at the Edgewater Hotel and Bell Harbor International Conference Center, featured 38 major presentations, including six keynote addresses. Those headliners and their topics were RISI Economist Bernard Fuller, on the outlook for global panel industry recovery; APA Market Research Director Craig Adair, on the major markets for North American wood products; Weyerhaeuser Company Senior Vice President Miles Drake, on options for forest products diversification; FPIInnovations Vice President Alan Potter, on future trends in forest products research and development; Nelson Pine Industries Managing Director Murray Sturgeon, on innovative applications of laminated veneer lumber; and American Softwoods China Office Director Xu Fang, on codes and standards affecting wood product use in China.

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## SYMPOSIUM No. 45, continued

The second day was devoted to technical topics under two concurrent tracks—one devoted to wood composite materials, the other to veneer-based products. The final day featured presentations on sustainability, environmental issues and regulatory challenges. Among those speakers were APA Product Evaluation Manager Tom Skaggs, on the impact of building code changes on the wood structural panel wall sheathing market; American Chemistry Council Senior Director David Fischer, on the work of ACC's formaldehyde panel; FPInnovations Building Systems Department Manager Erol Karacabeyli, on the rise of cross laminated timber (CLT) for multi-story wood construction; and FPInnovations Energy and Environment Group Leader Jennifer O'Connor, on the emergence of environmental product declarations. (The latter two topics are the subjects of feature articles in this issue of the Journal.) Nearly 20 poster sessions also were part of the program.

In addition to Yadama and Tichy, the Symposium Organizing Committee was comprised of APA Quality Services Division Director Steve Zylkowski, **Karl Englund** of CMEC, Chunping Dai of FPInnovations, Remy Marchal of Arts & Metiers ParisTech, and Matti Kairi of Technical University of Helsinki.

**Jack Merry** ([jack.merry@apawood.org](mailto:jack.merry@apawood.org)) is editor and publisher of the Journal.

## \$40 Million USDA Grant: ISD/CMEC Key Players

Following is information and the announcement of a \$40 million dollar grant to WSU. The co-leaders are **Michael Wolcott**, LP Distinguished Professor of Wood Materials and Director of the WSU's Institute of Sustainable Design (part of the Center) and **Norman Lewis**, Regents Professor and Director of WSU's Institute for Biological Chemistry. It is my understanding that this is the largest grant ever received by WSU. The name of the project is the Northwest Advanced Renewable Alliance (NARA): A New Vista for Green Fuels, Chemicals, and Environmentally Preferred Products (EPPs).

It is extremely gratifying to see this marvelous grant obtained by two outstanding faculty members. I believe, as the long time retired Director of the Wood Materials and Engineering Laboratory (the forerunner of the CMEC), that I can speak for all of the people who over the years developed the Laboratory to worldwide recognition. When one retires, many times the laboratory or department goes another way and all of the hard work of many years sort of disappears. That has not been the case at the Center, as WSU was able to attract and hire a number of excellent younger faculty and staff who have moved the Center to greater fame. Mike Wolcott is one of those faculty and all of us old timers are very pleased with his and Norm Lewis's success.

Also as part of the team from CMEC are **Vik Yadama** and **Karl Englund** who are leading the Outreach Effort and **Jinwen Zhang** working with Mike Wolcott on developing new polyether and polyester polymers produced from wood derived feedstocks. Our hats are off to them.

The Washington State University website has information on this grant and the NARA website provides more detailed information: <http://nararenewables.org/>. I encourage you to go to these websites and get the complete information on this grant. We will keep you informed of all the progress of this great research opportunity.

## Supply Chain to Sustainability

From the NARA website

### NARA Works to Harness Woody Biomass for Aviation Biofuel, Build New Industry

Spearheaded by Washington State University, the Northwest Advanced Renewables Alliance takes a holistic approach to building a supply chain for aviation biofuel with the goal of increasing efficiency in everything from forestry operations to conversion processes. Using a large variety of feedstocks, from construction waste to forest residues, the project aims to create a sustainable industry to produce aviation biofuels and important co-products. NARA features a broad alliance of private industry and educational institutions from throughout the Northwest to provide an overarching view to best address the aviation biofuels challenge.

## \$40 Million USDA Grant: ISD/CMEC Key Players, continued

### WSU leads effort for economical jet biofuel

Wednesday, September 28, 2011 (WSU News Center release)

PULLMAN, Wash. - Washington State University will receive a five-year, \$40 million grant to help develop alternatives to petroleum-based fuels and chemicals. The award was announced Sept. 28 by U.S. Department of Agriculture Secretary Tom Vilsack.

Overcoming obstacles that prevent wood-based jet fuel and petrochemical substitutes from being economically viable is the focus of the project. Led by WSU, it brings together a consortium of scientists from universities, government laboratories and private industry. The consortium is called the Northwest Advanced Renewables Alliance (NARA).

Vilsack announced that the University of Washington will receive a similar grant. Approximately two-thirds of the funding of these grants is directed to research, with the remainder targeted to education and outreach/public awareness.

#### Job creation, clean energy

"This is an opportunity to create thousands of new jobs and drive economic development in rural communities across America by building the framework for a competitively priced, American-made biofuels industry," Vilsack said. "Public-private partnerships like these will drive our nation to develop a national biofuels economy that continues to help us grow and out-compete the rest of the world while moving our nation toward a clean energy economy."

The WSU grant aims to address the need for a domestic biofuel alternative for U.S. commercial and military air fleets. NARA researchers envision developing a new, viable, aviation fuel industry using wood and wood waste in the Pacific Northwest. The Northwest has established oil refining and distribution assets as well as a significant aviation industry.

The project will focus on increasing the profitability of wood-based fuels through development of high-value, bio-based co-products to replace petrochemicals that are used in products such as plastics.

#### Viable wood-based energy crops

In addition to using wood and mill residues, the NARA project aims to develop wood-based energy crops and improve the economics of that industry with co-products as well. A major goal will be to address how to better understand and use wood lignin, a glue-like material constituting up to about 30 percent of some woods.

Lignin is often considered to be one of the key issues adversely affecting economic viability for production of wood-derived plant chemical products.

"We believe we can begin to resolve the issues that have prevented wood-based biofuels and other petrochemical substitutes from being economically viable with some new strategies and the diversity of skills represented on the NARA team," said Norman G. Lewis, Regents Professor and director of WSU's Institute for Biological Chemistry. "If we are successful, the potential to begin to replace the natural resources jobs lost in the region over the past several years is very high."

Lewis and Michael P. Wolcott, LP Distinguished Professor of Wood Materials and director of WSU's Institute for Sustainable Design, will lead NARA.

#### Integrating products, market, workforce

The focus for NARA has been spurred by the recent harsh criticism of the U.S. biofuels industry for failing to translate existing technology into economically viable industries. Key challenges to be overcome include resolving various scientific/technical obstacles that prevent economic viability.

Sustainability – economic, environmental and social – is also key. NARA researchers will use specific metrics to assess and evaluate technological progress against critical milestones throughout the project.

"To truly realize a new industry, we must begin considering all of the factors that make any major industry run successfully," said Wolcott. "One aspect of NARA's strength lies in the integration of products, market and workforce development, all with an eye toward the success of the existing forest industry and its relationship to communities and the environment."

## \$40 Million USDA Grant: ISD/CMEC Key Players, continued

NARA includes Gevo, Greenwood Resources, Catchlight Energy (a joint venture of Chevron and Weyerhaeuser) and Weyerhaeuser from private industry, along with WSU, Montana State University, the National Center for Genome Resources, Oregon State University, Pennsylvania State University, Salish-Kootenai College, University of Idaho, University of Minnesota, University of Montana and UW, the U.S. Forest Service - including the Pacific Northwest Research Station and the Forest Products Laboratory - and the William D. Ruckelshaus Center, which is jointly operated by WSU and UW.

### Private partners eager to help

The alliance's private industry partners said they value the opportunity to join a larger effort.

"The consortium is designed to capitalize on the unique contributions of the participants, and Weyerhaeuser is pleased to be part of that," said Dan Fulton, Weyerhaeuser president and CEO. "Sustainability is absolutely critical to the successful production of feedstocks and aviation biofuel on an economical scale, and we're proud to bring more than a century of forest science and innovative solutions to the effort."

Patrick Gruber, CEO of Gevo, said the greatest challenge facing development of advanced biorefineries is "the absence of readily available, cost effective and sustainable biomass feedstock sources."

"This alliance will help foster development of a biorefinery industry in the Pacific Northwest by aligning the region's major academic institutions, forest product companies and land management entities around a common vision – to create a thriving bio-based economy," he said.

More information about NARA, its work and its partners is available at <http://www.nararenewables.org>.

## Staff Focus: Scott Lewis



Photo of Scott Lewis and his wife, Susan

*Editor's Note: The CMEC has long had a very competent core of staff personnel. It goes without saying that these individuals have been critical members of the Center that has led to its worldwide reputation for research, development, graduate education, and technology transfer. Scott Lewis is now part of that very competent group. His story follows.*

**Scott Lewis** began serving at the CMEC as a Research Associate in May of 1999. As a graduate from Washington State University with a Bachelor of Science in Natural Resource Sciences and extensive personal experience with mechanical and woodworking tools, Scott's unique skill set matched well with the new niche being carved out at the then Wood Materials Engineering Laboratory.

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Scott provides technical support in every aspect of the Composite Materials Engineering Center's operation including composite panel manufacturing and structural and material testing. One of Scott's most important roles is to provide safety training for graduate students and other employees so that they are able to safely operate woodworking and power tools in the laboratory.

Scott also provides training on and maintains all hydraulic testing equipment to make sure it is functional, safe, and performing to the highest standards for all of CMEC's testing needs. Keeping CMEC's testing data acquisition system current is another one of Scott's duties. He is an active member of the IAS accreditation program and has the task of updating testing standard records as the Deputy Quality Manager.

Scott and his wife Susan, who is employed as a Program Coordinator for WSU's Civil and Environmental Engineering Department, met as students at WSU. They have been married for 12 years and have two children. Their son, Cal, is a fourth grader and daughter, Tess is in first grade. The family enjoys working in their yard, participating in the kids' school-related sporting events, swimming, and 4H activities.

## ALSC Reappointment for Director, Donald A. Bender



Don Bender

*(News Release by the U.S. Secretary of Commerce)*

PULLMAN - U.S. Secretary of Commerce Gary Locke recently reappointed **Donald Bender** as a principal member of the American Lumber Standard Committee representing consumers. Bender is a professor of civil and environmental engineering and director of the Composite Materials and Engineering Center at WSU.

The ALSC, comprised of manufacturers, distributors, users and consumers of structural lumber, is responsible for the development, maintenance and enforcement of NIST Voluntary Product Standard PS-20 and the accreditation program for lumber grading.

The American Lumber Standard system is the basis for the sale and purchase of virtually all soft-wood lumber traded in North America. The system also provides the basis for acceptance of and design values for lumber by the building codes throughout the United States.

## R.V. Subramanian, 1922-2010

**R.V. Subramanian**, former Professor of Materials Science and Engineering, Head of the Polymers Section, at Washington State University passed away August 5, 2010 in Greenbelt, MD.

Subramanian spent 30 years at WSU between 1969 and 1999. He earned his BS, MS and Ph.D. degrees in his native India before coming to Case Western Reserve University as a Fulbright Fellow and then making his way west to Pullman and settling in the Palouse that he loved so much.

For those 3 decades, he provided thoughtful leadership and established a strong focus on Polymers and Materials Science Research. He recruited, mentored and developed a steady string of graduate students who flocked to his laboratories to earn their MS and Ph.D. degrees in Polymers and Materials Science.

Some unique research he led included:

- Developing techniques for solidifying low-level radioactive wastes, making transportation and storage of these wastes much safer.
- Grants from the US Navy to synthesize and study properties of polymers to prevent marine fouling and thereby reducing fuel consumption and drydock times of ocean going vessels.
- Grants from the Navy and Alcoa Foundation to study the development of new polymer materials for coating ship hulls and thereby reducing or preventing the growth of barnacles.
- Pioneering the transformation of native basalt into product similar to fiberglass. This was important to the concrete construction industry which uses tons of fibers to reinforce cement. This research led to the formation

of a small company formed with partners called LSM, at which he was a director.

Subramanian was also the recipient of the Boeing Distinguished Professorship in Materials Science. He was a frequent speaker at conferences throughout the world, sharing his expertise and passion for his field of research and honored with many "best research" papers.



R.V. Subramanian

Subramanian also was an active member of the community as a long-standing member of the Pullman Kiwanis Club where he served as chairman of the Younger Years club committee. He led an effort with KWSU-TV to develop a 4-part program series called "Youth in Trouble" which involved increasing the awareness and socializing learning disabilities due to visual, perceptual or conceptual problems.

He loved Pullman and Washington State University and was most happy after retirement visiting his home on Military Hill, tending to his beloved roses and gardens, and doing his daily walks in the Coliseum.

Survivors include his wife Chellam, sons Venkatesh (B.S. 1978), Balaji (B.A. 1980, M.A. 1984), 4 grandchildren and a great-grandson.

(Information provided by R.V.'s son, Balaji Subramanian)

## Dee Strickler, 1927-2011



Dee Strickler

**Melvin "Dee" Strickler**, 83, died at his home in Columbia Falls, Montana on March 12, 2011.

He was born March 29, 1927, in Walla Walla, Wash., to Glenn and Elba Conley Strickler. His father was a wholesale distributor for Standard Oil and his mother, a homemaker. He attended schools in Milton-Freewater, Ore. Dee loved hiking in the outdoors and fished most of the length of the Walla Walla River as a boy. He lettered in football, basketball, and track at McLoughlin Union High School for three years. He spent his senior year in the U.S. Navy at the end of World War II, stationed on Oahu, Hawaii.

In 1950, he graduated from Washington State University with a Bachelor of Science degree in forestry, where he was a member of Sigma Phi Epsilon fraternity. Two years later he was granted a Master of Science degree in wood utilization from Syracuse University.

He was married to Claire Church in Syracuse, N.Y., on June 1, 1953. His first job out of college was at Cascades Plywood in Lebanon, Ore., working in quality control. In 1954, he and Claire moved to Clarkston, Wash., to help on his dad's fruit ranch on the Snake River. They also raised purebred Suffolk sheep. Their two older children, Jack and Zoe, were born in Clark-

ston.

When the ranch was scheduled to be flooded by a dam on the river, they moved to Pullman, Wash., where he was a member of the faculty at Washington State in the Division of Industrial Research, College of Engineering for 19 years. He was involved in research that included particleboard, finger jointing, trusses and glu-lam beams. During that time he authored 20 articles in professional publications and was awarded two patents. In 1972 he earned the L.J. Markwardt Award for Wood Engineering Research from the Forest Products Research Society for "distinguished contribution to the knowledge of wood as an engineering material and enhanced utilization efficiency of this renewable resource."

He took a year's absence from WSU to study for his Doctorate of Forestry degree at Duke University, which was awarded in 1967. He rose to the rank of full professor of materials science at WSU.

Their youngest son, Walt, was born in Pullman, Wash. Dee was active in Boy Scouts with his two sons. He took Scouts on long hikes, including a 100-mile hike in the Bob Marshall Wilderness. He also took church youth groups on backpacking trips with Claire, and the family enjoyed backpacking together. He hunted and hiked many miles in the Blue Mountains, where he started photographing wildflowers.

In 1976, the Stricklers moved to Whitefish to establish Strickler-Taylor Lumber Company with Keith Taylor, who had built a finger-jointing machine using one of Dee's patents. In 1978 their company entered "The World's Longest Board" in the Whitefish Winter Carnival Parade. A 2 by 6 measuring over 500 feet in length was carried by dozens of Whitefish Junior and Senior High School students. They had hoped to be entered in the Guinness Book of World Records, but were rejected because there was no such category.

When their business closed in the recession of 1980, Dee turned his hobby of many years, photographing wildflowers, into a new profession. He wrote and published five books: "Prairie Wildflowers," "Forest Wildflowers," "Alpine Wildflowers," "Wayside Wildflowers of the Pacific Northwest" and "Northwest Penstemons." All but the latter have gone into several editions and all are still in print.

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## Dee Strickler, continued

Dee was a member of the American Penstemon Society, the Montana Native Plant Society, and a former board member of the Glacier Natural History Association. He was a member of the first Presbyterian Church of Whitefish, an ordained elder and the church's "Dishwashing Deacon." He loved to sing and was a faithful tenor in the church choir. In 1982, he designed and oversaw the building of an addition to the church.

Possessing a lifelong passion for game hunting, Dee managed to go into the field at age 82 with his son. He also loved gardening, laboring over a vegetable garden and three wildflower gardens.

Dee was preceded in death by his parents, and his older brother Bob. He is survived by his wife of 57 years, Claire; and their son Jack, his wife Diana, and grandson Glenn, of Kalispell; son, Walt, of Boulder, Colo.; daughter Zoe, husband George Gibson, and granddaughter, Chloe, of Storrs, Conn.; and a foster son, Sanjay Narasimhalu, and family of Katy, Texas.

## John Robert "Bob" Stillinger, 1922-2011

**John Robert (Bob) Stillinger**, 89, of Corvallis, Oregon, USA died peacefully July 19 in his home. Bob was president of the Forest Products Society from 1967 to 1968 and served on committees in later years. Other noteworthy honors include participation on the international board of directors of the National Particleboard Association (four years); president of the National Plastic Foam Association (two years); president of the United Kingdom Particleboard Association (three years); the Distinguished Service Award, Washington State University College of Engineering, 1984; Distinguished Alumnus, University of Idaho College of Natural Resources, 1989; Board of Directors, Dee Forest Products, Inc., Dee, Oregon, 1992-97; University of Idaho Alumni Hall of Fame (1994); and honorary doctoral degree, University of Idaho (1998).

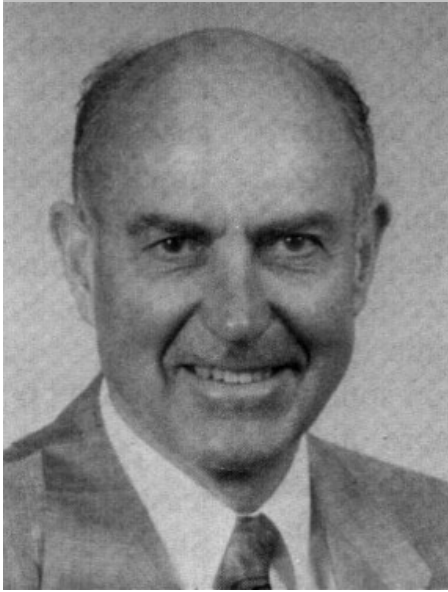
Bob was an extremely generous man who helped family, acquaintances, and agencies with physical help, advice, and financial assistance. He established a college foundation at University of Idaho to help students interested in natural resources careers. Bob was an avid lap swimmer and strong supporter of the Osborn Aquatic Center in Oregon. (This information is from the Forest Products Society).

*Editor's Note: Bob Stillinger was a strong supporter of the WMEL helping me to get the Symposium series started and providing funding for our graduate students. At the first Symposium, Bob was a featured speaker presenting two papers. He set the tone for all of the following symposia when at his first presentation, he threw his paper aside and said, paraphrased after all of these years, "Enough is enough, the previous speakers are following the boring style of scientific presentations and forgetting the nitty gritty of what is really happening in the plants. So I am telling all of you the way it is—the good and the bad." He brought down the house with applause and all of the next speakers followed his lead. Personally, I will miss him as he was one of my great critics keeping me in line. And he was a great friend of both Donna and myself.*



Bob Stillinger

## Ward Williams, 1925-2011



Ward Williams

**Ward Charles Williams** was born in Cleveland, Ohio on November 18, 1925, but raised in Portland, Oregon. At Grant High School he was editor of the *Grantonian*, sat on the Grant Student Board and enjoyed many sports including baseball and golf. While still in high school he was hired by the Oregon State Forestry Dept. as a firefighter in the Bend/Deschutes area. After some persuasion and an offer of a whopping \$10.00 a month extra he became camp cook.

*Editor's Note: In 1943, he volunteered for the US Navy and was sent to engineering school where, if you didn't make it, you went to 'boot camp' which would be an incentive to anyone, then to pre-flight and primary flight training. The war ended before he could earn his wings.*

Ward graduated from OSU in 1948 with a BS in Forestry and a minor in journalism. While attending OSU, he worked on the *Daily Barometer*, the school paper, and edited the forestry yearbook. Between years at OSU he worked for the U.S. Forest Service in Alaska.

Upon graduation, Ward accepted a permanent appointment as a USFS forester and was assigned for three years on the very primitive Kenai Peninsula. Aside from his forestry work, there was plenty of time for hunting, fishing and cross country skiing.

Next was a transfer to Stevens Pass, WA, a big ski area leased from the Federal Government, which meant the ski patrol and general safety for all lifts came under Ward's responsibility. He was trained in avalanche control which often meant dangling from a rope and setting explosives. Much more sophisticated methods are used now.

But the "writing bug" bit him, and he accepted an offer to be staff editor for *The Lumberman*, a forest products publication, so he switched to full time publishing in the industry. Next came jobs in Washington DC with the American Forest Products Industry as editor of the *American Tree Farmer* and in Zurich Switzerland, as editor for *Pulp and Paper International* and Brussels Belgium where he met and married Catharina, who is from Holland, and they had their first child. With the same organization he moved to New York City to publish the domestic "Pulp and Paper" journal. The same job was reorganized and moved to San Francisco, where they welcomed their second child.

After years of working for others, Ward decided to move back to Switzerland, where he lived in Lausanne with his family. He worked as an independent editor and publisher in the same field for 21 years. At this time he became involved in medium density fiberboard, known as "MDF". Still as an independent, he started a new magazine, "MDF" and in the process traveled all over the world – to 40 different countries !

Ward and Catharina had settled in Tigard, Oregon to be near their daughter and granddaughter. Their son is a geologist in Leiden, Holland. Ward was still involved with publishing as a contributing editor but to a lesser degree. He said this assured him time to pursue tennis, his favorite, on the Summerfield courts and snowshoeing with Catharina at Mt. Hood.

## Alumni, Staff and Friends News

The first part of this segment of the News was inadvertently left out of the last Newsletter, sorry about the omission. The more recent news follows.

### Environmental park district enhances land and business

CMEC is home to the **Institute for Sustainable Design** with **Mike Wolcott** as the Director (as most of you know, Mike is also professor of Civil and Environmental Engineering). Under his leadership a new project will create a detailed engineering, architectural and biological plan for the 130 acre zoned Auburn Environmental Park District (AEPD).

WSU graduate students will help Auburn, Wash., create a plan for sustainable development and green businesses

## Alumni, Staff and Friends News

with \$95,000 in funding from the city. The goal of the development is to create the environment necessary to economically attract green businesses to locate in the AEPD, enhancing the value of the property while substantially growing high value green jobs in the district.

Working with Wolcott will be about 20 graduate students, as well as **Deborah Ascher-Barnstone**, associate professor, and **Todd Beyreuther**, **Karl Olsen** and **Cara Poor**, all clinical assistant professors.

### Biodegradable wood-plastic composites

**Mike Wolcott** and his associates in the Center have come through again. In work with the Idaho National Laboratory and the University of California, Davis a new wood-plastic composite has been developed that that is eco-friendly. The Center's work on wood-plastic composites is well known. In this composite, waste wood and a different plastic [polyhydroxyalkanoates (PHA)] than used in other such composites are combined. Bacteria make PHA and some of these harmless bacteria are part of the composite. In the right situations the bacteria that made the plastic in the first place will breakdown the composite. Thus, this new composite is biodegradable. As an added bonus, the degraded composite is a fertilizer—the composite is actually future compost. The full article on this development can be seen in the Center's website at <http://www.cmec.wsu.edu/News.html>.

### Plant Restart in Elma, Washington

Some years ago, a plant was built in Elma to produce wood plastic composites for residential siding. For various reasons, the plant was closed a while back. A new company, NewWood Manufacturing Inc. was formed to take over and reopen the plant. Center staff had worked on the development of the plant in the first place. Now, the new CEO of NewWood, John Bowser, came back to the Center and made contact with **Karl Englund**, **Vikram Yadama**, **Mike Wolcott**, and **Bob Tichy**.

Bowser found that the knowledge of the technology was a tremendous help to his company. The product is a mix of recycled waste wood fibers encapsulated in recycled plastic. Over 100 applications for the board have been identified. The researchers provided technical advice in developing the products, assisted with connecting the company with economic development officials in the state, and helped to identify potential markets.

The 275,000 sq. ft. facility held an open house on November 15. The plant in full operation will employ about 150 people providing a tremendous economic boom for this small community. President **Elson S. Floyd** was so impressed with the project that he blogged about it at <http://president.wsu.edu/blog/perspectives/?p=74> .

### Engineers Without Borders

Professor **Dan Dolan** is continuing and expanding his efforts in the **Engineers without Borders** (EWB) organization. Personally, he has served in overseas efforts in Africa and South America. He was a founder of [EWB@WSU](mailto:EWB@WSU). Recently, he and **Rebecca Fakkema**, a senior civil engineering major presented a free public lecture at WSU entitled "Local, State, and International Student Service/Learning Projects: An Experience and Opportunity with [EWB@WSU](mailto:EWB@WSU)."

The following comes from the news article by David Clarke, University College, that was published October 11, 2011 on the *WSU News Center* website on the presentation. Since the chapter was founded in 2005, it has designed and/or constructed: water systems on the Yakama Indian Reservation in Washington and Kayafungo, Kenya; schools in Sri Lanka after the 2006 tsunami; a surgical hospital in Sudan independent of the region's electrical grid; and a restoration plan for a polluted lake in Chile, assisting in Africa to develop a functioning hand pump for irrigation, and designing and constructing a suspension bridge in El Salvador that will provide children with access to schools. Locally, handicap access ramps have been built for Habitat for Humanity and the group is working on the design and construction of wind and solar power supplies to the WSU Organic Farm.

## Alumni, Staff and Friends News, continued

Dan is truly a citizen of the world. To the Editor, his work is "Out of this World." Everyone should know about his and his co-workers efforts and I am sure anyone that wants to assist Dan with his efforts will be very welcome.

### More Recent News

#### Professor Lloyd Smith's Work on Baseball Bats

(Story in StatesmanJournal, Salem, Oregon on May 14, 2011)

For someone who describes himself as not a huge fan of baseball, **Lloyd Smith** has a major policy role in the college game. As director of the **Sports Science Laboratory** at Washington State University, Smith runs a certified testing facility for the NCAA. The lab helped to develop the data behind the move to the new standard for bats and it also certifies bats for manufacturers.

*Editors Note: Our work in this area started several years ago when **Don Bender** and Lloyd Smith conducted research with Tridiamond Sports (now Brett Brothers Bat Company) on a project funded by the Washington Technology Center.*

"We kind of got into this by accident," Smith said. "A company in Spokane was trying to make a more durable wood bat and we were helping him with that. His question was if I make it more durable does that affect performance? So we got into performance testing." The lab also is a certified lab for the American Softball Association and other organizations, and testing balls, helmets and even hockey sticks. In each bat test a ball is fired from an air cannon at a stationary bat. The incoming and rebound speed of the ball is measured and analyzed.

The ASA is concerned about reaction time, and NCAA baseball focuses more on re-creating the makeup of a wood bat.

"With the NCAA, they have said we don't know what a reasonable or safe reaction time should be, so we're going to regulate our performance relative to a wood bat," Smith said.

"All of their standards have that trademark, they're always saying the performance of this bat relative to a wood bat."

Although a baseball fan, Smith said he's not quite a fanatic, something he thinks helps his work. "I almost think it's good I'm not a fanatic of the game because I think that allows me to be a little more objective than someone who believes they know how the game should be played and what is right and what is wrong," he said.

*Editor's Note: Professor Smith's work has also been published in the New York Times. It can be found at: [www.nytimes.com/2011/06/19/sports/baseball/metal-bats-that-play-like-wood-alter-college-baseball.html?\\_r=2&pagewanted=print](http://www.nytimes.com/2011/06/19/sports/baseball/metal-bats-that-play-like-wood-alter-college-baseball.html?_r=2&pagewanted=print)*

### Latest Edition of the Wood Handbook

The **Wood Handbook** has been part of every forest products persons basic arsenal of information ever since 1935. Subsequent updates have been published in 1939, 1955, 1974, 1987, 1999 and now in 2011. This latest edition is the most comprehensive ever and includes many chapters, items, and information that was not even thought of in 1935.

As most of you know, the Wood Materials and Engineering Laboratory took the lead in the 1970's in moving forest products and wood into the Materials Science and Engineering arena. Shortly thereafter, the US Forest Products Laboratory bought into this movement and has pursued getting the materials science world to accept wood as a basic material. It is interesting to me to see the subscript under the Wood Handbook title of "Wood as an Engineering Material."

The CMEC is well represented in putting this latest edition of the Wood Handbook together. Our Alumnus, **Bob Ross**, is the Editor and, further, he authored one of the chapters and co-authored another one. He did a great job and we are very proud of his efforts. Our Director, **Don Bender**, was one of the reviewers of the entire book. Another of our graduates, **Sam Williams**, authored another chapter and **Charlie Carlil** who did all of his MS thesis work in our laboratory

## Alumni, Staff and Friends News, continued

was a co-author of a chapter. I was a chapter reviewer. I have not asked our other present or past staff members about their participation but I am sure there are a number of individuals who did indeed serve as reviewers. I certainly feel that the CMEC had a significant influence in the writing of the newest edition of the Wood Handbook.



Dieter Siempelkamp

### Lifetime Achievement Award

**Dieter Siempelkamp is awarded the Schweighofer Prize 2011**

**(Copy from Siempelkamp website)**

*Editor's Note: Dr. Siempelkamp is one of the members of the Wood Composites Hall of Fame and a long-time supporter of the Center.*

June 17, 2011: Dr. rer. nat. h.c. Dieter Siempelkamp is the top award winner of the Schweighofer Prize 2011. The European innovation award for forestry and wood technology and timber products was presented in Vienna, Austria, on June 16, 2011. The jury awarded the chairman of the advisory board of the Siempelkamp Group with the prize for his outstanding achievements in the wood-based products industry.

The initiator of the Schweighofer Prize is the Schweighofer family, the owner of one of Europe's leading wood-processing companies. The jury of six honored Dieter Siempelkamp with this year's top prize for his lifetime achievement. He, as well as the company with the same name, are synonymous with perfection and innovative solutions in mechanical engineering and are inseparably connected to the ContiRoll, the world's leading brand for continuous presses for wood-based materials, explains the jury in its statement. Dieter Siempelkamp joined the Krefeld family company in 1958. As the long-time CEO he set the decisive course for the future of the company by successfully promoting Siempelkamp's internationalization. The area of research and development was also developed and expanded under his leadership.

The Schweighofer Prize has been awarded every two years since 2003. The prize focuses on innovative and practice-oriented solutions for and with the sustainable wood material. The total prize money the jury awards is 300,000 Euros. The main prize is endowed with 100,000 Euros. The remaining 200,000 Euros are distributed over four innovation prizes.

### The 'Oscar' of the Wood-Based Material Industry

Approximately 450 guests from 20 countries including the Austrian Agricultural and Environment Minister Niki Berlakovich celebrated together with the well-known top award winner and the winners of the innovation prizes. This award is the 'Oscar' in the wood-based material industry. In this respect, I feel particularly honored to be this year's top award winner, says Dieter Siempelkamp at the award ceremony in Vienna. The 77-year old does not want to take credit all for himself because without the commitment of our employees this achievement would not have been possible.

Dieter Siempelkamp awards the prize money of 100,000 Euros to the Eugen Siempelkamp Foundation: Founded in 1964, this Foundation assists young talented people in the areas of mechanical engineering or the forestry industry, for example, with scholarships for engineers, mechanical engineering technicians or graduates of vocational schools. A share of the interest income benefits social institutions in Krefeld. Germany.



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