

HONOR ROLL

NEWS FROM THE PAPER INDUSTRY INTERNATIONAL HALL OF FAME

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2014 Hall of Inductees Selected 20th Annual Induction Ceremony Set for October 9

Six inductees will join the Paper Industry International Hall of Fame on October 9 during the Hall of Fame's 20th annual induction ceremony at the Radisson Paper Valley Hotel in Appleton, Wisconsin, U.S.A.

This year's inductees include Arne Asplund of Sweden, Hardev S. (Doug) Dugal of the United States, Martin Keyes of the United States, William M. Gilbert of the United States, Marja-Sisko Ilvessalo-Pfäffli of Finland, and George H. Tomlinson of Canada.

To reserve a table for the dinner and induction ceremony, please contact Kathleen at the PIIHF at 920-380-7491 by September 30. The Radisson Paper Valley Hotel has reserved a block of rooms for Hall of Fame attendees, \$89/night, double or single. To reserve a room at the discount rate, please call 1-920-733-8000 before September 9, 2014.

Sponsorship opportunities start at \$750. Individual tickets will also be available for \$50. Any additional donation will be greatly appreciated, as this is the only fundraising event supporting the Hall of Fame.

Russ Wanke continued from front cover

Paper Science Foundation.

In 2014, Russ was named the PIMA Executive of the Year, a distinguished honor given by the Paper Industry Management Association, a division of TAPPI. Additionally in 2014, Russ received the 2013-14 Paper Science Industry Leadership Award from UW Stevens Point College of Natural Resources.

A native of Wisconsin, Russ and his wife Jennifer, currently reside in the Fox Valley.

Chairman's Message continued from front cover

been called a jewel and it is one. In it, we teach, inspire, and continue our mission,

To Celebrate All Things Paper-the Wonder and the Legacy

We are gratified by receiving numerous comments applauding our keeping the heritage alive through recognizing the pioneers who built this industry and continue to do so. We are grateful for all the previous support over these years and look forward to its continuation.

Russ Wanke to Serve as Keynote Speaker for Paper Hall of Fame's 20th Annual Induction Ceremony



Russ Wanke, President and CEO of Expera Specialty Solutions, will be the featured speaker at the Paper Industry International Hall of Fame's 20th annual induction ceremony on October 9, 2014.

With 30 years of paper industry experience, Russ became CEO at the formation of Expera. Previously, he was Vice President

and General Manager for Thilmany Papers since November 2008. Prior to joining Thilmany, Russ headed the publication division for NewPage as VP - Publication Paper Operations. Earlier, Russ led Stora Enso North America's fine paper business, a \$1 billion sales business with 1,580 employees that produced 1 million tons. He also had responsibility for the North American research, central maintenance and engineering units.

Russ received his start here in Wisconsin with a Paper Science and Engineering degree from the University of Wisconsin-Stevens Point.

Russ serves on the Board of the American Forest and Paper Association based in Washington, D.C., and is former Chairman of the Wisconsin Paper Council Board of Directors and continues to serve on the Executive Committee. He also serves on the University of Wisconsin-Stevens Point College of Natural Resources Advisory Board and the Board of the

CHAIRMAN'S MESSAGE



Harry Spiegelberg

This year on Oct 9, we will welcome six new members into the Hall of Fame, bringing our total to 123. Our first induction was in 1995, and each one has been exciting and emotional. Two of our six this year separately invented and developed important technologies for the worldwide pulp industry, opening new sources of wood and reducing cost significantly. One in addition formed a company to produce and market his technology.

The Hall of Fame is into its third decade and the Paper Discovery Center (PDC) is into its 10th year. The PDC is a science and technology education center that fosters understanding of paper and related industries, their heritage, impact on our quality of life, and challenges and opportunities. This is brought to students and the general public through educational programming and interpretive exhibits. Its location in Appleton, Wisconsin is appropriate since it is surrounded by the greatest concentration of paper mills in the world.

Over 77,700 visitors have discovered the wonder and legacy of paper since the Paper Discovery center opened its door in 2005. Sixty different school groups have come to the PDC in the first seven months of 2014. Our outstanding education staff and volunteers continue to delight and dazzle students and adults alike, who appreciate the memorable experiences shared at the Paper Discovery Center and our focus on STEM - Science, Technology, Engineering and Math - learning.

Our restored building on the bank of the historic Fox River has

Call the Paper Discovery Center at 920-380-7491 or email kathleen@paperhall.org to make your reservation for the 20th Annual Paper Hall of Fame Induction Ceremony and Dinner at the Radisson Paper Valley Hotel on October 9, 2014.

LEADERSHIP, INNOVATION AND INSPIRATION

HONORING INDIVIDUALS WHO HAVE CHANGED THE WORLD OF PAPER

The Paper Industry International Hall of Fame recognizes SIX industry leaders at the 2013 Induction Ceremony

This year the Paper Industry International Hall of Fame will continue the proud tradition of honoring those who have made significant contributions to the paper industry by inducting six new members. Founded by a group of paper professionals in 1992, the Paper Industry International Hall of Fame recognizes individuals who have made pre-eminent contributions to the paper industry, its heritage, and its impact on the quality of people's lives. This year our inductees embody a legacy of invention, innovation and leadership within the world of paper.



Ekman Gold Medal of the Swedish Association of Pulp and Paper Engineers, and he was awarded a Doctorate h. c. at the Royal Institute of Technology in Stockholm, Sweden.

Hardev S. (Doug) Dugal (b. 1937 Bereilly, India) earned his undergraduate degree from Agra University (India, 1955) and M.S. in Chemical Tech from Harcourt Butler Technological Institute (HBTI) (India, 1958). He received his Dr. Ing. in Chemical Engineering from the Technical University of Darmstadt, Germany in 1963. Dugal's major employment experience in the U.S. began with the Institute of Paper Chemistry, Appleton, WI where he stayed for 21 years (1964-66 and 1968-1987) and quickly rose to be one of the directors. Among his many positions at IPC, he was Chairman of the Ph.D. Thesis Committee. From 1987 – 1989, Dugal worked at the James River Corporation as a Research Associate. In 1989 Dugal co-founded Integrated Paper Services and served as its President until 2000, and then as CEO until 2002, when he retired. Dugal was also a co-founder of the Paper Industry International Hall of Fame, Inc. and served for many years as Secretary for the organization. Among honors are the Shalimar Gold Medal (1977 at IPPTA, India), Roy P. Weston Prize (1987), TAPPI Environmental Division Award (1987), TAPPI Fellow (1988), TAPPI Outstanding Local Section Member Award (1991), Rotary Paul Harris Fellow and Charles and Adele Heater Outstanding Community Leadership Award (2009) and the TAPPI Herman Joachim Distinguished Service Award (April 2014).



Hardev S. (Doug) Dugal

William M. Gilbert (1852–1926 Neenah, WI U.S.A.) co-founded Gilbert Paper Company of Menasha, Wisconsin in 1887 and under his leadership the production, sale and distribution of fine writing papers was revolutionized. Innovations still used today that came from Gilbert Paper Company include the first mechanical tub-size, air-drying machine in the industry in 1890; making fine writing paper from a combination of wood and



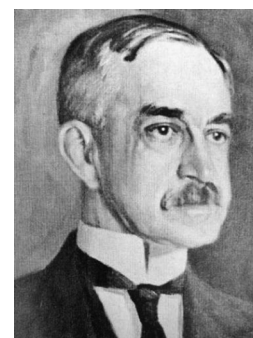
William M. Gilbert

rag fibers in 1894; introducing the first successful revolving suction box and creating the paper industry's only patented dandy roll in 1900 that included a shaded watermark. Gilbert established the paper industry's first quality-control laboratory, and developed unique early mechanical paper sorting devices. Gilbert built a network of paper merchants from Chicago to New York to develop a competitive advantage in sales and distribution leading to the sale of currency paper to the governments of Russia, China, Brazil, Mexico, Argentina and the United States. Under Gilbert's leadership, the company was the first to manufacture and sell cockle bond paper (fine paper with distinct three-dimensional texturing, revolutionary in 1902). He was a founder of the Wisconsin Papermakers Association, a founder of the Western Book Manufacturers Association and President of the National Manufacturers Bank of Neenah, Wisconsin.



Marja-Sisko Ilvessalo-Pfäffli

Marja-Sisko Ilvessalo-Pfäffli (1916 – 2013 Helsinki, Finland) produced work as a fiber specialist that is still of fundamental value to pulp and paper industries. She earned her M.Sc. degree from the Technical University of Helsinki in 1943. Her career started at KCL (Finnish Pulp and Paper Research Institute) in Helsinki, Finland followed by STFI in Stockholm, Sweden; Wiggins Teape in Scotland and back to KCL again. In 1954, she was appointed head of microscopy research of pulp and paper and board at KCL. In her last position at KCL, she held the right to sign officially (Per Procuram) the fiber analysis documents on behalf of KCL. Samples from all over the world were sent to her for analysis. Her book, *The Fiber Atlas*, is regarded as a "bible" for fiber microscopists, providing information not only on the structure of the fibers but also on the geographic distribution of the relevant tree species. The value of fiber analysis has increased as new fiber sources grew with increasing competition between suppliers and against other materials. Marja-Sisko understood this since she developed the methodology responding to such needs and making full use of the development of the scanning electron microscopes. She was one of the very first prominent women in the conservative, masculine world of papermakers. She opened up the field for coming generations of women.



Martin Keyes

Martin Keyes (1850 – 1914 Waterville, ME U.S.A.) showed an early aptitude for invention by designing a new type of fishing reel at the age of ten, which he used his entire life. Following an observation that workmen used pieces of veneer for plates, Martin conceived of developing plates of molded pulp. He was able to develop and patent a machine capable of making pulp molded pie plates. Following litigation to secure patent protection, Keyes was able to identify a pulp supplier, obtain financial backing and build a small mill in Shawmut, Maine. The first shipment of pie plates occurred in the summer of 1904, but the plant closed for a period in early 1905. His pie plates were superior to the competition,

but they were more expensive and not competitive. After making significant price reductions and applying some personal finances, Keyes was able to restart production. By 1908, Keyes Fiber had built a new mill in Waterville, Maine and had expanded the product line to include butter dishes and a "picnic Package" that included different size plates. The popularity of Keyes products has continued. The product line has expanded and today includes well-known Chinet® items. The original Keyes Fiber mill is gone, but the mill that was built in Waterville, ME in 1908 still stands today and is now part of Huhtamaki, Inc. a Finnish company.

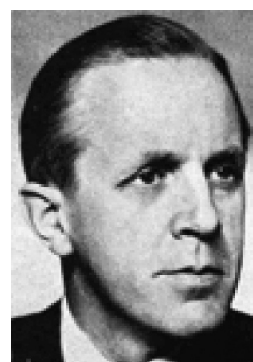


George H. Tomlinson

George H. Tomlinson (1880 – 1958 Westmont, Quebec Canada) was the inventor of the chemical recovery furnace in 1932, which was critical in advancing the Kraft pulping process to the dominant wood pulping method that it is today. His revolutionary invention recovered the heat value of waste organic material in black liquor while reducing sulfur to sulfide and collecting the sulfide and sodium in a molten sodium carbonate smelt. Within 10 years, the superior economic advantages of the Tomlinson furnace (particularly the recovery of heat as steam needed to heat digesters, paper dryers, etc.) and the fact that it efficiently recycled pulping chemicals enabled the Kraft process to overtake the sulfite process in production tonnage. Many improvements have been made to Tomlinson's initial design, but many of its basic features remain unchanged. Tomlinson worked for a variety of companies before joining Howard Smith Paper Mills in 1923, becoming a vice president. In 1908, he developed a process to produce ethyl alcohol from wood waste. As Technical Director of Research at Howard Smith Paper Company, Tomlinson was involved in developing commercial methods to separate lignin from black liquor, use lignin to produce a laminated panel called Arborite, and collect vanillin from sulfite pulping liquors. He received the Canada Medal of the Society of Chemical Industry of England in 1948 and the TAPPI medal in 1951.

Each of these individuals had a significant impact on the world of paper. To find out what shaped their personalities and inspired them to greatness, come to the Induction Dinner October 9, 2014 and hear their amazing stories.

For further information about the PIIHF dinner or the Paper Discovery Center, please contact Kathleen Lhost, executive director, at 920-380-7491 or by email at kathleen@paperhall.org.



Arne Asplund

Arne Asplund (1903 – 1993 Stockholm, Sweden) is the inventor of the steam-pressurized refining process, leading to a very important technology for producing thermo-mechanical pulp (TMP) and chemi-TMP, which eventually evolved to a branch of the technology called semi-chemical pulping. Asplund took his process from an idea in 1931, through pilot plant research that resulted in co-founding the company, Defibrator AB in 1933 to commercialize the process.

A patent was granted in 1934. In 1968, the first commercial paper industry application with a Defibrator Refining System was installed in Sweden. This virtually revolutionized the pulp and paper industry in the 1970s. Not many individuals take a scientific/engineering concept from the beginning through development to an ongoing commercial process used worldwide, with tremendous impact on the industry. Asplund retired as chairman of Sunds Defibrator in 1979, but continued his inventive ways with more than 50 patents. Among his many honors are the TAPPI Gold Medal, the University of Wisconsin Distinguished Service Citation, the National Swedish Board for Technical Development prize, the

Funding for Field Trips



Teachers – did you know that TARGET has grants available to help fund field trips for students in K – 12? Target recognizes that it has become increasingly difficult for schools to fund learning opportunities outside the classroom. That is why they launched their Field Trip Grants Program. Since 2007, Target has been awarding Field Trip Grants to K-12 schools. Each grant is valued up to \$700. Grant applications are only accepted between August 1 and September 30, so act quickly. For more information go to: <https://corporate.target.com/corporate-responsibility/grants/field-trip-grants>

SPECIAL THANKS!



We would like to thank the **Frank C. Shattuck Community Fund** within the Community Foundation for the Fox Valley Region, Inc. for the grant we received in support of Education Programs at the PAPER DISCOVERY CENTER. \$16,666.00 was awarded as the second installment of a two-year grant totaling \$50,000.00. With the support of the *Frank C. Shattuck Community Fund*, STEM education programming at the Paper Discovery Center has been developed and expanded to enrich experiences for school groups, workshops for Boy Scouts and Girl Scouts, and home school programs. These accomplishments are making a difference in informal learning and enrichment opportunities for schools and families in the Fox Valley and visitors to our area. We thank the Community Foundation and the Frank C. Shattuck Community Fund for their support.



The Paper Discovery has joined over 2,000 museums across America to offer free admission to military personnel and their families this summer in collaboration with the National Endowment for the Arts, Blue Star Families, and the Department of Defense. Free admission is extended to all active duty military personnel including National Guard and Reserve and their immediately families through Labor Day. The program provides families an opportunity to enjoy our nation's cultural heritage and learn more about their communities. The complete list of participating museums is available at arts.gov/national/blue-star-museums. **Blue Star Museums** is collaboration among the National Endowment for the Arts, Blue Star Families, the Department of Defense, and more than 2,000 museums across America. The program runs from Memorial Day, May 26, 2014 through Labor Day, September 1, 2014. The Paper Discovery Center is proud to be a part of this program.



Fox Valley Memory Project Purple Angel Program

The Paper Discovery Center has joined with the Fox Valley Memory Project to work toward making the Fox Valley a more Dementia-Friendly Community. We have joined a growing number of businesses and public institutions (restaurants, grocery stores, banks, shops, libraries, etc.) in the area who have trained their employees to offer hospitality and support to persons contending with memory loss, confusion, or other symptoms associated with dementia. These places can be identified by the **Purple Angel** decal displayed in their window. Persons with dementia and their care partners can be confident that they will be welcomed warmly and receive any extra assistance they might need. We encourage you to frequent public and private settings displaying the Purple Angel, and to encourage others to become a part of this program. - See more at: <http://www.foxvalleymemoryproject.org/community-education.php#sthash.ySTukGF6.dpuf>



All Things Paper
News from the Paper Discovery Center
August 2014

Open Mon. – Sat. 10 – 4 | Children \$3 | Adults \$5 | Seniors \$4 | Families \$12

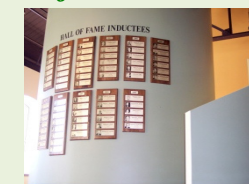
A Wonderful New use for corrugated paperboard helps disabled children



A non-profit organization based in Manhattan is making individualized furniture for disabled children corrugated paperboard. As a building material that is strong and inexpensive, the corrugated paperboard is perfect for making furniture specifically designed for an individual child. All of their designs are open sourced to encourage other programs in other parts of the country to get going. Special Education teachers are collaborating with design students, engineers, to improve the lives of special needs children, one piece of furniture at a time. To see some of their amazing designs, go to <http://www.adaptivedesign.org/#!adaptive-equipment/c1w61>



20th Annual Hall of Fame Induction Celebration



Join us for the 20th Annual Paper Industry International Hall of Fame Induction Celebration on Thursday, October 9, 2014. We will add six outstanding paper industry standouts to our Hall of Fame. Russ Wanke, President and CEO of Expera Specialty Solutions will be our keynote speaker.

Schedule of Events

Thursday, October 9, 2014

5:00-5:30	VIP Reception <i>Inductees, sponsors, family, media, and dignitaries</i>	Radisson Paper Valley Hotel
5:30 – 6:30	General Reception and cocktail hour	
6:30 – 8:00	Dinner	
8:00 – 9:30	Induction Ceremony	
9:30 – 11:00	Plaque Hanging	Paper Discovery Center,

For reservations, or to inquire about Sponsorship Opportunities, contact Kathleen at (920) 380-7491 or email Kathleen@PaperDiscoveryCenter.org

2014 Inductees

- **Arne Asplund** (deceased) was Founder and Chairman of Defibrator Group (now Metso), after inventing and refining the process of thermo-mechanical pulping which revolutionized the pulp and paper industry in the 1970s. Stockholm, Sweden
- **Hardev S. (Doug) Dugal** was the Director of Environmental Division at the Institute of Paper Chemistry, the founder of Integrated Paper Services, Inc. (IPS) and a founder of the Paper Industry International Hall of Fame, Inc. Appleton, WI. USA
- **Martin Keyes** (deceased) was the founder and President of Keyes Fibre Company (now Huhtamaki) after inventing the process to use molded pulp. He invented the machine to make molded pulp, produced a commercially viable product and created a demand, which now reaches around the world. Waterville, ME. USA
- **William Markley Gilbert** (deceased) was the founder and President of Gilbert Paper Company and under his leadership the production, sale and distribution of fine writing papers was revolutionized. Neenah, WI. USA
- **Marja-Sisko Ilvessalo-Pfaffli** (deceased) was the Research Manager for Fiber Physics at KCL. Her book, The Fibre Atlas, is regarded as a "bible" for fibre microscopists. Helsinki, Finland
- **George Tomlinson** (deceased) is the inventor of the recovery boiler, still used today. It made the kraft pulping process energy efficient and opened new markets and sources of wood pulp. Westmont, Quebec, Canada

2014-2015 Cub Scout & Boy Scout Programs



Group Tours
\$5 / scout
\$45 minimum
Call ahead to save your date and time



Tiger Cub Programs

Tiger Scout Fun Day

Saturday, Jan. 10, 2015
9 - 11 am
\$5/scout

- Explore science and art through papermaking
- Tour the historic Atlas Mill and make your own sheet of paper
- Complete achievement 1G and 9 electives



Wolf Cub Programs

Wolf Machine Power

Sat. Nov. 15, 2014
9 - 11 am
\$8 / scout

Complete Elective 8 as you power up with machines! Have fun while completing all the requirements

Wolf Knot Tying Workshop

Sat. Dec. 6, 2014
9 - 11 am
\$8 / scout

Complete elective 22 "Tying it all Up"; learn how to tie five important knots and how to handle rope.



Bear Cub Programs

Bear Things That Go

Sat. Mar. 21, 2015
9 - 11 am
\$8 / scout

Work on Elective 7; make a windmill and waterwheel while learning about energy sources and how things move

Bear Knot Tying Workshop

Sat. Dec. 6, 2014
9 - 11 am
\$8 / scout

Complete elective 22 "Tying it all Up"; learn how to tie five important knots and how to handle rope



Webelos Programs



Webelos Scientist



Webelos Math Belt Loop & Pin

Thurs. Mar 12, 2015
5 - 7 pm
Sat. Mar. 14, 2015
9 - 11 am
\$8/scout

Webelos Forester



Wed. or Thurs. Jan. 21 or 22, 2015
5 - 7 pm
Sat. Jan. 24, 2015
9 - 11 am
\$8/scout

Wed. or Thurs. Sept. 24 or 25, 2014
5 - 7 pm

Sat. Sept. 27, 2014
9 - 11 am

Wed. or Thurs. Feb. 18 or 19, 2015
5 - 7 pm

Sat. Feb. 21, 2015
9 - 11 am

Boy Scout Pulp & Paper Merit Badge Program



Sat. Nov. 8, 2014
or
Sat. Feb. 7, 2015
8:30 am - 1:30 pm
\$15/scout

- Participants will complete all requirements for the merit badge
- Pre-registration and payment are required
- Scouts should bring a brown bag lunch.



2014-2015 Girl Scout Programs



Daisy Fun Day

Daisy Girl Scouts will explore science, art and history through papermaking. Learn about the early days of papermaking while exploring the Paper Discovery Center in the historic Atlas Mill. Activities will include:

- Papermaking from recycled paper
- Paper Crafts
- Science experiments
- Games and Songs

Saturday November 22, 2014

9 - 11 am
Or

Call to schedule a date and time for your troop.
\$5 per girl

Brownie Wonder of Water Journey

Brownie Girl Scouts can work on the Wonders of Water Journey through hands-on activities at the Paper Discovery Center.

- Learn about the importance of the Fox River to both industry and people
- Make paper with recycled paper and learn about how they use and recycle fiber and water in the industry
- Learn about some properties of water with hands-on experiments
- Learn the history of the locks and dams along the Fox River and how they work



"A la carte"

Call to schedule a date and time for your troop
\$8 per girl or \$45 minimum

Cadette Trees Badge

Cadette Girl Scouts can work on earning the Trees badge at the Paper Discovery Center. Activities include:

- Exploring trees and forestry through guided activities
- Making paper from recycled materials
- Make a set of coasters using pressed leaves and recycled paper
- Tree related crafts and songs



"A la carte"

Call to schedule a date and time for your troop
\$8 per girl or \$45 minimum

Brownie Home Scientist

Brownie Girl Scouts will complete 5 steps to earn the Home Scientist badge while visiting the Paper Discovery Center. Hands-on activities:



- Make an edible treat
- Have fun with static electricity
- Experiment with density
- Get messy while exploring gases
- Use science to make "toys"

"A la carte"

Call to schedule a date and time for your troop
\$8 per girl or \$45 minimum

Juniors Get Moving!

Junior Girl Scouts can work on the Get Moving journey through hands-on activities at the Paper Discovery Center.



- Explore different types of energy and how it is used in papermaking
- Make recycled paper
- Make beads from recycled paper and create a unique piece of jewelry with the beads
- Explore the energy efficiency of different types of light bulbs and then make an old fashioned silhouette to keep.
- Learn more about our historic building and ask questions!

"A la carte"

Call to schedule a date and time for your troop
\$8 per girl or \$45 minimum

Girl Scout Fun Day

Come and explore science, art and history through paper making. Learn about the early days of papermaking while exploring the Paper Discovery Center in the historic Atlas Mill. Activities will include:



- Paper Crafts
- Science Experiments
- Games and Songs

Saturday Oct. 25, 2014
9-11 am
\$5 per girl

Adult chaperones are free

Daisy, Brownie and Junior Troop Visits

After-school or non-school days

Call to arrange a time for your troop to visit after school, evenings or Saturdays
\$5 per girl; \$45 minimum; chaperones are free.

Badge Workshops

\$8 per girl; \$45 minimum; chaperones are free

Tour the historic Atlas Mill, make your own sheet of paper from recycled materials and choose from many crafts, songs or science activities. Our staff will customize the program to suit the interests of your girls.