

EXPLORING A WORLDWIDE TECHNOLOGICAL REVOLUTION IN COATING AND GRAPHIC ARTS

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WORLDVIEW OF ADVANCES AND TRENDS IN COATINGS AND GRAPHIC ARTS HIGHLIGHT SUCCESSES IN SCIENCE AND MARKETING .

TAPPI'S COATING AND GRAPHIC ARTS DIVISION unrolled its 48th Conference to the beat of a fife and drum band in Philadelphia May 11-14. Inspired by the revolutionary spirit, the conference committee conspired to bring a variety of benefits together to enliven this year's technical program. These features were: Computer-supported presentations using PowerPoint™, simultaneous translation (Japanese), multiple video presentations of mill tours, and interactive poster boards for the committees.

New ideas stimulate innovations, which serve as catalysts to other advances. Based on that premise, the theme of TAPPI's Coating and Graphic Arts Conference and Trade Fair, "Beyond Rose Colored Glasses: A Look at Coating Technology," examined new technology and trends as the future beckons. Presentations, panel discussions, roundtables, new technology showcase, and poster sessions provided an eclectic venue for information exchange with a bent toward the practical.

Attendees took advantage of socializing and networking opportunities during the newcomers breakfast, receptions, awards luncheon, and in the conference breakout room where a continuous coffee service was provided. And, as one delegate stated, the conference provided a forum for measuring what you are doing against your competitors.

The research-oriented Advanced Coating Symposium preceded the annual conference. The combined events offered something for everyone—a balance between research and practical application. The Philadelphia Marriott hosted both the symposium (May 9-10) and the conference. A report on the symposium appears on p. 251 of this issue.



Benjamin Franklin made a special guest appearance.

ADVANCING COATING INTERNATIONALLY

Twenty-six flags—representing the countries of the 1167 delegates to the conference—lined the walls of the opening-session ballroom. A total of 994 delegates represented North America, while another 173 came from 22 countries on other continents. Eighty per-

cent of the overseas delegates hailed from Brazil, Finland, Germany, Japan, South Korea, Switzerland, and the United Kingdom. Truly an international venture, approximately a third of the speakers were from overseas.

OPENING UP THE FUTURE

Division Chairman J. Philip E. Jones of ECC International delivered a welcome address to the delegates, and Conference Chair Jan C. Walter of Ronningen-Petter Co. gave a brief overview of the conference. Later, Walter served as moderator of the Keynote Panel focused on the future of the market, coated paper as a graphic arts medium, and printing. Panelists included Edwin Masten of Union Camp Corp.; Tom Lazaunikas of Ted Thomas Associates;



Playwright and actor Gordon Bugg



The Fife and Drum Corps

and Frank Romano, a professor at the Rochester Institute of Technology.

Masten examined people's attitudes about various media as information sources, and he reported on a study predicting that paper and electronic media will co-exist but some paper media will fare better than others.

Lazaunikas shared his 15 years' experience in the graphic arts. This award-winning creative director discussed all the components of graphic quality.

Romano, an educator, author, and consultant, spoke on digital prepress, electronic publishing, and digital printing. In comparing projected future trends of different printing technologies with electronic media, the signposts indicate market growth in media and print within the digital arena. With the printing industry moving toward on-demand printing, there are two categories of computer-to-paper imaging—direct-to-image carrier and direct-to-paper substrate. Print is shifting to Docutech, E-print, and desktop. According to Romano, the number of copies generated by printers now exceeds the output of copiers. Referring to MOPIERS instead of copiers, digital print volume is now defined from 1–2 copies to 3000 copies per print job.

Romano summed up his response to concerns about a paperless office by assuring everyone that “there will be a paperless office when there is a paperless bathroom.”

CERTIFICATES OF APPRECIATION

The opening session is traditionally the time to express gratitude to the many volunteers who have contributed time and energy on the Division level as committee chairmen. This outgoing group provided the backbone to the conference technical program and drove project development for the Division. The following received Certificates of Appreciation: Datta G. Mislanka of Mead Corp., *Basestock*; David Sastre of Metsa Serla Chemicals, *Coated Paperboard*; Charles “Chuck” D. Skinner of Rohm & Haas Co., *Coating Binders*; Randy E. Branston of BASF Corp., *Coating Fundamentals*; Kenneth “Ken” Mueller of Spe-

cialty Minerals, *Coating Pigments*; Chris L. Lazaroff of GenCorp Specialty Polymers, *Coating Process*; Hans B. Neubold of OMYA Inc., *Fillers and Pigments Testing*; John W. Stutz of Appleton Papers Inc., *Specialty Coated Papers*; and Lars G. Andersson of J. M. Huber Corp., *Technical Trends*.

Special Certificates of Appreciation were awarded to Bob Knowles of International Paper for his years of service to the Division and for his work as a roundtable coordinator; Larry Gaspar of National Starch & Chemical Co. for his continued influence on conference, seminar, and education planning; and Garth Williamson of Dow Chemical Co., the founding father of the curriculum development program for the Division.

Bill Powell raced across the stage to receive his Certificate of Appreciation for the successful development and coordination of the 5K Fun Run for two years in a row.

The Best Student Paper Award went to Martti Toivakka at Åbo Akademi University. Charles S. Kan, Linda H. Kim, Do I. Lee, and Ronald L. Van Gilder, all of Dow Chemical USA, were recognized for presenting the best paper at the 1996 Coating and Graphic Arts Conference.

FRANKLIN AND BUGG

The City of Philadelphia, “the birthplace of liberty, Independence, and the American Spirit,” inspired the historical theme of the opening session on Monday morning. Benjamin Franklin made a special appearance. Technical Program Chairman/playwright/actor G. Gordon Bugg of Mead Coated Board, Inc. delighted the crowd with his showmanship by reenacting the original coating formulation experiment (circa 18th-Century America) that exploded in his face, literally. According to coaters in-the-know, this experiment delayed the introduction of coated paper for at least another century.

A fife and drum parade representative of the period signaled the end of the opening session when they paraded with the delegates into the main hall where the performance continued.



Patrick Gane (left) of Pluess Staufer AG received the Division's 1997 Technical Award. Richard R. Berube represented the Engelhard Corp. in the presentation of the Charles W. Engelhard Medallion, which accompanies the TAPPI award.

TECHNICAL PROGRAM: TRENDS AND APPLICATIONS

The technical program included 25 papers presented in 11 sessions at the conference. The papers are reprinted in the *Proceedings*. Beyond the Global Panel Discussion that profiled several international companies, five other panel discussions stimulated discussions and contributed to the interaction of the delegates. Panels topics included film-split phenomena and misting in premetered size press coating, improving paperboard uniformity for the converting process, recent industry trends in coating pigment usage, and a two-part panel presentation on emerging printing technologies.

EXHIBITORS AND NEW TECHNOLOGY SHOWCASE

About 215 people sported "Exhibitor Only" badges representing the 65 companies that displayed their products and services at the trade fair. On Tuesday afternoon exhibitors stepped away from their booths to present new products and processes during the New Technology Showcase to a standing-room-only crowd. This year's showcase featured 17 companies with a 10-minute time limit to deliver a spiel.

The conference setting offers many other opportunities for suppliers to meet with their customers to update them on new products and technologies. The Sixth CLC User's Forum is an example of one such satellite event. Sponsored by Sensor and Stimulation Products, a division of Weyerhaeuser, the forum is held each year to coincide with the TAPPI Coating Conference. More than 50 coating scientists from five countries discussed topics of mutual interest this year.

TECHNICAL AND SERVICE AWARDS

The Coating and Graphic Arts Division honored Patrick A. C. Gane, vice president, R&D for OMYA in Switzerland, with its highest technical award, which is accompanied



The Division honored Philip C. Clark (center) of Potlatch Corp. with the 1997 Leadership and Service Award. TAPPI President Dale Dill (left) took part in the ceremony, while William T. Skaggs, vice president and managing director, Protein Technologies International Inc., presented Clark with the Protein Technologies Medallion and cash prize.

by the Charles W. Engelhard Medallion and cash prize. His achievements include advances in coating structure analytical techniques, basepaper-coating interactions, runnability of blade coaters and the metered size press, the concept of preshearing—premetering blade elements (twin-blade coating heads), the development of analytical tools and mechanisms of printability (including the Ink-Surface Interaction Test Method), and relaxation-induced dilatancy of separable viscoelastic suspensions with special application to paper coating mark.

Gane is a frequent presenter at TAPPI conferences, has been widely published, and holds numerous patents. He is a regular contributor to the postgraduate course at Åbo Akademi in Finland, teaching the latest technological advances, and has lectured at the University of Manchester Institute of Science and Technology in the United Kingdom. He has been a featured speaker at the Finnish Coating Seminar.

Gane's educational background includes a Ph.D. from the University of Plymouth, with postdoctoral research at the University of Exeter.

The Division honored Philip C. Clark, special projects manager for Potlatch Corp. in Cloquet, MN, with its Leadership and Service Award, which is accompanied by the Protein Technologies Medallion and a cash prize. This recognition is in appreciation for three decades of leadership in all chairs of the Division Council, including Division chairman in 1989. He also held all chairs in the Pigments Committee. Clark, who is *TAPPI JOURNAL's* technical editor for the Coating and Graphic Arts Division, has spearheaded the move to publish the best in reviewed papers for his Division. Devoting his acceptance speech to defining the review process, Clark thanked the many anonymous experts who donate their time and knowledge in evaluating papers for publication.

CONFERENCE REPORT



Standouts in the 5K: (left-right) Maureen DeFeo, DuPont; Kay Sanborn, Rohm & Haas; and Jane Thompson, Protein Technologies. (Back row) Steve Ottone, Reichhold; Mike Ruggio, Rohm & Haas; Bill Dempsey, Bayer; and organizer Bill Powell of Specialty Minerals.

5K FUN RUN

Organizer Bill Powell of Specialty Minerals reported on this enormously successful event: The Second Annual 5K Fun Run was held at Fairmount Park on Tuesday morning, May 13. There were 77 runners signed up to receive their six-color T-shirt, although not everyone made the 6:30 a.m. start time. The winner of the 5K Run was Mike Ruggio of Rohm & Haas with a time of 17:05. Steve Ottone of Reichhold came in second at 18:00 and Bill Dempsey with Bayer was third at 19:27. Kay Sanborn of Rohm & Haas won the women's division with a time of 20:46. Jane Thompson of Protein Technologies came in second at 22:24 and Maureen DeFeo of DuPont was third at 23:24. Sponsors of the event were Alco, BASF, Beloit, Dry Branch Kaolin, Engelhard, GenCorp., Grain Processing, J. M. Huber, OMYA, Penford Products, Protein Technologies, Rohm & Haas, Specialty Minerals, *TAPPI JOURNAL*, Valmet, and Vinings. The sponsors helped make the event a huge success and raised US\$ 5500 toward the Coating and Graphic Arts Division's scholarship fund.

KNOW YOUR DIVISION

Current facts about your Division: The Coating and Graphic Arts Division has 11 full committees and there are 560 Division members. This conference plus the Printing and Graphic Arts Conference are offered bi-annually. The Division is developing more "hot topic" symposia. This year, four short courses were offered and three new TAPPI PRESS books were published.



Joining the foray: Phil Jones took his place among past chairman of the Coating and Graphic Arts Division this year. (Front row kneeling) Al Barton, Jack Callahan, Jones, Jim Hoover, and Jerry Hein; (left, standing) Dale Dill, Bob Hagemeyer, Robert E. Klem, Phil Clark, Terry L. (Durushia) Clark, and Don Laughton. (Bill Goetz is not present).

EVENTS CALENDAR

1998 Coating and Papermakers Joint Conference and Trade Fair

May 4-6, Sheraton Hotel, New Orleans, LA.

International Printing and Graphic Arts Conference/Pan Pacific Conference

Oct. 6-8, 1998, Chateau Frontenac Hotel, Quebec City, PQ, Canada

(Call for Papers, p. 211, July 1997 issue of *TAPPI JOURNAL*)

Coating Conference and Trade Fair (50th Anniversary)

May 3-5, 1999, Sheraton Centre Toronto, Toronto, ON, Canada

Upcoming Coating and Graphic Arts Short Courses

Coating Binders Short Course

Sept. 29-30, 1997, Kalamazoo, MI

Coated Paper Short Course

Oct. 27-29, 1997, Appleton, WI

Coated Paperboard Short Course

Feb. 9-12, 1998, Mobile, AL

CALL FOR PAPERS

Anyone interested in presenting a paper at the 1998 Coating and Papermakers Joint Conference should contact Ron Van Gilder, Emulsion Polymers R&D, The Dow Chemical Co., Midland, MI, by telephone: + 1 517 636-0567, or fax: +1 517 638-7510. The deadline for drafts is Nov. 14, 1997, and the final manuscript is due to TAPPI on Jan. 31, 1998. **TJ**



TAPPI volunteers and staff get into a carnival mood for the 1998 conference.



The 1997 Conference Committee: (left-right) Lawrence A. Gaspar; Jan C. Walter, conference chair; Hans W. Maurer; J. Philip E. Jones, Division chair; James R. Weber; and Robert L. Kearney

NOW AVAILABLE FROM TAPPI PRESS

Pigments for Paper

Robert W. Hagemeyer, editor; John E. O'Shea, task group chairman.

Reviewed by Vincent E. Newberry, director of basic research services, Appleton Papers Inc., in the August 1997 issue of *TAPPI JOURNAL*, p. 203.

1997

Item no.: 0102 B062

Price: US\$ 125; US\$ 84 (TAPPI members)

1997 Advanced Coating Fundamentals Symposium Proceedings

These *Proceedings* contain 19 papers presented in four sessions. Selected paper titles include "Viscoelasticity in blade coating on non-Newtonian fluids"; "Simulation of relaxation-induced dilatancy"; "Digitalization of printing—status and prospects"; and "Computer simulations of coating suspensions."

1997. 284 pp., 8 1/2-in. x 11-in., soft-cover

Item no.: 01052197

ISBN: 0-89852-689-2

Price: US\$ 67; US\$ 45 (TAPPI members)

1997 TAPPI Coating Conference Proceedings

These *Proceedings* contain 25 papers presented in 11 sessions at the conference. Selected paper titles include "Performance of Brazilian clay in coated paper"; "Achievement of coating uniformity"; "Coating pigment usage"; "Recent industry trends"; and "Mill experience with advanced type of free-jet coating Applicator."

1997. 310 pp., 8 1/2-in. x 11-in., soft-cover

Item no.: 01050497

ISBN: 0-89852-690-6

Price: US\$ 80; US\$ 54 (TAPPI members)



The 1998 Conference Team: Ron Van Gilder, Hans W. Maurer, and Robert L. Kearney