SECOND CALL FOR PAPERS FOR TAGA '92 VANCOUVER

We are now collecting abstracts for papers to be presented at the 1992 TAGA Annual Technical Conference in Vancouver, British Columbia. The paper selection process is long and time-consuming. Please submit your abstracts early to:

Dick Fisch
3M Company
3M Center 209-2S-14
Saint Paul, MN 55144

Our 1991 program was designed to allow different views on the same subject to be presented one after the other, so our attendees could hear all sides of an issue and make up their own minds. We feel that this depicts the best spirit of TAGA communication and education.

Papers are being solicited for the following topics for 1992:

SESSION I
Image, Imagesetting and Storage

SESSION II
Desktop Publishing (including Hi-Fi Color)

SESSION III
Measurement and Verification (including Color)

SESSION IV
Papers and Printability

SESSION V
Inks, Their Characterization and Use

SESSION VI
Press Operations and Control

SESSION VII
Statistical Quality Controls and Standards

SESSION VIII
Environmental Issues in Printing and Publishing

Last year we expanded the time allotted for a presentation to 20 minutes plus 5 minutes for discussion. That extra time seemed to allow for a more effective presentation as well as speaker/audience interaction. We will be following that same procedure this year.

TAGA is communication among people. Our best communication forum is our annual meeting. Please share your learning and experience with your fellow members and present a paper in Vancouver. We look forward to hearing from you. The more the merrier!

WORKSHOPS CHANGE TO TECHNICAL FOCUS GROUPS

At the TAGA Board Meeting in Rochester in May 1991, based on member input the Board voted to establish Technical Focus Groups to discuss current high priority topics. On the conference appraisal forms that went out after the conference, topics requested were:

- Desktop publishing in pre-press — What’s (hands-on) happening?
- Environmental issues — How are people handling them?
- Statistical process control — How are we using it? Is it making a difference/working?
- Common printing problems and solutions
- Ink and Paper interaction

According to TAGA Papers Chair Dick Fisch, two Technical Focus Groups have already been formed: Hi-Fidelity Color to be headed by Don Carl; and Environmental Concerns facilitated by Nelson Ho. These groups will be meeting at TAGA '92 in Vancouver.

For any of you who were not able to attend the conference (and therefore did not receive a conference appraisal form) please FAX any suggestions you have to Nancy Lowther in Ontario, Canada at (416) 492-4214. And thanks to all of you who took the time to complete the conference appraisal forms — to help TAGA grow.

TAGA • One Lomb Memorial Drive • P.O. Box 9887 • Rochester, New York 14623-0887 • (716) 272-0557 • Fax (716) 475-2250
MEET YOUR BOARD

Interview with Patrice Mangin, TAGA Executive Vice President

1. As Sectional Head of fine paper physics at the Pulp and Paper Research Institute of Canada, what does your job entail?
Research, of course. For instance, now, I am looking into new areas of research for the paper industry. We have challenges, with the 'old' newspaper, as we know it, dying. I am looking at new products that will constitute a better support for colour printing...even with high contents of post-consumer deinked paper.

Another facet of my job is to offer technical support to the paper industry. PAPRICAN as a research institute is sponsored by most Canadian paper companies. We do research that a single company could not afford on its own.

2. How does TAGA help you do your job, make it easier?
The paper industry is a supplier to the graphic arts. What has been - and is still - lacking, is a link, a better communication, between the paper industry and the graphic arts industry. The goal is to get better communication between these two groups. As papermakers, we need to know what our customers really want.

This is why I put a lot of hope in an organization like TAGA. You find here people from all parts of the graphic arts industry, some papermakers included, and that is why TAGA is so special.

3. Why did you choose research as a career?
I enjoy solving problems. Give me the money, the manpower, and the time...and I can solve any problem. There is no such thing as a problem that cannot be solved. Sometimes you need all parts to crack the nut but time is always of the essence.

4. You teach at the University of Quebec. What is the connection between teaching, training and research?
Look at the results of research and the time it takes before these results are taught...it is too long. We must push forth these new ideas and findings. Right now, it takes two or three years before ideas get implemented!!! Researchers need to get more involved in training. Get down from their ivory tower and out...to teach in layman's terms and make research applicable.

5. What do you see as the role of trade magazine in research?
Helping to get the information out as soon as possible so people can use it. Unpublished research is unfinished business.

6. How do you stay current, up-to-date?
First, through attending major conferences. It is the main way...because with all our workloads, you can't read all that you want or would like to. At a conference, in two or three days, you get more than a month's reading; both by listening to presentations and by meeting, talking with the people.

Secondly, I keep up-to-date through magazines, of course. Then, as time allows, by visiting other colleagues at other companies or research organizations.

7. What do you do in your spare time?
I coach children in martial arts...it is rewarding! On the other hand, I enjoy going to concerts and the ballet. Having a parallel position as an associate professor at the University of Quebec takes a lot of your spare time. I teach students at the masters or graduate level. Eventually, I would like — and I am working on it — to get a small research laboratory set-up for them...a printing research laboratory, bien entendu!

CALL FOR PAPERS — TAGA JOURNAL

As reported in the TAGA Spring Newsletter, we are now open for contributions to the first edition of the TAGA Journal. The TAGA Journal publishes papers, in English, relevant to graphic arts materials, science, engineering and processes associated with graphic arts research and practices. Manuscripts will be considered in the following broad categories:

1. Student Papers pre-published in TAGA Student Chapter publications.
2. Overflow papers from the annual TAGA conference (unable to be presented for any reason)
3. Complex Presentations:
   a. Mathematical Complexity
   b. Subject Matter
   c. Pre-prints for Editorial Review
4. Color Reproduction and Inserts
5. Educational Non-Original Matter*
   a. Tutorials
   b. Bibliographies
   c. Retrospectives
   d. Projections Future/Scenarios
6. Special Features*
   a. Book Reviews
   b. Previously Published Papers Not Available in English
*At the request of the Editor or Editorial Board

No advertisements or commercial literature will be accepted.

All accepted submissions shall be charged a per page charge of $80. This charge may be waived by the Editor in Chief under extenuating circumstances, including, but not limited to the ability to pay.

Our plan is to initially publish one issue per year and increase as papers and finances allow. We anticipate our first issue appearing in the first quarter of 1992. For guidelines for papers and instructions to authors, contact:
Richard Fisch
3M Company
3M Center, 209-2S-14
St. Paul, MN 55144-1000
(612) 733-2607

TAGA Newsletter • Summer 1991
PRESIDENT’S MESSAGE

We have formed a new ad hoc Committee entitled New Offerings. This committee has been charged with looking at new products for TAGA that will be of benefit and use to our membership. The new products are not to be new meetings, but are to be physical, tangible items. The committee will be chaired by Jeanette Truncellito of SUN Chemical; and the members of the committee will be John Sweeney, X-Rite; John Mitchell, Print Action; and Don Carlh, Nima Hunter. These four people will be working very hard at looking at new items for TAGA. If you have ideas regarding products please communicate directly with Jeanette or any of the members of her committee. We are looking for ways to make membership in TAGA more interesting for you.

ISCC/TAGA DELEGATION AND WILLIAMSBURG CONFERENCE UPDATE

Inter-Society Color Council (ISCC) is a non-profit organization of societies and individuals actively interested in the description and standardization of color, the practical application of color knowledge to problems in art, science, and industry, communication between color specialists and creative workers in art and design, and in the interchange of ideas on color and appearance, for the benefit of all.

The TAGA Board approved, in its spring meeting, the following ten TAGA members as delegation to the Inter-Society Color Council (ISCC): Bob Chung (chairman), Milton Pearson, David McDowell, Gary Field, Richard Fisch, Alan Muirhead, John Long, Anthony Johnson, Bryan Sunderland, and James Huntsman.

ISCC and TAGA will co-sponsor a conference on Comparison of Color Images Presented in Different Media in February 23-26, 1992 in Williamsburg, VA. According to Milton Pearson, Conference Chairman, there will be a full program with invited and contributed papers to address such topics as color space transformations, ambient conditions, viewing geometry, surface properties, and adaptation.

Because many of the problems associated with the comparison of images in different media involve appearance concepts, the conference is dedicated to the memory of Richard S. Hunter, a pioneer in measurement, instrumentation, and technology of appearance. A program brochure with registration form will be mailed to ISCC and TAGA members sometime in October.

YOU ARE INVITED
To Attend
The 1992
TAGA Conference
April 5 - 8, 1992
at Vancouver, British Columbia

As we said in the last TAGA newsletter, there are many things worth seeing in Vancouver, and we encourage you not to miss the opportunity to take some vacation time to see the beauty that exists there. To obtain information on events/activities and to make reservations for these events (such as the salmon fishing or the trip up the glacier) call Vancouver Central Information Center on their toll-free phone number which is 1-800-888-8835.

To tempt you to come and see Vancouver, here’s more information on two of the technical displays worth seeing:

Science World Everything is hands-on — try it yourself at this exhibition. For example, in the main gallery, see and participate in the physics display on matter and force; on how tornados are formed; on lasers and on sound. In the science theatre, see movies on ‘arcs and sparks’ and on ‘lasers’. While the T A G A conference is in-town, they have a special show called “About Faces”, that demonstrates how we express ourselves through our faces and how to read people’s faces. There is also a display on kaleidoscopes, their history and science. For more information on Science World call (604) 687-8414.

TRIUMF (at the University of British Columbia) TRIUMF is a physics research laboratory, to which researchers from around the world come for help and information. The experiments conducted here link pure research with practical applications in computer software, cryogenics, electromagnetic systems, particle physics, chemistry, microelectronics, measurement and control systems. Experiments are conducted 24 hours a day and the innovations have practical applications in fields ranging from microelectronics to medicine...and of course, graphics. For more information on TRIUMF, call (604) 222-1047.

TAGA Newsletter • Summer 1991
Call for Student Chapters Participation at the TAPPI/CPPA 6th INTERNATIONAL PRINTING AND GRAPHIC ARTS CONFERENCE

The International Printing and Graphic Arts Conference is a biennial event co-sponsored by the two major North-American pulp and paper associations, namely TAPPI (Technical Association of the Pulp and Paper Industry) and the CPPA/TS (Canadian Pulp and Paper Industry, Technical Section). The 6th IPGAC will be held in Pittsburgh, PA, October 18-22, 1992.

Word came around that the TAGA Student Poster session during the 43rd TAGA Annual Technical Conference was quite successful. Taking example on TAGA, for the IPGAC 10th anniversary, the organizing committees are looking to duplicate such an event.

Timing is right for TAGA best ambassadors, the students in the graphic arts, to show papermakers the wealth of knowledge and talents that TAGA Student Chapters embrace.

TAGA Student Chapters interested in participating in the student poster session at 6th IPGAC should contact either Dr. Sam Ingram (Student Chapter Co-Chairman) or Dr. Patrice Mangin. TAGA poster session rules will apply (TAGA Newsletter No. 98, Winter 1990-91). Papers should have 'paper related favour'. Some financial support will be available from the organizing committee. There are no registration fees for students at the TAPPI/CPPA IPGAC.

Deadline for submissions is February 28, 1992.

Authors will be notified of acceptance by April, 1992.

Dr. Sam Ingram
Clemson University
G-01 Tillman Hall
Clemson, SC 29631
Tel (803) 656-3447
Fax (803) 656-0311

Dr. Patrice Mangin
Paprican
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Point Claire, QC, H9R 3J9
Tel (514) 630-4100
Fax (514) 630-4134

Dr. Harvey Levenson of Cal Poly and Chair of the TAGA Board of Directors Student Chapters Committee discussed the judging criteria for the student papers competition and he announced that there were two winners this year: Derek Seaton of Ryerson Polytechnic Institute and Mark Montecalvo of Rochester Institute of Technology. Each student received a $1,000 award for his winning paper. He indicated that students wishing to participate in future papers competitions should address the new rigor being applied to judging. Referring committees will be looking for papers that represent original research methods as opposed to papers representing library research only. He encouraged enhanced student participation in the newly established TAGA poster sessions. This year four posters were displayed, two from Clemson University and two from R.I.T.

Discussion then turned to the shared concern for increasing and sustaining membership in the student chapters.

that many scholarships and grants were available for students wishing to pursue graduate studies. Dr. Sam Ingram of Clemson University, and newly elected member of the TAGA Board of Directors, briefly discussed industrial education and training and graduate opportunities at Clemson University.

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TAGA's new Education Committee Chair, Cam Hitchcock, reports that the following have earned TAGA fellowships for academic year 1991-92:

Nancy Bard  
Rochester Institute of Technology  
Degree: MS-Packaging Science

Patrick F. McGuire  
University of Illinois: Chicago  
Degree: Master-Chemical Engineering

Todd K. Petersen  
Rochester Institute of Technology  
Degree: Master-Printing Management

David Rogers  
Northern Illinois University  
Degree: MS-Industry & Technology

Student Papers Contest Winners:
The Education Committee and Vice President of Technical papers Dick Fisch had a difficult task this year in choosing a winner of the Student Papers Contest from the many excellent papers submitted. There were two finalists that were impossible to choose between: Mark Montecalvo of RIT and Derek Seaton of Ryerson Polytechnical Institute. Since a tie was declared, these students each were presented with a check in the amount of $1,000 at the Annual Awards Banquet at TAGA '91 in Rochester, New York, May 7, 1991.

MICHAEL H. BRUNO/TAGA SCHOLARSHIP ENDOWMENT

At the May 4th meeting of the TAGA Board of Directors the Education Committee, then chaired by Alice Mentzer of 3M Company, announced its decision to place 25% of funds allocated as Supplementary Education Funds into the principal of the Michael H. Bruno/TAGA Scholarship Endowment Fund. The endowment was established in honor of Mike Bruno, TAGA Executive Director and one of its original founders, in 1988 at TAGA's 40th Anniversary Conference in Chicago, the birthplace of TAGA. The original principal was $20,000. Last year the Education Committee added $6,000 more to the principal. One of Mike Bruno's clients also contributed $1,000 to the principal bringing the current total principal to $27,000. With the addition of the Supplementary Education fund monies, the new total principal will be $30,500. The interest from this endowment is awarded to worthy (undergraduate) students each year in the form of scholarships. The recipients of the scholarships for academic year 1991-92 are:

Roy J. Barloga, Sophomore  
California Polytechnic State University  
Major: Graphic Communications

Laurie A. Jones, Senior  
Georgia Southern University  
Major: Printing Management

Kenda S. Junk, Junior  
University of Wisconsin: Platteville  
Major: Technical Communications Management

Patricia Zerhusen, Senior  
Rochester Institute of Technology  
Major: Printing Management

TAGA is proud to report that Steven Zanko was recognized by Dr. Thomas Schildgen on April 18, 1991 at the Arizona State University Honors Convocation as the graduate recipient of the TAGA Fellowship. He graduated from ASU in May of 1991 after completing 32 hours in his program of study with a Master of Technology degree in Graphic Communications under the direction of Dr. Schildgen, Department Head. In a recent letter, Mr. Zanko expressed his thanks to TAGA for sponsoring his studies at Arizona State and for providing the financial assistance to make his degree possible.

FELLOWSHIP RECIPIENT UPDATE

TAGA Newsletter • Summer 1991
RECENT ACCOMPLISHMENTS

The Royal Institute of Technology (KTH) in Stockholm, Sweden has established a chair of professor in graphic arts technology financed by the industry. Professor, Dr. Simo Karttunen, former TAGA Board Member of Espoo, Finland, was elected and begins August 1, 1991. His main tasks are to plan and start research and conduct doctor level research projects in graphic arts technology. He will also act as scientific adviser for the Graphic Arts Research Laboratory (GFL) which is the research institute of the Swedish printing industry. GFL has close relations with the new Graphic Technology of KTH. From the VTT Graphic Arts Laboratory (Espoo) where he has been the Director of Laboratory from 1970 on, he will be off-duty for three years.

National Association of Printing Ink Manufacturers (NAPIM) president Harvey R. Brice has announced the appointment of James H. Sutphin as the Executive Director of NAPIM effective July 1, 1991. Jimmy Sutphin is a veteran of the printing industry having been employed with Braden Sutphin Ink of Cleveland, Ohio for 37 years. He served the company in a variety of sales and management positions becoming president in 1967. He retired from Braden Sutphin in 1985 and joined NAPIM in 1989 as Assistant Executive Director.

David Q. McDowell, Senior Technical Staff at Eastman Kodak Company's Graphics Imaging Systems Division and immediate Past President of TAGA, was recently elected Chairman of the American National Standards Institute (ANSI) Accredited Committee for Graphic Arts Technologies Standards (CGATS). McDowell is also Chairman of ANSI Accredited committee IT8 (Image Technology) Working Group II on color, and Chairman of the U.S. Technical Advisory Group to the International Standard.

ELECTRONIC PREPRESS WORKSHOP MET AT TAGA '91

The theme for this year's Electronic Prepress Workshop at TAGA '91 Rochester was "Electronic Half-tone Systems". Workshop Moderator Brian Chapman of Kodak Electronic Printing Systems provided opening statements which were followed by questions, answers, debates, theories, and experiences offered by participants.

The discussion session on screening technology covered a variety of topics including "high quality" methods, random and "blue noise" techniques, alternate ways of producing conventional clustered dots, and means of producing "high fidelity" screens for 6 or more color separations.

First consideration was given to the current state of conventional screening. Consensus was that "high quality" angles are available from several vendors. A participant discussed the problem random screening techniques have in giving highlight regions without objectional noise. He suggested that one might make a transition from a regular pattern above the quarter tone into a random pattern in the darker regions.

At this point, Kevin Parker of the University of Rochester made a presentation describing his work using "blue noise" screening. This work is an extension of methods discussed by Robert Ulichney in his book "Digital Halftoning". The blue noise techniques use a random screen in which the lower frequency components of the pattern are suppressed, which helps remove the objectionable noisy appearance of some random dithering techniques. Professor Parker presented some images which compared the blue noise technique to several other dither methods. The application of the blue noise mask to color work was also discussed.

Discussion then turned to work done by the FOGRA Institute in Darmstadt which found that the smallest printable dot was 5-10 microns in diameter.

A participant related the experiences of Case-Hoyt printers in an attempt at using a random screening method about 10-15 years ago. Another audience member related the problem of getting the electronic systems to duplicate advantageous aspects of manual striping techniques. Others offered examples of photomechanical and manual techniques difficult to reproduce in electronic systems.

Another attendee mentioned experiences with dot on dot methods, possibly off registered, that worked at 133 lines per inch on newprint but not on calendared paper. He also brought forth the topic of screen making for six process color work. It was suggested that prepress system makers have not considered this an important problem to date and that current techniques consist of ad hoc manual methods. Tony Johnson related his experiences of five years ago in doing color work involving 6-7 separations.

Another participant mentioned problems of proofing subject moire, especially in direct digital color proofing systems. Mike Bruno mentioned a device shown at the Polychrome booth at Drupa which used a projector and potentially a continuous tone proof but allowed one to check for moire problems. Don Carli pointed out that computerized spatial frequency analysis could be done on an image to check for moire.

In conclusion, one attendee made the provocative claim that the next significant improvement in screening would be based on the new random techniques. A special thanks to Doug Walker of Kodak Electronic Printing Systems for his invaluable help in compiling the notes from the Workshop discussions.
New GALA Book Available

The Graphic Arts Literacy Alliance (GALA) published its first book entitled Literacy and Print Media. This 90-page publication, edited by GALA Chairman Harvey Levenson, covers the Gravure Association of America's (GAA) Literacy Day presentation which was part of the GAA's special joint session entitled: The 1990's — Stepping Stones to the 21st Century. The session took place at the GAA's 1990 annual convention. The presentations within this publication range from family literacy to world literacy — including literacy in the community, nation, workplace, and in the publishing and publishing industry itself.


Read this publication for insights into why a literacy problem exists, the impact it is having on business and society, and what individuals and companies can do to help resolve the problem.

Price: $22.50. The price includes a one-year individual membership in the Graphic Arts Literacy Alliance. Send order or direct inquiries to: Maria Harris, Alliance Coordinator, Graphic Arts Literacy Alliance, 4615 Forbes Avenue, Pittsburgh, PA 15213. Telephone (412) 621-6941, FAX (412) 621-3049.

GALA Produces National TV Ad for the Graphic Arts Industry

Funded by the Printing Industries Association of Southern California, GALA participated in the production of a 30-second TV spot promoting the graphic arts industry and literacy. The advertisement will be sent to the national TV networks and distributed to local TV stations through industry associations that will have the opportunity to be the contact source for "additional information." This is one of a number of projects that GALA is working on to enhance the image of the graphic arts industry.

For additional information on the TV spot contact: Steve Borba, Printing Industries Association of Southern California, 5800 S. Eastern Avenue, Los Angeles, CA 90091-1151, phone (213) 728-9500.

November Designated as Graphic Arts Literacy Month

GALA is reminding industry groups and educators that November is Graphic Arts Literacy Month.

Last year the focus of activities was at schools having graphic arts programs. Educators were asked to take some time in each of their classes to talk about society's literacy problem and the importance of promoting the use of print media as a means of solving problems.

This year's activities will focus on education and industry. Educators and industry leaders are asked to let students and employees know how growing literacy and a shrinking work force is making it difficult for the graphic arts industry to fill the many "high-tech" positions requiring qualified employees. Let them know how these issues must be resolved in order to nurture the continued growth and development of the graphic arts profession.

Talk about the image of print media and the important role that the graphic arts plays in society as a source of information. Get your students and employees to feel proud of their field of study or occupation. Let them know that by promoting literacy they are not only promoting an important social cause but they are also promoting print media; the most influential and informative form of mass communication that has ever existed.

TAGA student chapters along with the entire regular TAGA membership are encouraged to celebrate Graphic Arts Literacy Month.

GALA on Target with National Efforts

The importance of GALA's mission is magnified by the U.S. Senate's appro-

val of a National Literacy Bill. Senators voted 99 to 0 in passing the bill to improve coordination of literacy programs and research at national and state levels. It would authorize $1.5 billion for literacy programs through fiscal 1995. Highlights of the bill include: (1) A National Institute for Literacy to coordinate federal literacy programs, research literacy issues and evaluate programs. (2) Grants to states for training, technical assistance for federal, state and local literacy programs. (3) Assuring that community-based groups can compete for literacy funds.

GALA's mission is "To involve the North American graphic arts community in efforts to eliminate existing and new literacy programs which are appropriate and effective, and to promote the cause of literacy throughout the graphic arts industry.

How TAGA Benefits By Supporting GALA?

Issues of literacy relate to more than just the ability to read and write. The issues also relate to being able to comprehend and interpret what is read and written. There is also increasing emphasis on the importance of technical, computer, scientific, and math literacy, all of which are necessary in increasingly technological and scientific industries such as the graphic arts. The graphic arts industry has been in the forefront of technological change and scientific innovation for many years and this is likely to continue in the years ahead. Starting with the need to attract and retain the most scientifically and technically literate innovators to our profession, to making sure that users of our technology can read and understand instruction and safety manuals, the issue of a literate workforce is as relevant to the graphic arts as it is to any other "high-tech" industry.

TAGA represents the present and future scientific and technological leadership of the graphic arts industry. Its involvement in supporting and nurturing technological and scientific literacy of the graphic arts workforce is as important as product development, research, and innovation.
1991 TAGA TECHNOLOGY PATRONS
American Printer
Dunn Technology Inc.
Hallmark Cards, Inc.
Raymond J. Prince

1991 TAGA CORPORATE SPONSORS
3M Company
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Du Pont Electronic Imaging Systems
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Eastman Kodak Co.
ENCO Printing Products
Flin Ink Corp.
Fuji Photo Film U.S.A., Inc.
Gretag Systems
GTE Government Systems Corp.
Hallmark Cards Canada
Hallmark Cards Inc.
Heidelberg Canada
Heidelberg Eastern Corp.
Inx, Inc.
Linotype-Hell, GmbH
Photo Mechanical Services
Polaroid Graphics Imaging Inc.
P. H. Glatfelter Co.
Raymond J. Prince
Rockwell Graphic Systems Division
Scitex America Corp.
Sun Chemical Corp.
Toray America Inc.
Western Lithotech
Westvaco Corp.
Weyerhaeuser Corp.

Future TAGA Annual Technical Conferences

Mark your calendar early! Reserve these important dates for future TAGA Annual Technical Conferences:

TAGA '92 Vancouver: April 5-8, 1992
TAGA '93 Twin Cities: May 2-5, 1993
TAGA '94 Baltimore: May 1-4, 1994