Trying to constantly source the latest technical information can be a struggle. Stimulating your mind in order to see technical problems in a different way and thus create new products and/or processes can also be a challenge. These are your everyday dilemmas.

One of the best ways to generate creative thoughts (that can then lead to new innovations) is to change your daily environment or routine – such as by attending the TAGA Conference. Verification of this is found in an article from the Harvard Business Review where technology fusion (aka creativity) is described as "nonlinear, complimentary and cooperative. It blends incremental technical improvements from previously separate fields of technology to create products... Relying on breakthroughs alone fails because it focuses the R&D effort too narrowly, ignoring the possibilities of combining technologies." A basic principle for technology fusion is that there is a high level of intelligence gathering to keep tabs on technology developments both inside and outside the industry.

TAGA was established in 1948 with a mission of providing a worldwide forum for sharing and disseminating theoretical, functional and practical information on current and emerging technologies for graphic arts print production and related processes. Members come from all over the world, from all facets of the graphic arts industry:

- Technology – providers of hardware, software and consumables
- Applications – providers of printing and related products and services
- Education – providers of education and training of manpower for the Graphic Arts industry

This article will show you the importance and value of attending the March 18th to 21st 2007 TAGA Conference in Pittsburgh, Pennsylvania:

- Continue to learn about the latest advances in both your field and related fields
- Brainstorm with other experts about solving industry problems and road blocks in order to move our industry forward

Once you’ve read this article, hopefully you will budget and plan to attend the 2007 TAGA Conference.
Continue to Learn about the Latest Advances in Both Your Field and Related Fields

Although the total program for the 2007 TAGA Conference is not available at this early date, two of the keynote presentations for Sunday have been confirmed. Dean A. Hornsby has over fifteen years experience in the inkjet industry with Matthews International in the USA, Europe and Australia. As a keynote speaker at the 2007 TAGA Conference his topic will be “Emerging Trends of Industrial Inkjet Printing.”

He will overview inkjet technology, the methods by which they disperse fluids and the properties. He will discuss the traditional and non-traditional (emerging) applications for inkjet technologies and the impact of the fluid properties on the technology. Just a few of the examples will be printing with scented inks to add aroma to enhance product presentation, building conceptual prototype models by inkjet printing scaffolds, printing rigid and flexible electronic circuits, applying a 6-axis robot to print wide array formats, and printing bio-fluids for medical applications.

Dr. Richard McCullough is Dean of the Mellon College of Science at Carnegie Mellon University. He holds a B.S. in chemistry from the University of Texas and worked with Dwaine Cowan on organic metals at the Johns Hopkins University, where he was awarded his Ph.D. At Columbia University, with Ronald Breslow, he developed enzyme models. He started the award-winning company Plextronics, which develops active layer technology for printed electronics devices – OLED displays and lighting, polymer solar cells and plastic circuitry. Active layer technology is the printed semiconductors and conductors that drive device performance, the subject of his presentation.

As to likely papers that will be presented at TAGA 2007:

• In regard to inkjet technology an “emerging technologies in packaging” track will include the increasing use of holographic foils in packaging as well as “new ways to print metallics.” Further related to the packaging revolution, there are concerns regarding migration and extractables in food packaging. With more and more food being cooked in a bag, analytical instrumentation is less expensive and easier to use, and people are finding small quantities of materials in the food that comes from the packaging. Ways to both print more appealing packages and avoid any possible extractables getting into the contained foods will be presented.

• Always a leading venue for color developments, TAGA will present new ways of looking at color in publishing; in other words, a new and simple model to allow people to implement a PDF workflow incorporating RGB. The result is a single document incorporating RGB that could be taken to a display, to newsprint, etc. to get perfect reproductions within the limitations of the target media. A person could take that one document and go everywhere with it.

• Goniometric measurement/modeling is another hot and emerging technology in which TAGA membership is on the cutting edge: that is, depicting the surface characteristics of a package for print in realistic lighting environments. It utilizes fundamentally new software that builds on the algorithms used in virtual worlds by the gaming industry, applying it to the real-world issues of today. Relatedly, in terms of measurement, modeling and analysis, we expect a big emphasis on the use of existing software to measure production efficiencies. Online Analytical Processing (OLAP), applied to printing plant data is an important emerging application—one that is very real world and of value to printers making decisions critical to making their operations run more efficiently. This kind of “Look what’s coming” aspect of TAGA ATC has been broadly enjoyed by attendees.

• TAGA will also present its continuing session on the subject of “printing electronics.” We may feature new wrinkles such as the technology where a retail store in Germany is 100% RFID, presenting a case study as part of a new session on buying behaviors.

Brainstorm with Other Experts about Solving Industry Problems and Road Blocks in Order to Move Your Company and Our Industry Forward

Brainstorming is one of the most effective ways of finding new creative solutions to difficult problems. Ideas are valuable – the more the better during a brainstorming session. In a brainstorming session the problems or challenges, one at a time, are put to everyone. Then each person gives their idea on how to solve the problem. This is where the TAGA Technical Focus Sessions/Workshops come in.

The rules are:

• Combinations or improvements on ideas are sought.

• Adopt a “we can learn from anyone” philosophy

• The rate of organizational learning can be accelerated from both internal and external sources.

• Good companies avoid the Not-Invented-Here syndrome.

• They value ideas that are “borrowed” equally to those that are “created”.

Having read this article, hopefully you will budget and plan to attend the 2007 TAGA Conference.
Include Vacation Days in Your Plans

While in Pittsburgh attending the 2007 TAGA Conference, add some vacation days to your trip. Make some downtime for yourself.

Pittsburgh is a beautiful city as seen in the cover photo. From Frank Lloyd Wright’s Fallingwater (www.paconserve.org/fallingwaterhouse.htm) and his Kentuck Knob, to H.H. Richardson’s Allegheny County Courthouse and Jail, there is much world architecture. It was ranked second in USA Weekend Magazine’s list of the 10 most beautiful cities in the USA.

Here are a few places that will interest you in Pittsburgh:

• For budding or experienced gardeners, or for those who just want to feel the stress fade away as they saunter among the flowers, there is the Phipps Conservatory and Botanical Gardens (www.phipps.conservatory.org)
• The Carnegie Science Center is worth a visit – especially for kids. It includes a four-story Omnimax Theater, a Planetarium, an interactive Science Exhibit with more than 400 displays, a real WWII submarine that you can tour through, a Sports Exhibit, and a huge Model Railroad display. (www.carnegiesciencecenter.org)
• If shopping is on your agenda, head downtown. There is no sales tax on clothing, shoes and necessities.
• The largest single museum of Andy Warhol works, Warhol being a native of Pittsburgh and Pop Art legend, is here – with over 4,000 displays in all media forms. (www.warhol.org)
• In the city is the Pittsburgh Symphony Orchestra (www.pittsburghsymphony.org), the Pittsburgh Ballet (www.pbt.org), the Broadway and Pittsburgh Opera (www.pgharts.org)
• The Frick Art and Historical Center includes tours of an original Victorian home and the Car and Carriage Museum. (www.frickart.org)
• If you love jazz, this city is known for it. Two of the top places are Dowe’s on Ninth, an upscale jazz club with salsa one night a week (www.doweson9th.com); and the Manchester Craftsman’s Guild, with its annual jazz concert series (www.mcjazz.org) The CD “Count Basie Orchestra Live at Manchester Craftsmen’s Guild” won a 1997 Grammy Award.

Make some time for yourself! You’re worth it!
2006 Michael Bruno TAGA Honors Award
(previously called the TAGA Honors Award)

Awarded to:
Professor Robert Chung

- 34 year career in graphic arts and education
- holds a masters degree from RIT; a bachelors degree from Eastern Washington University and a printing technology diploma from the Eastern Chinese Culture University in Taipei, Taiwan
- creator and editor of ‘Test Targets’ – an annual RIT publication on color management and process control
- served as associate director of the Laboratory for Quality and Productivity, conducting industry seminars and workshops on color management and quality control—performed quality audits for printers and print buyers
- promoted to professor in 1995 and to gravure research professor in 2004 with a mandate to develop original research serving the gravure industry
- visiting professor in the Department of Graphic Communication, Chinese Culture University, Taipei, Taiwan – visiting research institutions and conducting seminars in Hong Kong and Peking – teaching at the Shanghai Publishing and Printing College
- has published over 40 papers
- thesis and academic advisor to many graduate students
- a TAGA member for 30 years – served as a TAGA Board member and Chairperson of the Color Workshop and of the Student Chapters Committee – helped establish the RIT TAGA Student Chapter in 1985 – continues as faculty advisor of the RIT TAGA Student Chapter
- member of American Society for Quality, the International Graphic Arts Education Association, and the Committee for Graphic Arts Technology Standards (SC3 and SC4 committees)

Robert F. Reed Technology Medal
(Awarded by PIA/GATF )

Awarded to: Ghilad Dziesietnik

- chief technology officer of EFI
- general manager of EFI’s professional, printing applications and super-wide digital printing businesses
- chairperson of the industry consortium PODi
- has delivered numerous presentations on unified digital workflow, printing standards, variable data printing technologies
- holds many patents particularly in the area of variable data printing
- has an E.E. and M.S.C. in Electrical Engineering from the University of Tel-Aviv, Israel
- instrumental in EFI’s achieving and maintaining the position as a world leader in digital imaging and print management solutions for commercial and enterprise printing
- his server technology breakthrough made the CS600 Fiery Server the fastest in the market – which also delivers a high level of performance for producing complex documents, categorically ideal for mission-critical, high speed, commercial and transitional document protection environments
President’s Message

Richard Goodman

TAGA is pleased to announce the reinstitution of the TAGA Newsletter as a service to its members. We expect to issue this newsletter 3 or 4 times per year going forward, of course, depending on the frequency of interesting news to transmit to the membership.

The transition from the Rochester “home office” to the Sewickley “home office” has been completed. To help all TAGA members understand the relationship between TAGA and PIA/GATF let us begin with the formal structure. TAGA and PIA/GATF signed a contract for PIA/GATF to perform services for TAGA. In this way TAGA pays for only those services it needs which in reality is far more efficient than maintaining a full-time association office. George Ryan and Judy Allen over the last two years have actually provided assistance beyond the mere language of the contract. This has provided for professional management of the Annual Technical Conferences, streamlining of the TAGA administrative operation and a marked increase in the liaison activities with potential sponsors. The result of all these activities has been a dramatic improvement in the financial health of TAGA and its ability to move forward.

We should like to acquaint the membership with recent changes in this administrative structure for TAGA. As has been well-publicized George Ryan, COO of PIA/GATF stationed in Sewickley, PA is assuming a new position as President of the Printing Association of Florida, stationed in Orlando. To replace George, Mark Bohan, recently appointed Vice President, Research and Technology with PIA/GATF, has agreed to take over as Administrator, TAGA. As well as TAGA Administrator, at PIA/GATF he is responsible for all technical research, graphic services, environmental health and safety, and the JDF Product Certification Program for CIP4.

Dr. Bohan is active in an extensive range of printing, paper and coating research. He has also been involved in many projects evaluating new technologies and in the application of functional materials using different processes. He has spoken extensively on many topics including CIM technologies and the opportunities they present. He has been involved with the development of graphic arts ISO standards for 10 years and is a US expert on ISO TC130. Judy Allen, who previously performed as assistant to the Administrator, has recently retired and Cathie Meyers of PIA/GATF has taken over as assistant to the administrator and will be working with Mark Bohan. We look forward to a continued high level of support from the new administration staff for TAGA.

We remind all TAGA members that the TAGA Journal is alive and well and information about submitting manuscripts can be found at www.tagajournal.com. The Welsh Centre for Printing and Coating in the School of Engineering at the University of Wales Swansea has taken full responsibility for editing and publication of the TAGA Journal at no cost to TAGA. Three volumes have been completed, and information about ordering them can also be found at the website. The TAGA Journal provides the opportunity for graphic technology scientists and engineers to publish their work in a prestigious, refereed journal.

The 2007 Annual Technical Conference will be held at the Omni Hotel, Pittsburgh, PA, USA on March 18–21. Tim Claypole, VP for Technical Papers, is preparing an outstanding program. (Check the www.taga.org website to obtain information on preparing abstracts for submission to the conference).

So, read on and enjoy the reinvigorated TAGA Newsletter. And be sure to let us know if there is anything you would want to see and didn’t in this first issue.
Students are an important part of our industry’s future within commercial printing companies. As well, many of the members of TAGA student chapters will be important in future research – moving our industry forward. They are you, the TAGA researchers, the movers and shakers of the future…. so TAGA both encourages student chapters and supports them.

The individual major Student Chapter activities are:

- participate in the governance of the student chapter on campus
- conduct workshops
- host guest lectures from industry
- conduct field trips
- write and publish technical papers
- attend the annual TAGA conference
- participate in an annual TAGA Student Paper competition
- one student paper will be selected for a cash award and for presentation at the TAGA Conference
- participate in Student Chapters Poster Paper session during TAGA Conference

**Chapters**

- CalPoly State University (San Luis Obispo, CA)
- Carnegie Mellon University (Pittsburgh, PA)
- University of Central Missouri (Warrensburg, MO)
- Chinese Culture University (Taipei, Taiwan)
- Chowan College (Murfreesboro, NC)
- Clemson University (Clemson, SC)
- French Engineering School of Paper and Printing (Saint Martin d’Heres, Cedex)
- Eastern Illinois University (Charleston, IL)
- NC A&T State University (Greensboro, NC)
- Rochester Institute of Technology (Rochester, NY)
- Ryerson University (Toronto, Ontario)
- University of Wales Swansea (Swansea, United Kingdom)
- University of Wisconsin – Stout (Menomonie, WI)
- Western Michigan University (Kalamazoo, MI)
- Appalachian State University (Boone, NC)
- Arizona State University East (Tempe, AZ)
- Arkansas State University (Arkansas, AR)
- California State University/Los Angeles (Los Angeles, CA)
- Chulalongkorn University (Bangkok, Thailand)
- Illinois State University (Normal, IL)
- KTH – Royal Institute of Technology (Stockholm, Sweden)
- Louisiana Technical University (Ruston, LA)
- New York University (New York, NY)
- Northern Illinois University (DeKalb, IL)
- Texas A&M – Commerce (Dallas, TX)
- Western Washington University (Bellingham, WA)

Can you help as a guest lecturer, by conducting a workshop, by offering a field trip? If ‘yes’ contact one of these schools to see if they have any needs in your area of expertise.

**The attending students from the Cal-Poly State University TAGA Student Chapter with Professor Harvey Levenson**

**Bernard Pineaux – Co-Chair of the Education/Student Chapters Committee**
Products and Services

All products are available through Cathie Meyers at PIA/GATF at 800/910-4283 Ext.706 with the exceptions noted below.

Included in Your Membership Fee:

- Conference Proceedings – a soft-cover book including executive summaries of all the papers presented at the conference. Included in the back of the book is a CD-ROM with full script and color images of the papers presented (avg. 700 pgs).
- Index to past TAGA Proceedings – a hard-cover bound book
- On-Line Discussion Forum (Go to www.TAGA.org)
- On-Line Membership Networking Directory
- Three TAGA Board meetings per year (see back cover for the committees that are at work for you and our industry)
- Quarterly newsletter

At Special Membership Pricing:

- Past Conference Proceedings from 1948 to date (inclusion of CD-ROM started in the 2001 edition)
- TAGA Journal—a refereed journal (available by contacting Dr. Tim Claypole at the University of Wales Swansea at 441-792-295214 or by email at t.c.claypole@swansea.ac.uk)
- TAGA Conference registration (Go to www.TAGA.org)
- TAGA books
- TAGA videos
- DVD-ROM of thirty years of TAGA Proceedings

Networking—What Is It and How Can It Benefit You

(excerpts from an article in American Inkmaker by Nancy Lowther – March 1993)

Often scientists, engineers and researchers are put in a back room and isolated from the rest of the company. Everyone in the company then waits for these people to emerge from that room with wonderful new innovations and discoveries. However, this isolation limits their ability to stay current. Being able to talk with other people in both their field and other fields – people with different opinions, outlooks, and experiences is the real key. This is networking.

Networking is the developing of contacts and exchanging of relevant information in an informal manner. It is an important job activity for researchers. They bounce ideas off each other, discuss problems together in regard to their industry, and with the knowledge gained, go back and come up with new methods, procedures and ideas.

Other opinions and perspectives outside of their own company give fresh thoughts, new ways of looking at things – technical information that may not be widely known yet is not proprietary information. Networking with others at the same level of technical expertise challenges researchers and helps them be creative. Good researchers are those who question themselves constantly (no ego – not thinking somehow, as an individual that they know best, cannot learn from others) and thus they relentlessly go after information and the expertise of others.

One of the best places to network is at professional conferences. That is where TAGA comes in. You not only gain leading edge technical information from the papers that are presented but have a wealth of people to network with. You only need ask, start a two-way communication.
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“By attending the TAGA 2007 Conference, you will learn ways to help improve your business in the next year.”
Richard Goodman, President, TAGA

Save the Date! March 18–21/07—Pittsburgh, PA