

Since its founding in 1948, the Technical Association of the Graphic Arts (TAGA) has presented and subsequently published over 2,500 original papers on graphic arts research and technical innovation. This timeline exemplifies how TAGA contributes to the development of our industry's technological sophistication.



#### A NEW PRINCIPLE IN LITHOGRAPHIC PAPER MANUFACTURE

Dr. Frederick H. Frost and  
A.P. Reynolds, S.D. Warren Paper

Theory tested how to produce a paper that had a high affinity for ink but a low affinity for water. Their results influenced paper production, giving printing companies better substrates to print on.

#### STUDY OF SCREENLESS LITHOGRAPHY

Irving Pobboravsky and Milton Pearson,  
Rochester Institute of Technology

This TAGA paper from 1967 provided a method and test results of a "continuous tone" process similar to stochastic. In the 1990s there was a flurry of TAGA papers examining the performance of stochastic screening.

#### ON THE RENDITION OF UNPRINTABLE COLORS

James Gorden, Richard Holub, and  
Robert Poe, Eikonix Corporation, a  
Kodak Company

In this paper from 1987 a mathematical model is proposed for automatically compressing and mapping colors from one gamut to another when using color electronic prepress systems, replacing a manual process that depended on the knowledge of scanner operations.

#### PRINTING OF CONDUCTING INKS ON PAPER

Tim C. Claypole and Eifion Jewell,  
Welsh Centre for Printing and Coating;  
William J. Ray, Group Infotech;  
and Yuri Bery, Appleton Papers

The research recognized the potential of a new printing market, as it successfully tested paper as a substrate for printing disposable electronics. Printed electronics on specially developed papers has grown since then.

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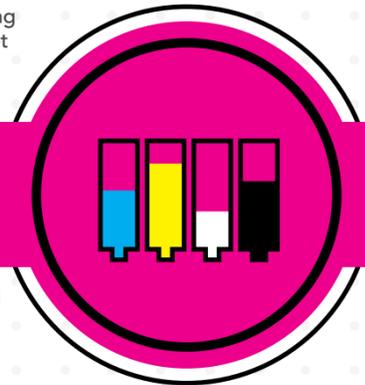
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# A HISTORY OF TAGA-PUBLISHED RESEARCH

#### REPRODUCTION OF GRAY WITH HALFTONES

H. B. Archer, Rochester Institute of Technology

Decades before G7™ and its grayscale calibration technique became a fixture in the industry, this paper stressed the use of neutral gray to eliminate manual color correction, posing a method for determining gray reproduction requirements for a particular set of lithographic conditions.



#### DIJIT INKJET PRINTING

Peter L. Duffield, Mead Dijit Inc.

The application of inkjet for graphic images was already being discussed at TAGA in 1974, as momentum started to slowly build for this new technology. In a span of three years, six papers were delivered on various aspects of inkjet.

#### A COLORMETRIC INVESTIGATION OF SOFT PROOFING

Carl Williamson, Graphic Arts  
Technical Foundation



This was the first in-depth examination of the capabilities of a "soft proof" to match color on a final printed reproduction. Williamson predicted the need to reduce throughput time, combined with improved monitors and color management software, resulting in soft proofs having a big impact on workflow.

#### COLOR UNIFORMITY OF ELECTROPHOTOGRAPHIC PRESSES

Anthony Stanton, Carnegie Mellon University;  
Dr. Mark Bohan and Lindsay Ferrari,  
Printing Industries of America

The study compared the color uniformity of electrophotographic (EP) presses to a sheetfed lithographic press and an inkjet color proofing device. The results showed that most of the EP presses tested were almost as good as the litho press at maintaining color, but improvement opportunities remained.