

Call for Papers

Society for Information Display

***INTERNATIONAL SYMPOSIUM,
SEMINAR, AND EXHIBITION***

May 12-17, 1996

**San Diego Convention Center
San Diego, California, USA**

Symposium Topics

The Society for Information Display encourages the submission of original papers on all aspects of research, engineering, application, evaluation and utilization of displays. SID '96 will feature topical sessions which focus specifically on selected issues or key developments. Paper submissions are welcome for any of the general symposium topics or any of the specific topical sessions listed below. (Session organizers appear in parentheses.)

(1) ACTIVE-MATRIX LCDs: All types of active elements that are applied to LCDs. Also, liquid-crystal and electronic driver developments specifically for AMLCDs are included.

Low-Power Portable Reflective-Mode AMLCDs (W. E. Howard, AT&T Bell Laboratories)

Projection AMLCDs (F. Maurice, Thomson-LCD)

Low-Cost AMLCDs (R. L. Wisnieff, IBM)

High-Reliability AMLCDs (F.-C. Luo, OIS Optical Imaging Systems)

AMLCD Drivers (R. A. Martin, Xerox PARC)

New AMLCD Devices and Processes (R. G. Stewart, David Sarnoff Research Center)

Desktop AMLCDs (T. L. Credelle, AlliedSignal)

AMLCD Components (H. Steemers, Xerox PARC)

Wide-Viewing-Angle AMLCDs (T. J. Nelson, Bellcore)

(2) APPLICATIONS: Practical aspects of display technology such as design, manufacturing, and testing of displays and display-related products.

Novel Display Components (backlighting, black matrix, color filters) (M. Stefanov, Kent Display Systems)

FPD In-Process Inspection and Repair (A. Brunfeld, Display Inspection Systems)

LCD Engineering for Specific Applications (K. Sarma, Honeywell)

Glass/Plastic Substrates and Display Enhancement Means (P. Rose, Rohn & Haas)

FPD Systems Applications (J. M. Pollack, Sharp Electronics Corp.)

CRT Systems Applications (R. Donofrio, Philips Display Components)

Display Characterization and Measurement (M. Anandan, Matsushita Electric Works)

Novel Applications of Displays in Computing (N. Bergstrom, Apple Computer)

(3) APPLIED VISION / HUMAN FACTORS:

Display legibility and visual performance, and color coding. Input devices and human interface issues are also included.

Image Quality: Vision Models and Applications (M. A. García-Pérez, Universidad Complutense and M. W. Cannon, Armstrong Laboratory)

Image Quality: Impact of Sampling and Quantization (A. Naiman, Hong Kong University of Science & Technology and J. Larimer, NASA Ames Research Center)

Visual Performance in Dynamic Lighting Environments (L. D. Silverstein, VCD Sciences and A. R. Jacobsen, Boeing Commercial Airplane Group)

Visual Effects in Synthetic Displays (including Virtual Reality) (R. Patterson, Washington State Univ. and E. Peli, Harvard Medical School)

(4) CRTs: Displays for military, industrial, consumer, and specialized applications. Related base technologies and materials, components, design considerations, and circuit techniques are also included.

Electron Guns (H. Y. Chen, Chunghwa Picture Tubes and R. C. Alig, David Sarnoff Research Center)

Deflection Technology (B. Dasgupta, Sony Corp. and J.-M. Perreaut, Thomson Tubes & Displays)

Color CRTs (M. Maeda, Sony Corp. and A. Yamaguchi, Hitachi)

Glass and Coatings (M. Taylor, Corning and J. Wakaki, Nippon Electric Glass)

Phosphors (J. Sauerborn, Hughes Lexington and P. Seats, Consultant)

High-Resolution CRTs (J. Sauerborn, Hughes Lexington and C. Infante, CBI Technology Consultants)

Very-Wide-Angle CRTs (D. Cappels, Apple Computer)

Miniature CRTs (J. Sauerborn, Hughes Lexington and K. Hawken, Tektronix)

(5) DISPLAY MANUFACTURING: Materials, designs, and processes for large-scale cost-effective manufacturing of displays.

AMLCD Manufacturing Advances (P. Bocko, Corning)

Color-Filter Manufacturing (M. Tilton, Standish Industries)

Emissive Display Manufacturing Advances (J. Jorgensen, Sandia National Laboratories)

Economics of Manufacturing FPDs (E. Schlam, Elliott Schlam Associates)

(6) DISPLAY MEASUREMENT: Instruments, analyses, models, and methods for determining all relevant display parameters.

Flat-Panel Measurement and Modeling (S. Atwood, MicroTouch Systems)

Display Measurement Standards and Procedures (H. C. Masterman, MITRE Corp.)

In-Line Measurement for Quality Control and Production (M. E. Becker, autronic-Melchers GmbH)

Colorimetric Evaluation, Simulations, and Measurements (F. Rochow, LMT)

(7) DISPLAY SYSTEMS: All system implementations of displays including automotive, avionic, game, HDTV, interactive, and video.

Automotive Display Integration (J. A. Rupp, Rockwell International)

Avionic Displays (J.-N. Perbet, Sextant Avionique)

Backlighting (M. Anandan, Matsushita Electric Works)

CRT Monitor System Design (B. Berkeley, Apple Computer)

Display Interfaces (D. Eccles, Sony Corp.)

Graphic Systems (J. Peddie, Jon Peddie Associates)

Head-Up Displays (W. F. Goede, Northrop-Grumman Corp.)

High-Definition Display Systems (D. Urban, ARPA)

Novel Display Devices (W. F. Goede, Northrop-Grumman Corp.)

Novel Visually Coupled Systems Applications (J. H. Brindle, Naval Air Warfare Center)

Portable Information Display Systems (D. Urban, ARPA)

User Interfaces and Display Software (B. Berkeley, Apple Computer)

Videoconferencing (D. Eccles, Sony Corp.)

Virtual Reality (P. Breen, MITRE Corp.)

(8) EMISSIVE DISPLAYS: New developments in all aspects of emissive displays other than CRTs.

Electroluminescent Displays (R. Mauch, Heinrich-Hertz Institute)

Plasma Displays (R. L. Johnson, SAI Technology Co.)

Field-Emitter Displays (M. Slusarczyk, Silicon Video Corp.)

Phosphors (A. Vecht, University of Greenwich)

Organic Luminescent Materials (S. Forrest, Princeton University)

(9) HARDCOPY / IMAGING SYSTEMS: All types of printing, soft-copy, communications and storage devices, and the systems that employ them.

Digital Halftoning (R. Ulichney, Digital Equipment Corp.)

Color Facsimile (D. Lee, Hewlett-Packard Labs and M. Matsuki, NTT Human Interface Labs)

Image Data Compression (D. Lee, Hewlett-Packard Labs and V. Bhaskaran, Hewlett-Packard Labs)

Display Hardcopy Continuum (J. E. Farrell, Hewlett-Packard Labs and A. I. Lakatos, Xerox Corp.)

(10) LARGE-AREA DISPLAYS: Projection displays with CRTs, light valves, or lasers and mosaic or other potential technologies for large area including applications and systems.

Projection Display Systems (W. Chen, Apple Computer and E. H. Stupp, Philips Laboratories)

Projection Display Components (J. Rudolph, U.S. Precision Lens and P. Candry, Barco N.V.)

Light Sources and Illumination Systems for Projection Displays (F. J. Kahn, Kahn International Consulting and E. H. Stupp, Philips Laboratories)

Light Valves for Projection Display Systems (E. H. Stupp, Philips Laboratories and R. Melcher, IBM)

Videowalls and Tiled and Modular Displays (E. Lueder, University of Stuttgart and A. Sobel, Consultant)

New Technologies for Projection and Large-Area Direct-View Displays (R. Melcher, IBM and E. Lueder, University of Stuttgart)

Large-Area Direct-View Display Devices and Systems (S. Morozumi, Hosiden Corp. and A. Sobel, Consultant)

Display Systems and Electronic Cinema (G. Alphonse, David Sarnoff Research Center and F. J. Kahn, Kahn International Consulting)

(11) LIQUID-CRYSTAL TECHNOLOGY: New materials, characterization techniques, electro-optic effects, and processing.

Novel LC Materials and Devices (A. Lackner, Hughes Research Labs)

Passive LCDs (P. J. Bos, Kent State University)

LC Dispersions (P. Drzaic, Raychem Corp.)

LC Alignment (H. L. Ong, Kopin Corp.)

LC Addressing (T. J. Scheffer, Motif)

Wide Viewing Angle (D. Fair, Standish Industries)

Reflective LC Effects (A. R. Kmetz, AT&T Bell Laboratories)

Product Engineering / Applications

Attention Manufacturers and Suppliers:

These sessions contain information on the practical aspects of display technology such as design, manufacturing, and testing of displays and display-related products. Papers are generally product or process oriented and deal with how something was engineered, how it works, what-to-use, how-to-use, and what-to-avoid. Emphasis should be technical, not marketing. Abstract, paper submission, and presentation requirements are the same as for the Symposium papers, although the content does not have to be original. Applications Sessions will be conducted in parallel with the Symposium sessions. A separate Product Engineering/Applications Digest of Papers will be published. Applications papers are welcome in all areas of display technology, including:

- Flat-Panel Displays and Systems
- Monitors and Projection Displays
- Multimedia Display Systems
- Display Peripherals
- Display Manufacturing/Inspection/Repair
- Display and Graphics Processors
- Display Interfacing
- Display Test and Measurement

For additional information, contact Zvi Yaniv, Kent Display Systems, Phone: 810/476-4555; Fax: 810/476-4550

Deadlines and Key Dates

Abstract/Summary	Dec. 1, 1995
Acceptance Notification . . .	Feb. 16, 1996
Late-News Papers	Feb. 16, 1996
Digest Paper Submission . .	Mar. 15, 1996
Late-News Digest Paper Submission	Mar. 22, 1996
Short Courses	May 12, 1996
Seminars	May 13&17, 1996
Product Engineering / Applications	May 14-16, 1996
Applications Seminars .	May 14-16, 1996
Technical Symposium . .	May 14-16, 1996
Vendor Exhibits	May 14-16, 1996

Format of Submissions

Please submit your double-spaced 35-50 word abstract and technical summary on single-sided 8.5 x 11 in. pages. Also, adhere to the following format:

Page 1: Paper Title, Abstract, Oral/Poster Preference, Symposium Topic, and Keywords. Include the names of all authors with their affiliations, addresses, telephone/fax numbers, and e-mail addresses, and underline the name of the presenter when there are two or more authors. Your submitted 35-50 word abstract, highlighting the key details of your paper, will be published in the Advance Program if your paper is accepted. The abstracts are usually edited to accommodate the program format.

(A) Indicate if you wish to have your paper considered for oral or poster presentation. If you do not so indicate, the committee will consider your paper for both.

(B) Indicate whether the paper is intended for the Applications Sessions.

(C) For Symposium presentation, indicate the closest matching Symposium Topic from the list provided and include a minimum of two keywords below the abstract for future use in a database SID is developing.

Pages 2-5: Technical Summary. Include the first author's name and the title of the paper on each page. A technical summary (FOUR-PAGE MAXIMUM) is required covering the following aspects:

(1) Objective and Background: Briefly describe the goals and intent of your project, and give background factors that led to the new results.

(2) Results: Describe, in detail, the specific results that will be presented at the SID '96 Symposium.

(3) Impact: Discuss the significance of your work, and compare your findings with previously published work.

(4) References: List a few main references covering projects in related areas.

(5) Prior Publications: Symposium papers must be original contributions. If your organization has published or presented material on similar work in English, please explain how the present material differs. Applications papers need not be original. Previously published and/or presented material designated for an Applications Session must be accompanied by a statement describing prior publication.

Format of Presentations

Oral presentations will conform to a 20-minute format (15 minutes for presentation and 5 minutes for questions and answers). Once again, a Poster Session will be held on the afternoon of May 15. Accepted papers will be assigned to either oral or poster presentation at the discretion of the program committee.

Abstract / Summary Submissions

Send one reproducible copy of your abstract and technical summary to:

Jay Morreale (SID '96)

Conference Coordinator

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81-426-62-0515 (Fax: -6768)

e-mail: abiko@hlabs.oki.co.jp

Student Travel Grants

A limited number of travel grants up to \$1000 each will be available to student authors of accepted papers. Please consult the Student Call for Papers, or call Jay Morreale at 212/620-3371.

Points of Contact

All questions or inquiries for further information regarding this meeting should be directed to one of the following:

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Timetable

The deadline for receipt of abstract and technical summary is **December 1, 1995. ABSTRACTS RECEIVED TOO LATE TO BE MAILED OUT FOR REVIEW WILL BE RETURNED.** Notification of acceptance will be mailed by **February 16, 1996** (February 29 for Late-News papers). Authors of accepted papers will receive an "Authors Kit" with instructions for the preparation of the paper to be published in the Symposium Digest. The paper shall consist of four pages of camera-ready copy, including illustrations, and is due March 15, 1996 (March 22 for Late-News papers).

SID '96 Features

Technical Symposium ... Product Engineering/
Applications Sessions ... Poster Session ...
Keynote Speakers ... Invited Addresses ... Author
Interviews ... Evening Panels ... Short Courses ...
Applications Seminars ... Technical Seminars ...
Awards Luncheon ... Special Social Event ... Annual
SID Luncheon ... Vendor Exhibitions... and more!

Technical Courses / Seminars

SID once again offers a comprehensive series of technical seminars given by experts in the field of information displays. Speakers have expertise in the technical area as well as an established track record in presenting quality seminars. Extensive seminar notes will be provided. These are valuable sources of reference materials. The seminars and courses will complement the technology tracks of the three-day Symposium, and, in addition to giving overviews of information displays, they will cover areas such as liquid-crystal displays, CRTs, display systems, image processing, applied vision and human factors, as well as display measurement and manufacturing.

The courses and seminars will fall into three categories:

Sunday, May 12. Four 4-hour Short Courses on Fundamentals. These give a clear and thorough introduction to the principal display technologies.

Monday, May 13, and Friday, May 17. A series of 90-minute Seminars covering a broad range of technical subjects.

Tuesday, May 14 through Thursday, May 16. Practical 90-minute "Applications" Seminars targeted at design and application engineers. The seminars are held each morning before the Symposium Sessions.

SID seminars and short courses have established themselves as a cost-competitive source of comprehensive coverage of key technical issues and of recent progress in information display. Seminars and short courses planned for SID '96 will maintain or exceed these standards.

Evening Panels

Several special panel discussions will provide in-depth participative discussions of issues of topical interest to the display community. Experts in their respective fields will present brief and informal opening presentations, followed by spirited discussions and questions from the audience.

**Society for Information Display
c/o Palisades Institute for Research Services, Inc.
201 Varick Street
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