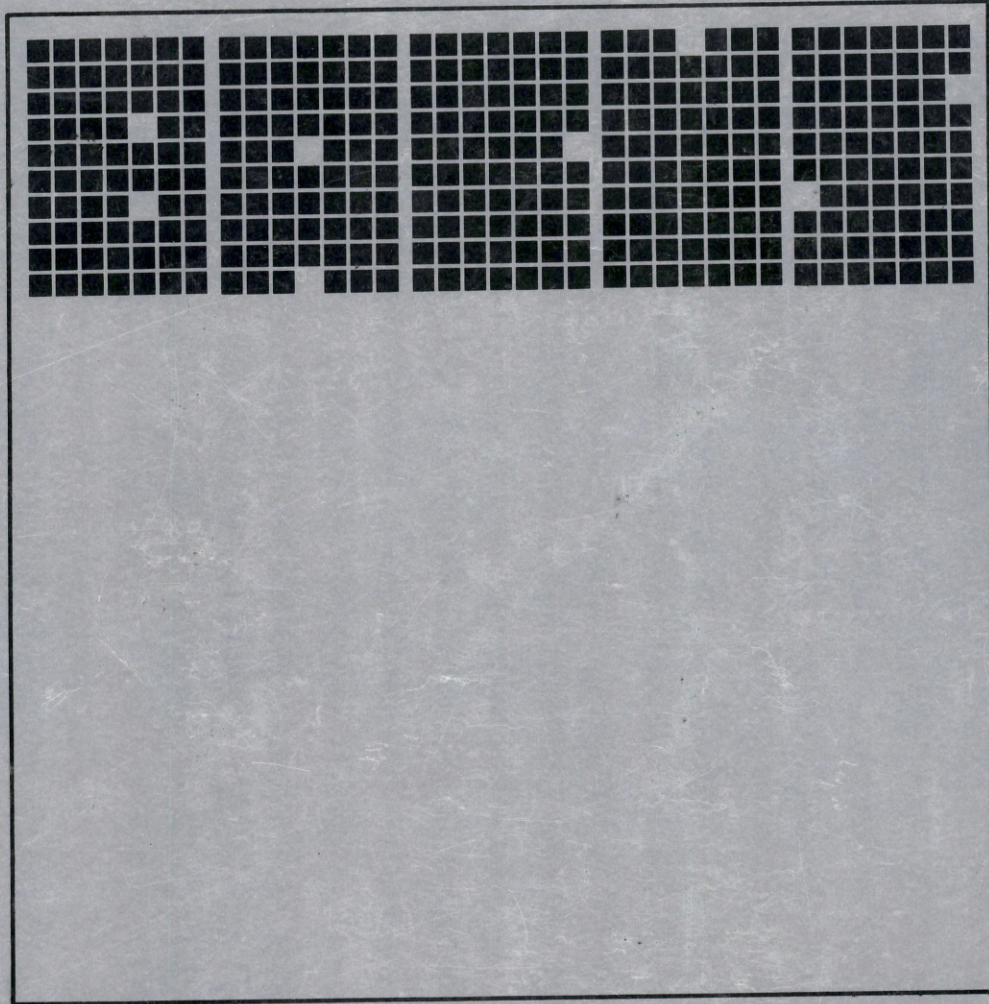


J. WILEY



Bay Area Chrome Users Society
Symposium
March 9, 1981
Sunnyvale, California

BAY AREA CHROME USERS' SOCIETY

SYMPOSIUM

MARCH 9, 1981

SUNNYVALE, CALIFORNIA

BACUS

P.O. Box 1571

Cupertino, CA 95014

BACUS Symposium Coordinating Committee

George Damon
Fairchild Semiconductor

Steve Dunbrack
Ultratech Corporation

Paul Johnson
American Microsystems, Incorporated

Robert Murphy
National Semiconductor

James Reynolds
Micromask

James Wiley
Master Images, Incorporated

Proceedings Editor Sara Calvillo
Associate Editor Scott Ashkenaz
Typist Lisa Bertoli

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ATTENDEES

<u>COMPANY</u>	<u>REPRESENTATIVE</u>
American Microsystems, Inc. 3800 Homestead Road Santa Clara, CA 95051 (408) 246-0330	David Angel Scott Ashkenaz Sara Calvillo Paul H. Johnson
BMI Textron 120 Reed Road Lake Park, FL 33403 (305) 842-1707	Barry Hopkins
BMI Textron 1610 Blossom Hill Road #1 San Jose, CA 95120 (408) 269-9001	Stephen W. Moles
Burrough's 16701 W. Bernardo Road San Diego, CA 92127 (714) 451-4282	Bill McCutchen
Corning Glass Works MP 21-3 Corning, NY 14830 (607) 974-7636	Mark F. Slifkin
Corning Glass Works 900 Lafayette Street Suite 501 Santa Clara, CA 95050	Dick Mace
Dai Nippon Printing Co., Ltd. 12, 1-Chrome Ichigaya-Kagacho Shinjuku-Ku, Tokyo Japan	Satoru Kaneki
Dai Nippon Printing Co., Ltd. 44 Montgomery Street, Suite 926 San Francisco, CA 94132 (415) 788-1618	Kazumi Suqiyama
Electronic Materials Corporation 939 N. Vernon Avenue Azusa, CA 91702 (213) 334-4961	Dennis Hatcher Chet Northrup Valdis Sneberg

COMPANY

REPRESENTATIVE

Fairchild Semiconductor
464 Ellis Street MS 13-001
Mountain View, CA 94042
(415) 962-3244

George Damon
Ronald G. Ivancich
Don Shernock

General Instruments Inc.
2355 W. Williamsfield Road
Chandler, AZ 85224
(612) 963-7373

Sandy Parkhurst

Hewlett Packard
MS 54
5301 Stevens Creek Blvd.
Santa Clara, CA 95050
(408) 246-4300

Duane Dutton

Hoya Electronics
1237 Midas Way
Sunnyvale, CA
(408) 737-8151

Fumitoshi Uchiya
Shoichi Harada
Ted Terushima

Hughes Aircraft
500 Superior Avenue MS B1253
Newport Beach, CA 92663

Terry Woodward

IBM Corporation
E. Fishkill Facility
D-13H 21P19H B-003
Hopewell Jct, NY 12533
(914) 897-2072

Joseph E. Levine
H.C. Schick

IBM Burlington
River Road
Essex Jct, VT 05452
(802) 769-2398

Jim Eary
Douglas Kruger
Ernie Pettine

IBM
5600 Cottle Road
San Jose, CA 95193
(408) 256-7380

Bill Hines
Art Jimenez

IMAI Associates
525 W. Remington Drive
Sunnyvale, CA 94087
(408) 245-3511

Jim Imai
Noel Suzuki

COMPANY

REPRESENTATIVE

International Materials Research
2266 Trade Zone Blvd.
San Jose, CA 95131
(408) 946-6353

Gilbert H.K. Hong
George Kuo
Edward Lin

Inabata & Co., Ltd.
2 - 6 Hon-Cho Nihonbashi
Shuo-Ku Japan
03-667-1111

Chikahisa Tanaka

Intel
3601 Julliette Lane
Santa Clara, CA 95050
(408) 987-6382

Peter F. Schoen

Kodak
343 State Street
Rochester, NY 14650

Don Frey

Master Images, Inc.
2235 Zanker Road
San Jose, CA 95131
(408) 262-6275

Jim Campi
Russell Morgan
Jim Wiley

Microfab
3960 Fabian Way
Palo Alto, CA 94303
(415) 969-1750

Reed Welch

Micro Mask
695 Vasqueros
Sunnyvale, CA 94086
(408) 245-7342

Jim Burgess
Eytan Pick
Jim Reynolds

Mostek
1215 West Crosby Road
MS 113
Carrolton, TX 75006
(214) 323-6000

Ron Bracken

Motorola
2200 West Broadway
Mesa, AZ 85204
(602) 962-2850

Neal Jorgensen

COMPANYREPRESENTATIVE

National Semiconductor
1572 Alameda de las Pulgas
Redwood City, CA 94061
(415) 367-0752

Jim Justin

National Semiconductor
2900 Semiconductor Drive MS A1525
Santa Clara, CA
(408) 737-6727

Bob Murphy
Jeremy Nichols

National Semiconductor
9000 S 3333W
W. Jordan, UT
(801) 263-7000

Kathy Wall

Optifilm Company
407 W. Griffith Street
Gardena, CA 90248
(213) 323-6744

Art Burnett
J.J. Lanzilloti
Robert Quinn

Optimetrix
500 Ellis Street
Mountain View, CA 94043
(415) 965-4061

Bruce Ruff

Precision Photoglass Inc./Konishiroku
2557 Charleston Road
Mountain View, CA 94043
(415) 961-0700

Larry Bruestle
Kenneth E. Caple
Sakae Ono
Frank Yamamoto

Quantum Products, Inc.
226 W. Brokaw Road Suite 490
San Jose, CA 95110
(408) 279-2105

Mary Ruddell

Rockwell International
4311 Jamboree Road MS 503-240
Newport Beach, CA 92660
(714) 833-4871

Chip Vesper

ROK Industries, Inc.
1492 Caspian Avenue
Long Beach, CA 90813
(513) 436-1221

Manuel C. Ray

<u>COMPANY</u>	<u>REPRESENTATIVE</u>
Ruddell & Associates, Inc. 226 W. Brokaw Road Suite 490 San Jose, CA 95110 (408) 279-3993	Rick Ruddell
ShIPLEY Company 3375 Scott Blvd. Santa Clara, CA (408) 496-0522	Larry Wachler
Sierracin/E.O.I. 3952 Campus Drive Newport Beach, CA 92660 (714) 540-6080	Timothy A. Smith
Signetics 811 E. Arques MS 0336 Sunnyvale, CA 94086 (408) 739-7700	Ron Almaguer Anita Goodson
Signetics P.O. Box 11251 Palo Alto, CA 94306 (415) 248-7045	Ray Chin
Tau Laboratories, Inc. P.O. Box 3398 Poughkeepsie, NY 12601 (914) 471-9040	Raymond Auyang Harold Koenig
Toppan Printing Company, Inc. 4911 Birch Street #101 Newport Beach, CA 92660 (714) 752-0773	T. Shinozaki Hirokazu Yunokuchi
Ultratech 2970 Coronado Drive Santa Clara, CA 95086 (408) 727-0451	Steve Dunbrack Alex Hong Ann Lavoto
Ulvac Coating Corporation 2804 Terao Chichibu-City Saitama Pref. 368 Japan 0494 (24) 6511	Kaoru Asao

AUTHORS' BIOGRAPHIES

William E. Eaton - In 1969, Theodore Tarone and William E. Eaton founded Basic MicroElectronics, Inc. (later BMI/Textron), where together they developed thin film deposition equipment and process technology for high quality, hard surface mask substrate production. Mr. Eaton is currently Executive Vice-President for Product Development for BMI/Textron.

Gilbert Hong - Ph.D. in chemistry and physics from California Institute of Technology. Mr. Hong has been on the faculties of the State University of New York and the University of Notre Dame. He has consulted for IBM and currently is the Director of R & D for International Materials Research, Inc.

Satoru Kaneki - Graduate of Tohoku University with a degree in Applied Physics. In 1971, he began working for Dai Nippon Printing Co., in the Central Research Laboratory and later transferred to the Micro Products Division.

Harold Koenig - Graduate of the University of Illinois with a degree in Engineering. His experience includes employment as a physicist at IBM in New York and at General Electric Research & Development Laboratory in New York. In 1971, he joined Tau Labs as the Manager of Research.

Sakae Ono - Mr. Ono is a graduate of Tokyo Photographic School and has been employed by Konishi-Roku Photo Industry Company since 1966. He is currently a Business and Technical Representative.

Robert Quinn - Bob Quinn was initiated into the semiconductor industry in 1959 with Pacific Semiconductors (now TRW). He later spent seven years with Northrup Electronics before founding Optifilm in 1970.

Rick Ruddell - Graduate of the Missouri School of Mines and Metallurgy. He has worked at Texas Instruments, IBM and Fairchild. In 1975, he founded Ruddell and Associates.

Valdis Sneberg - Graduate of the University of Minnesota with a degree in Physics. He was employed at Honeywell Research Center for over eight years. Since 1972, he has served as Principal Engineer for Electronic Materials Corporation.

Theodore T. Tarone - Mr. Tarone holds degrees from the Pennsylvania State University and Lehigh University. He was on the technical staff of Bell Labs for seven years and later joined the ITT Semiconductor Research and Development facility. Presently, he is President of BMI/Textron. (See biography for William E. Eaton.)

Fumitoshi Uchiya - Mr. Uchiya is a graduate of Waseda University in Tokyo and holds a degree in chemistry. In 1957, he went to work for Hoya Electronics as an optical glass manufacturer and is currently Manager for International Sales at Hoya's headquarters in Japan.

WELCOME NOTE

BACUS CONFERENCE

MARCH 9, 1981

SUNNYVALE, CALIFORNIA

Jim Wiley:

Good morning and welcome to the Bay Area Chrome Users Society Conference on functional and analytical qualification of very high quality chrome blanks. To explain what that is and to give a brief history and introduction to the Bay Area Chrome Users Society, I would like to introduce Dave Angel from AMI.

DAVID L. ANGEL
AMERICAN MICROSYSTEMS, INC.
SANTA CLARA, CALIFORNIA

About a year ago Paul Johnson and I were talking and in the course of the commentary we observed that as a user group of chrome blanks we were presenting a very poor image of what we really needed from you, the vendor community. For example, one customer may want 4000 Å photoresist, another customer may religiously believe he needed 4800 Å of photoresist and so forth. Correspondingly, one user may measure reflectivity in one manner, another user may measure reflectivity in yet a second manner. Concomitant with this effort was a serious analysis which is being prepared on the effect of the chrome materials in preparing masks for the VLSI production. With the advent of automatic defect inspection we pretty well tied down the ability to make high quality masks and eliminated a lot of the subjectivity of what is or is not a defect. Likewise, with the advent of precise measuring equipment, critical dimension control is rapidly coming under control. We found in published work that the effect of photomasks upon yield in the manufacture of VLSI products is considerably more significant than what we had originally thought. Now, perhaps this is arguable but in some sense most of the chrome vendors are relatively small in net sales compared to the larger semiconductor users. As such, most of their annual operating budget is directed more towards manufacturing capitalization as opposed to pure R & D and really trying to understand the properties of their product. This is not said in a detrimental way. Therefore, our original thoughts were that we as a user community need to come up with some collective requirements or specifications which we can present to you, the vendor community, to fundamentally make your job easier. We need to present to you common specifications and common needs. We need to work with you, the vendor, on deficiencies in your product using our resources; the resources of the AMI's, the Nationals, the Signetics, the IBM's, the Motorola's, etc. to relate to you what the problems are. And some of this work has been published already. So this in turn, became BACUS. It started as a small group of companies getting together for an hour or two during the working day reviewing some thoughts and trying to arrive at some common specifications as well as some common observations. The group is composed of ten major users in the Bay Area. The only reason we limit it to the Bay Area is that we felt that this was as much as we could handle at the time. The group includes AMI, Ultratech, Master Images, Signetics, National Semiconductor, IBM, Micromask, Microfab, Hewlett Packard, and Fairchild. The purpose of BACUS is to provide uniform observations regarding the qualities or deficiencies of chrome blank products being offered to the user community. But I think, more importantly, the purpose

of BACUS is to provide a uniform position in defining the chrome blank requirements to you, the vendor community. So, to the vendors, this is your day. We're here to try to help you. We're here to try to pass information between the vendor community and the user community. This is an experiment for us. It started as a group of people getting together and comparing ideas about what we thought about our chrome blanks and what we needed. The response to this has been fantastic! It's far more than we ever expected. So we hope it's a good day for you, and we believe it will be a good day for us, the users.