

SOCIETY FOR INFORMATION DISPLAY

Newsletter 23 / 2008

EVENTS

SID EuroDisplay 2007 Moscow, September 18-20, 2007

EuroDisplay '07 continues the European series of International Display Research Conferences and Exhibitions that were held in Amsterdam (1990), Strasbourg (1993), Birmingham (1996), Berlin (1999), Nice (2002) and Edingbrough (2005). EuroDisplay '07 is the first EuroDisplay Symposium which was held in Russia. It was organized by the Russian SID Chapter with co-organizing by SID, Belarus SID Chapter and Ukrain SID Chapter. The organisation was mainly carried out by the Lebedev Physical Institute of the Russian Academy of Science.

The Exhibition was organized by Russian JSC "ChipExpo".

EuroDisplay '07 included the XXVII International Display Research Conference (IDRC), Workshops, Tutorials and the Exhibition. The IDRC conference, workshops and tutorials were held in the Office Building of the Russian Academy of Science on the Leninski Prospect in the center of Moscow.

The conference was sponsored by the Russian Foundation of Basic Research, the Russian Academy of Science, the European Office of Aerospace Research and Development of US AirForce, the Society of Information Display and the Russian JSC "ChipExpo".



TUTORIALS

Three lectures on the Education Seminar were held on September 17:

V. Chigrinov, Hong Kong University of Science and Technology, "LCD: Physics & Application"

H. Tolner, SouthEast University, China, "Plasma Display Panels"

I. Underwood, Microemissive Display Co. UK, "Microdisplay Technology and Applications"

WORKSHOPS

Four lectures on the Business Seminar were held on September 17:

B. Young, Display Search, USA, "Review on Display Technologies Market"

B. Bercley Samsung, EI.Co., USA, "Advanced Technologies for LCD-TV"

J. Magarino, Thales Avionic, France, "Displays for Avionic Applications"

J. Kimmel, Nokia Research Center, Finland, "Displays for Mobile Applications"

SOCIAL PROGRAM

The visit of the Display Exhibition was organised for all participants on the first evening which was connected with the reception party. On the next evening a boat trip on the Moscow River gave a lot of impressions and information about Moscow city and the Russian history. The very exciting presentations of a Russian folklore ensem-

S I D - M E

SOCIETY FOR INFORMATION DISPLAY



ble should be mentioned as very exciting topic during the boat trip. On the last evening a bus excursion "Moscow at Night" brought the participants to the most famous places of Moscow and gave a lot very exiting impressions and information about the burning capital of Russia.



EXHIBITION

68 companies presented displays and components on September 18-20. The almost companies came from Russia, 2 from Belarus and Germany, 1 from Taiwan, Finland and Korea.

Oral presentations of companies took place:

September 18, "*Modern components and technologies for displays*"

September 19, "*Modern displaying technologies for business and city infrastructure*"

September 20, there was a round table discussion: "*DisplaySystems as innovative background of the XXI century education*".

IDRC

IDRC contained 135 contributions (4 keynote addresses, 58 oral presentations and 73 posters). The speakers came from 20 countries (41 from Russia, 25 Korea, 11 Belarus, 10 Japan, 9 from PR China, Taiwan, Hong Kong, 8 Ukraine, 5 Germany, 4 The Netherlands and USA, 3 from Belgium, Finland, France and Iran, and 2 from Greece, Ireland, Singapore, Switzerland).

COMING EVENTS

SID MEC Spring '08 Meeting March 13-14, 2008, Fraunhofer IOF, Jena, Germany

Special Topics: Microdisplays, Applications, and Optics

The SID Mid Europe Chapter organizes yearly spring and fall meetings with technical and scientific presentations, attracting many European display professionals.

The 2008 spring meeting focuses on different aspects of microdisplays and their applications.

Basic technology is covered as well as optical components and systems or applications in multimedia and niche markets. 33 paper from 9 countries are presented at the meeting. An industrial exhibition takes place during the meeting.

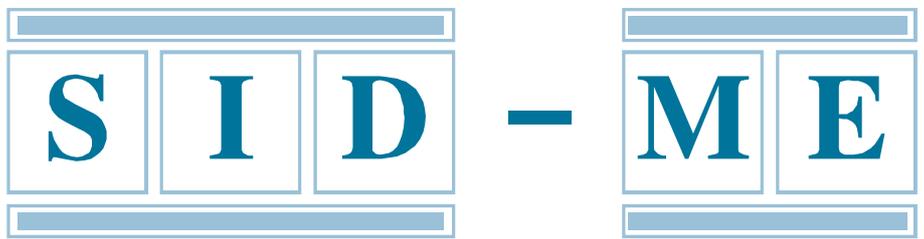
One additional highlight of the conference is the evening event, a dinner show in the Zeiss Planetarium including a demonstration of the newest projection technology (all dome laser image projection). The meeting closes on the second day with a visit to the laboratories of the Fraunhofer IOF.

PROGRAM

Thursday, 12/03/2008

Session 1 "Microdisplay Applications I"

Jyrki Kimmel, Nokia Research Center, Finland



SOCIETY FOR INFORMATION DISPLAY

"Microdisplays in mobile multimedia"

Roland Höfling, Vialux GmbH, Germany

"New emerging applications of DLP® microdisplays"

Peter Schreiber, Fraunhofer IOF, Germany

"Laser display with single mirror MEMS scanner"

Session 2 "Light Sources"

Roland Schulz, OSRAM OS, Germany

"Laser light sources for microdisplay illumination"

Sergey Kudaev, Fraunhofer IOF, Germany

"LED light sources for projection displays"

Kenneth Li, Wavien, Inc., USA

"Dual paraboloid reflector lamp system with life extension for projection display applications"

Session 3 "Optics – Design & Fabrication"

John G. Smith, MEMS Optical Inc., USA

"High efficiency micro-optics for illumination in projection systems"

Dirk Maes, BARCO, Belgium

"Dual TIR prism, a way to boost the performance of a DLP projector"

Hüseyin Murat, ELINTEC/TFCG Microsystems, Belgium

"Two LCOS full color projector with efficient LED illumination engine"

Khaled Sarayedine, Optinvent, France

"Slim rear projection for laser TV"

Michael Degel, Jenoptik AT GmbH, Germany

"Laser cutting of display glass"

Friday, 14/03/2008

Session 4 "Microdisplay Applications II"

Lars Runge, SyproOptics GmbH, Germany

"Requirements for projectors for the consumer market"

Mark McCallum, Forth Dimension Displays Ltd., Scotland

"The use of LCOS microdisplays in 3D optical surface metrology systems"

Stefan Riehemann, Fraunhofer IOF, Germany

"Microstructure and 3D-measurement systems with microdisplays"

Sven Krüger, HOLOEYE Systems, Inc., USA

"Holographic projection using LCOS displays"

Session 5 "Student Award"

Lawrence Bogaert, Vrije Universiteit Brussel, Belgium

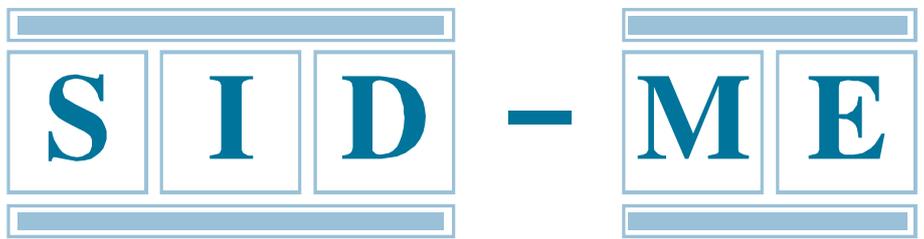
"Stereoscopic projection display with LCOS panels and LED light sources"

Session 6 "OLED Microdisplays"

Uwe Vogel, Fraunhofer IPMS, Germany

"OLED microdisplays: Advanced functionality and systems"

Ian Underwood, MicroEmissive Displays, Scotland



SOCIETY FOR INFORMATION DISPLAY

“HYPOLED – High performance OLED micridisplays for see-through mobile multimedia applications”

Jan Blochwitz-Nimoth, Novald AG, Germany

“Novald PIN OLED technology for display applications”

Chris Yates, MicroEmissive Displays, Scotland

“Some limitations of the conventional “lifetime” parameter when applied to OLED displays and beginning to develop a real-world equivalent”

Visit to the Labs of Fraunhofer IOF.

Program available:

www.iof.fraunhofer.de/sid/program.html



Eurodisplay 2009 (International Display Research Conference 2009) September 14-17, 2009, Rome, Italy

The next Eurodisplay Conference will be held in Rome in September 2009. SID Mid-Europe Chapter is responsible for the arrangements, and the organization of the conference is headed by SID-MEC veterans. The General Chair is Mr. Jyrki Kimmel from Nokia in Finland, the Program Chair is Prof. Norbert Frühauf from University of Stuttgart, Germany, the Workshop Chair is Dr. Gerrit Oversluizen from Philips in the Netherlands, the Exhibit and Sponsorship Chair is Ms. Jutta Rasp from FP Displays

in Germany, and the local organizing Chair is Dr. Guglielmo Fortunato from the CNR in Italy. We are looking for a great conference and a worldwide participation in one of the great centres of European culture. If you or your company have an interest in sponsoring Eurodisplay 2009, please contact either Jyrki Kimmel or Jutta Rasp. Contact details inside this Newsletter.

NEWS

Several entities from the SID-Mid Europe chapter area together with partners from France are participating in the new European Framework 7 project AMAzOLED (Active Matrix of Any Shape for Organic Light Emitting Diodes displays) that started on January 1st, 2008:

Thales Avionics LCD (TLCD), programm coordinator

Centro Ricerche Fiat (CRF)

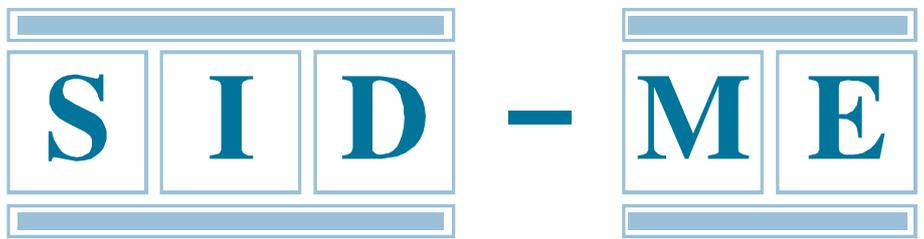
Laboratoire d'Electronique et de la Technologie de l'Info (LETI)

NOVALED AG

Universität de Stuttgart

Le Laboratoire LPICM de l'Ecole Polytechnique

The target of project is to develop a highly reliable high brightness conformable low cost up scalable display for demanding applications such as their use in cars, aircraft or extreme sports applications. For the time being, in these applications, the LCD is the main display technology. Although its performances are appropriate in such difficult environments, designers are looking for a solution easier to



SOCIETY FOR INFORMATION DISPLAY

integrate. For example, the LCD backlight makes it very bulky in aircrafts, both because it has to supply a lot of light and therefore needs a cooling system but also because of a heavy bezel to handle a high level of vibrations. The backlight is even more critical in systems where the display is bent or is non-rectangular like in innovative design for cars but also where the weight is a major issue such as in sports items. The solution to these issues is an emissive display technology for which both lighting and information content are integrated at the pixel level. The proposed display will use colour filters on white organic light emitting diodes (OLED) to achieve the brightness and the reliability for the light emission. The OLED does not have to be referenced to the pixel element. Each pixel element will be driven by a polymorphous TFT with a higher reliability compared to a-Si TFT without degradation on other parameters. Both new OLED and new TFT technologies are compatible with existing industrial means thus limiting the capital expenditure to manufacture the product at a lower cost. The concept is designed to enable 2mm thick big size high-resolution TV products in a near future. The display can be built on peelable polyimide on glass as developed in FLEXIDIS. Using conformal displays offers a higher capability of integration in the envisaged applications.



SID-ME CHAPTER COMMITTEE

The SID-ME Chapter committee is now formed by:

Ing. P. Vandenberghe (chair),
Barco, Pres. Kennedypark 35,
B-8500 Kortrijk, Belgium.
Tel.: +32 56 233216
Fax: +32 56 232279
E-mail:
patrick.vandenberghe@barco.com

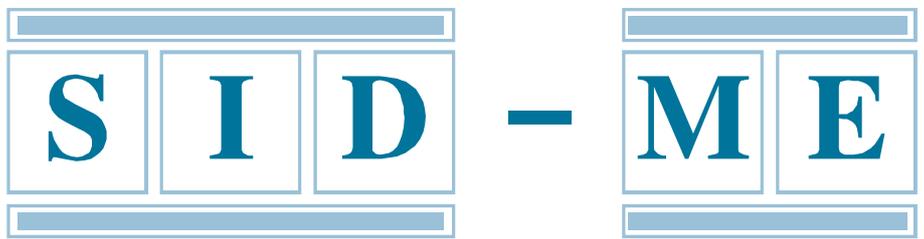
Dr. A. Wedel (vice-chair),
Fraunhofer Institute for Applied
Polymer Research, Geiselberg-
strasse 69, D-14476 Potsdam-
Golm, Germany.
Tel.: +49 331 568 1910
Fax: + 49 331 568 3910
E-mail:
armin.wedel@iap.fraunhofer.de

Prof. Dr. H. De Smet (secretary),
Ghent University, Technologiepark
914A, B-9052 Zwijnaarde, Bel-
gium.
Tel.: +32 9 264 5363
Fax: +32 9 264 5374
E-mail:
herbert.desmet@elis.ugent.be

J. Rasp (treasurer), FPExperts,
Alpenstrasse 12, Postfach 1208,
D-85619 Feldkirchen, Germany.
Tel.: +49 89 203 52667
Fax: +49 89 203 52661
E-mail: jutta.rasp@fpexperts.com

Additional members of the SID-ME Chapter committee are:

Dr. G. Oversluizen (director SID-ME chapter), Philips Research,
Prof. Holstlaan 4, 5656 AA, Eind-
hoven, The Netherlands.
Tel.: +31 40 2747715
Fax: +31 40 2746321



SOCIETY FOR INFORMATION DISPLAY

E-mail:
gerrit.oversluizen@philips.com
Dr.-Ing. N. Frühauf, Universität
Stuttgart, Allmandring 3B, D-70550
Stuttgart-Vaihingen, Germany,
Tel.: +49 711 685 66922
Fax: +49 711 685 66924
E-mail: norbert.fruehauf@fbf.uni-
stuttgart.de

Lic. Tech. J. Kimmel, Nokia
Research Center, P.O. Box 1000,
FIN-33721 Tampere, Finland.
Tel.: +358 7180 35484
Mobile: +358 50 48 35484
Fax: +358 7180 35322
E-mail: jyrki.kimmel@nokia.com

Dr. Michael E. Becker, Display-
Metrology & Systems, Marie-
Alexandra Str. 44, D-76135
Karlsruhe-Germany.
Tel./Fax: +49 721 981 2268
E-mail:
m.becker@display-metrology.com

Dr. W. Becker, Merck KgaA,
Frankfurter Str. 250, D-64293
Darmstadt, Germany.
Tel.: +49 6151 72 7360
Fax: +49 6151 72 3132
E-mail: werner.becker@merck.de

Prof. Dr. P. Maltese, University La
Sapienza, Via Marmorata 169,
I-00153 Roma, Italy.
Tel.: +39 644 585 428
Fax: +39 647 42 647

Dr. M. Schadt, MS High-Tech
Consulting, Liestalerstrasse 77,
CH-4411 Seltisberg, Switzerland.
Tel.: + 41 61 911 9933
Fax: + 41 61 913 9270
E-mail: martin.schadt@rolic.com

Dr. D. Theis, Siemens AG,
Tel.: +49 89 636 40550
Fax.: +49 89 636 40554
E-mail:
dietmar.theis@siemens.com

Dipl.-Ing. F. Rochow, LMT
Lichtmesstechnik GmbH, Helm-
holtzstrasse 9, D-10587 Berlin,
Germany.
Tel.: +49 30 393 40 28
Fax: +49 30 391 80 01
E-mail: rochow@lmt-berlin.de

Prof. Dr. A. van Calster, Ghent
University, Technologiepark 914A,
B-9052 Zwijnaarde, Belgium.
Tel.: +32 9 264 5364
Fax: +32 9 264 5374
E-mail: vancalster@elis.ugent.be

SID PAYMENT

The SID annual membership fee amounts US\$ 75. Please note that the membership is a rolling membership, which means that it runs 12 months from the month in which the payment was made. For more information see the SID website www.sid.org.

We encourage our members to pay directly to SID-HQ in the USA, but if they want to pay to the ME-Chapter directly the annual fee should be EUR 70 **with all bank fees covered by the member!** Please note that due to the change in the US dollar/Euro exchange rate SID-MEC has reevaluated the membership fee.

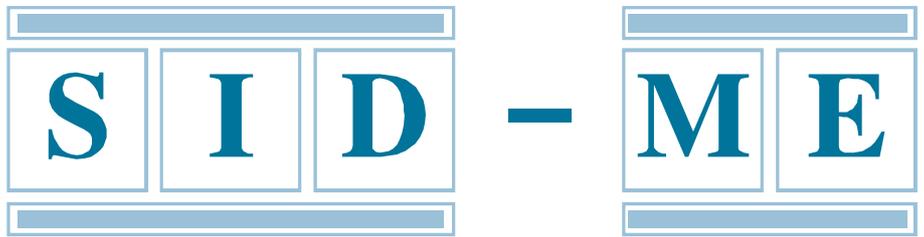
In case of direct payment to the SID-ME Chapter the payment in EURO should be done to

Account no.: 206 020 1104

Bank: Berliner Sparkasse,
Berlin, Germany

Bank code: BLZ 100 500 00

Account name:
Frank Rochow, SID-ME



SOCIETY FOR INFORMATION DISPLAY

Please indicate your name on the remittance papers.

THE NEWSLETTER

If you want to place an article in the Newsletter, which is interesting for the European Display Society, please send it to:
armin.wedel@iap.fraunhofer.de

The Newsletter in the electronic or printed form.

In the previous newsletter distribution we have included a form with which readers could declare their desire to continue to receive the newsletter in printed form. All readers that didn't respond would automatically be removed from the printed distribution list and only receive the electronic version.

February 2008

NEWSLETTER 23