



MEETING NOTICE & INVITATION  
Pacific Northwest Chapter • Society for Information Display

## ***Light-Field, Holographic and Volumetric Display Measurements***

**Adi Abileah**

President, Adi-Displays Consulting

**Wednesday, February 22nd - 6:00 P.M.**

PLANAR Systems (headquarters)  
1195 NW Compton Dr.  
Beaverton, OR 97006 (503) 748-1100

### **Abstract**

The measurements of Field of Light Displays (FoLD) generate a measurement challenge. These type of displays (Lightfield, Holographic and Volumetric - 3D without eyeglasses) have images in space, and the focusing of the measurement devices has to meet these conditions. The whole space has to be mapped and characterized. Critical measurements include depth sensitivity and resolution. Some tests are based on the IDMS1 standard (modified). New methods have been developed for the challenging tests: depth sensitivity and resolution. The present talk is based on an Airforce SBIR project phase I. These days a phase II project is taking place, where a prototype test system is being built.

### **Speaker Biography**



Adi Abileah retired from Planar (chief scientist), and is doing consulting jobs in the last three years. His main activity is related to the development of active matrix liquid crystal displays, physics and optics of the displays of several technologies, backlights and enhancement techniques.

Adi has degrees in physics (BSc- Technion, Haifa, Israel; & MSc-plasma physics -Hebrew Univ., Jerusalem), and a two years research work at the university on high power CO<sub>2</sub> lasers.

He developed soil mechanics density sensors at the Negev Institute. His first industry job was in medical imaging (Nuclear Medicine) at Elscint, Israel. He was the head of the electro-optics group at Elbit for several years, and then the manager of EL-OP north branch R&D center in Haifa, Israel.

In 1987 he joined OIS - Optical Imaging Systems in Michigan where he became the manager of the optics group and responsible for all related topics in the development of AMLCDs. During this period he became expert in the optics of AMLCDs, testing techniques and liquid crystals physics. He served at OIS until the company closed at 1998 and then joined Planar Systems as Chief Scientist during a period of 14 years.

Adi has 45 US patents, mostly related to displays, backlights, 3D-stereo and in-cell optical sensors. He presented many technical papers at SID, SPIE, and OSA conferences, and gave several seminars at SID. Adi is a SID Fellow (2005), and got the Otto Schade Award (2012). Since 2008 he is the Pacific Northwest (PNW) chapter director. He served as program chair and co-chair for ADEAC conferences and five LatinDisplay/IDRC conferences. He is chairing the 3D sub-committee of ICDM standards group, and is an assoc. editor for J-SID. Adi is a member of the Applications subcommittee of SID.

### **Seminar**

The Seminar is free. Please join the speaker for a no-host dinner after the seminar. Directions to the restaurant will be provided at the seminar. Non-Members are welcome. RSVP to Gary Johnson at [Gary.Johnson@tek.com](mailto:Gary.Johnson@tek.com) or (503) 627-1985. Please indicate if you plan to participate in the dinner.

The Pacific Northwest Chapter of the Society for Information Display was established for the following purposes:

- To support the activities and purposes of SID.
- To encourage and contribute to the scientific and educational advancement in the field of information display and to promote its use.
- To provide forums for the exchange and dissemination of ideas and knowledge relating to the field of information display.

The Executive Committee of the Pacific Northwest Chapter consists of:

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