



## IEEE SF Bay Area MEMS and Sensors Chapter

<http://sites.ieee.org/scv-mems/>

### Innovative Pressure Sensing Solutions



**Speaker:** Holger U. Doering, Chief Operating Officer, Silicon Microstructures Inc.

**Date/Time:** Wednesday, Nov. 19th 2014, 7:45pm to 8:45pm

**Location:** Qualcomm, Building B, Room 132, 3165 Kifer Road, Santa Clara, CA 95051

**Food:** Complimentary food and refreshments will be served at 7:15 pm.

**Sponsor:** SoftMEMS [www.softmems.com](http://www.softmems.com)



**Abstract:** Silicon Microstructures Inc (SMI) is a premier semiconductor sensor company developing and manufacturing MEMS-based pressure sensors for automotive, medical, and industrial markets. It has a long history rooted in Silicon Valley since 1991. This talk will present the recent developments in pressure sensor R&D and production at SMI. It will cover the following aspects:

- 1) Company overview on products, R&D and Manufacturing capabilities
- 2) DRIE etch is essential for pressure sensor miniaturization. This talk will present SMI ultra-small pressure sensor development with DRIE process.
- 3) Automated Optical Inspection (AOI) for defect detection in MEMS devices. This talk will cover the application criteria and inspection capabilities.

**Biography:** Holger Doering is the Chief Operating Officer (COO) at Silicon Microstructures Inc (SMI). He joined SMI in 2007 as a Consultant in Operations, then took over the VP Operations position in 2008 and was promoted to COO in 2011. He is responsible for Production, Process Engineering, IT, Assembly, Test, and Facilities Management. He started at ELMOS in 1995 as a Process Engineer and became Production Engineering Manager in 1997. From 1999 he was responsible for Production, Process Engineering and Equipment Maintenance in the Plasma-Module of the ELMOS fab. In 2003 he began to transfer the 0.8  $\mu\text{m}$  process from the 6-inch fab in Dortmund to the 8-inch line of the joint ELMOS/ Fraunhofer IMS fab in Duisburg and in 2005 became responsible for the complete 8-inch Operations in Duisburg.

Holger holds a diploma in Electrical Engineering from the University of Dortmund (Germany) with a focus on semiconductor manufacturing. His diploma thesis work was carried out at ELMOS in 1994 where he developed a CMOS-compatible process module to produce monolithic integrated piezoresistive pressure sensors in a EU-funded project.