

Curriculum Vitae

Prof. Dr.-Ing. Dr. rer. nat. habil. Harald Schenk



Education

- 1990-1996 Studies of Physics at the Julius-Maximilians-University in Wuerzburg, Germany
Focus: Solid-state physics
- 1997-1999 research work on PhD thesis
Fraunhofer Institute for Microelectronic Circuits and Systems, Dresden branch
- 2000 PhD degree from the Gerhard-Mercator-University in Duisburg, Germany, rating: *with distinction*
Title of PhD thesis: „A novel micro actuator for 1D and 2D deflection of light“
VDE dissertation award North Rhine-Westphalia

Habilitation and Venia Legendi

- 2008 Habilitation in Physics at Brandenburg University of Technology Cottbus
Topic of habilitation: „Silicon based microoptical modulators“
Awarding of Venia Legendi in Physics

Professional experience

- 1997-1999 Research Associate (Doctoral Candidate) at Fraunhofer Institute for Microelectronic Circuits and Systems, Dresden branch
Focus: Development of a CMOS-compatible process for light-deflecting elements, characterization and modeling, development of acceleration sensors
- 2000-2002 Establishment and leadership of Group „Scanning Micro Mirrors and Inertial Sensors“ at Fraunhofer Institute for Microelectronic Circuits and Systems, Dresden branch
Focus and tasks:
- Technology development for the production of micromechanical components
 - Design, modeling, and characterization of micro scanning mirrors and inertial sensors (acceleration sensors and gyroscopes)
 - Acquisition and project lead
- 2002-2005 Leadership of department „Micro Actuator Systems and Technology “ at Fraunhofer Institute for Microelectronic Circuits and Systems, Dresden branch
Focus and tasks:
- Technology development for the production of CMOS driver circuits

- Program Manager for SLM development for Micronic Laser Systems, completion of development including qualification. The SLM component is currently used by Micronic Laser Systems (Sweden) in commercially available laser-based mask writers for the semiconductor industry.
- 2004-2013 Deputy director of Fraunhofer Institute for Photonic Microsystems
since 2005: Head of business unit "Micro Scanner Devices"
- 2006 Co-founder and shareholder of HiperScan GmbH, authorised officer until 2008
The spin-off from Fraunhofer Institute for Photonic Microsystems is engaged in spectral sensing for material analysis
- since 2012 W3 Professor of "Micro and Nanosystems" (Physics) at the Brandenburg University of Technology Cottbus-Senftenberg (BTU)
- since 2013 Director of Fraunhofer Institute for Photonic Microsystems (approx. 450 employees at four locations; Saxony, Thuringia, Brandenburg)
- since 2022 Executive Director IPMS

Publications

More than 200 scientific publications, 28 issued patents

Memberships

SPIE-member

VDI/VDE-member

Services in the scientific community

- Associate Editor of the journal „Journal for Micro/Nanolithography, MEMS and MOEMS“
- Associate Editor of the journal „Journal of Optical Microsystems“
- Symposium Co-Chair „MOEMS/MEMS“, Symposium Chair, 2009-2010
- Symposium Chair „MOEMS/MEMS“, Part of Photonics West, 2011- 2013
- Conference Chair „MOEMS Display and Imaging“, Part of SPIE Photonics West Symposium „MOEMS/MEMS“ (2005 - 2011)
- Co-Chair of IEEE conference "Optical MEMS and Nanophotonics", 2011
- Program Chair of IEEE conference "Optical MEMS and Nanophotonics", 2021
- Steering Committee member of IEEE conference "Optical MEMS and Nanophotonics"
- Program Committee member of conference „MEMS, MOEMS and Micromachining“, part of SPIE Photonics Europe
- Chair 14th international Workshop on Micromachined Ultrasonic Transducers (MUT), Dresden (2015)
- Tutorial Chair „International Conference IC Design and Test“, 2021
- Member of DFG review board (electrical engineering and information technology, field 408-01: electronic semiconductors, components & circuits), 2018-2020
- Speaker of Graduate Research School Clusters "Functional Materials and Layer Systems for efficient energy conversion (Fusion)" of BTU Cottbus-Senftenberg, 2016 – 2019