

Curriculum vitae

Name, Date of birth: Herbert Zirath, 550320-5097

Affiliation: Microwave Electronics Laboratory, Department of Microtechnology and Nanoscience (MC2), Chalmers University of Technology

1-4 Education and degrees

- Docent, 1992, Chalmers University of Technology
- PhD in Electrical and Computer Engineering, 1986-09-28, Chalmers University of Technology
- MSc in Electrical Engineering, 1980, Chalmers University of Technology

5. Current and previous positions

- 2001 – : Head of the Microwave Electronics Laboratory (MEL) at MC2, with more than 50 employees including research associates. <http://www.chalmers.se/mc2/EN/laboratories/microwave-electronics>
- 1996 – : Professor in high speed electronics at Chalmers; full professor since June 2000.
- 1995 – : Part-time employed at the Microwave and High Speed Technology Research Center (MHSERC) at Ericsson AB. Technical expert on microwave circuits.
- 1993 – 1995: Research manager (biträdande forskningschef) at the National Defense Research Establishment, Department of Information Technology.
- 1992 – 1996: Docent, Department of Microwave Technology, Chalmers
- 1989 – 1992: Researcher at Teknisk Elektronfysik, Chalmers
- 1980 – 1989: Research assistant at Elektronfysik 1, Chalmers

Distinctions, scholarships and awards

Fellow IEEE 2011, Research fellow at Caltech Pasadena 1998, Saab Scania Award 1987, Best paper award at CSICS 2004 Monterey, USA. Best (student) paper award at Proc.EuMC2004 Amsterdam B. Motlagh, H. Zirath, and S. Gevorgian, #2 best student paper contest award Sten Gunnarsson, Herbert Zirath, IEEE IMS 2005. Best student paper Klas Ericsson, Herbert Zirath, MIKON 2012.

7 Supervising experience

Supervisor for Niklas Rorsman, Mikael Garcia, Jörgen Stenarsson, Klas Yhland, Lars Bengtsson, Christer Karlsson, Christian Fager, Anders Mellberg, Vincent Desmaris, Stefan Davidsson, Kristoffer Andersson, Bahar Motlagh, Anowar Masud, Mattias Sudow, Sten Gunnarsson, Mattias Ferndahl, Willian Wu, Li-Han Hsu, Yogesh Karandikar, Morteza Abbasi

9 Publication statistics

Authored or co-authored 502 published journal and conference papers
number of citations: 3873. *H-index*: 31 (source: Google Scholar 2013-04-11).

Teaching experience

Experience from teaching at Master's level and doctoral courses 22 years on active microwave circuits, monolithic microwave integrated circuits, nonlinear circuits, semiconductor physics.

National and international assignments of importance

- Director of the Strategic Research Center HSEP (High Speed Electronics and Photonics), financed by SSF (60 MSEK) from 2003 to 2008.

- Director of the SSF High Speed Electronics program (ended 1999)
- Scientifically responsible for activities in CHACH (CHAlmers Center for High-speed technology, sponsored by NUTEK. CHACH ended in 2006.
- Scientifically responsible for activities in GHz Center financed by VINNOVA. GHzCenter started 2007.
- Member of the scientific advisory board for DIMES, at TU Delft.
- Member of the TFR (now VR) review board until 2000.
- Project leader for the national research project, NMP-4, with the purpose to start a research facility on fast three-terminal components based on III-V compounds for Stiftelsen MARI from 1986-1989.
- Member of the European Microwave Conference paper review board.
- Reviewer for various international scientific journals like IEEE Transactions of Microwave Theory and Techniques, IEEE Transactions of Electron Devices, IEEE Transactions on Circuits and Systems.
- Member of the Technical Program Committee of EuMIC, a conference within the European Microwave Week.
- Member of the ITRS Wireless Working Group
- TPC member of TWHM Topical Workshop on Heterostructure Microelectronics since 2007.
- Chairman of EuMIC 2008 Amsterdam. EuMIC is Europe's largest conference of Monolithic Microwave Integrated Circuits.
- TPC member of CSICS (Compound Semiconductor Integrated Circuits Symposium) from 2009.
- Member in IEEE MTT Adcom education subcommittee from 2009.
- TPC member of IEEE RFIC Symposium since 2010.
- Associate editor of IEEE Transaction for Microwave Theory and Techniques since 2010.
- Member of the Executive Committee for CSICS (Compound Semiconductor Integrated Circuits Symposium) from 2011

Innovation and outreach activities

- Founder of spin-off company Gotmic AB founded 2008 for commercialization of 60 GHz and E-band multifunction MMICs (www.gotmic.se), based on paper 8 in the publication list. Fast growing, today 7 employees and 9M\$ turn-over.
- 6 granted patents between 1998 and 2007. Examples are the resistive HEMT-multiplier, a 'zero-bias' diode (based on paper 3 in the publication list, now used in commercial satellite transponder systems by RUAG former Saab Space), as well as an antenna integrated HEMT-active mixer.
- Close cooperation within microwave R&D with industry and research institutes such as: Saab Microwave Systems AB, Ericsson AB, RUAG AB (former Saab Space AB), Omnisys Instruments AB, Sivers IMA AB, Comheat AB, Acreo, SP Sveriges Tekniska Forskningsinstitut, FOI, Mitsubishi Inc, OMMIC Inc, WIN Semiconductor Inc (Taiwan), NXP (The Netherlands), UMS (Germany/ France), Thales (France), Ammono (Poland), Infineon, Fraunhofer Institute IAF (Germany), Teledyne (USA), Jet Propulsion Laboratory (USA).