

EXHIBIT 1004

Peter Glösekötter

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Personal Information

Date of Birth: August 4, 1971, Ibbenbüren, Germany
Nationality: German
Marital Status: Married, one child

Professional Experience

Professor (W2), Department of Electrical Engineering and Computer Science

Münster University of Applied Sciences, since September 2006

Research Focus: Circuit architectures for emerging technologies, Embedded/SoC Design, Quantum Sensing

- Co-founder of the Institute for Energy and Process Technology, January 2014
- Winner of the EFRE-Stars NRW Prize 2022

Co-founder and Mentor, iEXERGY GmbH, since December 2011

Focus on the development of embedded systems for building automation

Design Engineer, Intel GmbH, Braunschweig, January 2003 - September 2006

Specialized in the design and implementation of high-speed interfaces, planning of tape-outs

Research Associate, University of Dortmund, January 1998 - January 2003

Research on Neuro-Fuzzy Systems and dynamic digital circuits

Educational Background

Ph.D. in Electrical Engineering, University of Dortmund, Germany

Dissertation: Resonant Tunnel Diodes and Heterobipolar Transistors in Dynamic Digital Circuits, July 2002

Diploma in Electrical Engineering, University of Dortmund, Germany

Diploma Thesis: Learning Methods for an Adaptive Neuro-Fuzzy Network, December 1997

Teaching and Research Activities

- Lecturer in the Master's program Engineering of Computers and Networks, University of Granada, Spain, since May 2012
- Lecturer at international summer schools and guest lectureships in Brazil and Spain
- Supervised 11 Ph.D. theses, 50 Master's theses, and 78 Bachelor's theses

Awards

- Intel Divisional Recognition Award for exceptional contributions to product development

Interests and Memberships

- Scaling of Embedded Systems, Wireless Sensor Networks
- Chair of the Nanotechnology Consortium NRW e.V.
- Member of IEEE Solid-State Circuits Society and IEEE Computer Society

Languages

German (Native), English (Fluent), Spanish (Fluent)

Grants and Funding

Throughout my career, I have demonstrated a strong ability to secure competitive funding for research and development projects, underscoring my leadership in advancing technology and innovation within my field. Below is a summary of significant grants I have been awarded as the Principal Investigator (PI):

- **QuantumMiniLabs:** Awarded by BMWK, €832,800.00 (My share: €416,400.00)
- **ECOPump (2024-2027):** Awarded by BMWK, €510,879.09
- **QuantumIRES (2023-2028):** Awarded by BMWK, €704,761.74
- **E2NVQ (2023-2025):** Awarded by HAW, €270,000.00 (My share: €90,000.00)
- **MicroLens (2023-2025):** Industry Partner, €177,423.10
- **OCQNV (2021-2023):** Awarded by BMBF, €1,770,000.00 (My share: €885,000.00)
- **RaQuEI (2021-2024):** Awarded by BMBF, €4,000,000.00 (My share: €947,053.33)
- **P-ZLS (2019-2022):** Climate Protection Competition, €800,000.00
- **Inhalor (2018-2021):** Industry Partner, €15,000.00
- **Spectro (2018):** Industry Partner, €7,400.00
- **Motion Analysis (2018-2019):** Schmiemann, €22,300.00
- **Kick-Point (2018):** Industry Partner, €5,950.00
- **QV Funds for PC (2018):** Presidency, €19,000.00
- **Surveillance Projects (2017-2018):** Industry Partner, €14,875.00 (per project)
- **Fellowship (2016-2017):** Awarded by Stifterverband, €41,000.00
- **Zinc-Air (2016-2019):** Leading Market Competition, €440,000.00
- **3D-Scanner (2016):** Industry Partner, €5,500.00
- **INT030 (2016):** Industry Partner, €2,300.00
- **Early Career Support (2015-2018):** MIWF, €150,000.00
- **Stirrer (2015-2017):** Awarded by BMBF, €74,700.00
- **Wihmo (2011-2014):** Awarded by INTERREG, €2,000,000.00
- **EXIST (2011-2014):** Awarded by BMWi, €580,000.00

Tentative Total Awarded: €14,122,238.93 (My share: €9,587,692.26)

This funding has supported a wide range of projects from foundational research in quantum sensing and embedded systems to practical applications in energy efficiency and nanotechnology. The outcomes of these projects have not only advanced the state of the art in their respective fields but have also contributed to the training and development of the next generation of engineers and researchers.

Publications, Conference Contributions, and Lectures

As a dedicated researcher and academic, I have contributed extensively to the field through a variety of publications, conference presentations, and invited lectures. Below is a selection of my work, showcasing the depth and breadth of my research activities:

Selected Articles in Scientific Journals:

- J. Pogorzelski et al., "Compact and Fully Integrated LED Quantum Sensor Based on NV Centers in Diamond," *Sensors* 2024, 24(3), 743. [Link](#)
- J. Homrighausen et al., "Edge-Machine-Learning-Assisted Robust Magnetometer Based on Randomly Oriented NV-Ensembles in Diamond," *Sensors* 2023, 23, 1119. [Link](#)
- J. Stegeman et al., "Modular low-cost 3D printed Setup for Experiments with NV centers in Diamond," *European Journal of Physics*, February 2023. [Link](#)
- A. Löchte et al., "Battery State Estimation with ANN and SVR Evaluating Electrochemical Impedance Spectra Generalizing DC Currents," *Appl. Sci.*, 2022, 12, 274. [Link](#)

Selected Conference Proceedings:

- A. Löchte et al., "Analysis of switching electronics for metal-air batteries," *2022 International Conference on Electrical, Computer and Energy Technologies (ICECET)*, Prague, Czech Republic.
- L. Horsthemke et al., "Highly Sensitive Compact Room Temperature Quantum Scalar Magnetometer," *SMSI 2020*, pp. 47-48. [Link](#)

Invited Lectures:

- "Embedded Systems – An example of how to deal with environmental resources," Departamento de Arquitectura Tecnológica de Computadores, Universidad de Granada, Spain, April 2011.
- "Aspects of Micro- and Nanosystems for Wireless Health Monitoring Applications," Universidad de Granada, Spain, September 2010.

Other Publications:

- I. Rojas et al., "Deep Learning Systems for the Classification of Cardiac Pathologies Using ECG Signals," June 2023. In book: *Bioinformatics and Biomedical Engineering*
- EFRE.NRW, "Podcast Series on Future Innovations: The Development of the Zinc-Air Battery," presented by Prof. Dr.-Ing. Peter Glösekötter. [Link](#)

This selection represents just a fraction of my ongoing commitment to advancing knowledge and technology in my field. For a comprehensive list of my publications and contributions, please refer to my full academic profile.

References

Available upon request.