

Curriculum Vitae

Profile

Product & Process Development
Materials Science | CAD Design & FEM Analysis
Forming Technology | Joining Technology
Programming | Prosthetics

R&D Experience

Head of Engineering, MRCT GmbH | Heuchelheim | ab 07/2025

- Mechanical and electrical system development in the field of cleanroom technology
- Standards-compliant design of clean air transport systems in the pharmaceutical and semiconductor industries
- Design of air and water circuits | Prototyping

Head of Research & Development, Schäfer Werke GmbH | Neunkirchen | 08/2023 – 06/2025

- Manager Business Development & Prototype Construction
- Development departments: Equipment Systems | Betzdorf & Container Systems | Ledec [CZ]

Team Leader Advanced Development, PROFIL Verbindungstechnik GmbH & Co. KG | Friedrichsdorf | 10/2017 – 07/2023

- Head of predevelopment team
- Supervision of research projects
- Design calculations and simulations
- Preparation and review of patent applications
- Tool design for fasteners
- Contact person for Sales, Manufacturing, Business Development, Application Engineering, and Service

Research Assistant, Institute of Forming Technology and Machines, Leibniz University Hannover | 01/2012 – 09/2017

- Group Leader Modeling | Forming & Joining Technology
- Team Leader Medical Technology | Prosthesis Development
- Project management | CAD & FE modeling, material characterization & programming
- International conferences

Research Assistant, Institute for Drive Systems and Power Electronics, LUH | 10/2010 – 01/2012

- Design of electronic circuits

Research Assistant, Baath University, Homs | 05/2008 – 03/2009

- Signal processing, image processing



Sales Engineer, Olympus Medical Systems | 09/2005 – 04/2008

- System installation and training of professionals

Academic Background

Ph.D. Mechanical Engineering – Biomedical Engineering, Leibniz University Hannover | 01/2012 – 07/2017

- Thesis: “Mapping of Prosthesis Migration and Development of a Partially Individualized Hip Prosthesis Cup Manufactured Using Forming Technology”

M.Sc. Mechanical Engineering – Biomedical Engineering, Leibniz University Hannover | 10/2009 – 06/2011

- Master's thesis: “Generation of a Valid Human Multibody Simulation Model”

Diploma Mechanical Engineering – Medical Engineering, University of Damascus | 10/2000 – 06/2005

- Final thesis: “Development of a Mechatronic System for Measuring Blood Pressure”

Further Education

Patent and Innovation Protection, University of Koblenz-Landau | 09/2021 – 05/2022

Further Activities

Professor, University of Applied Sciences Stralsund | 02/2024 – 09/2024

- Surface Technology & Biomaterials
- Technical Mechanics

Lecturer, Leibniz University Hannover | 02/2013 – 06/2017

- Application of FEM, especially in implants

School Education

High School Diploma | Dubai | 06/2000: Score: 1.0

Other Skills

FEM: DEFORM, Abaqus CAE, Simufact | CAD: Hypermesh, AutoDesk Inventor, NX-Siemens

IT: MS Office | Programming: Python

Languages: German (native proficiency) | English (professional working proficiency)

Annex – Miscellaneous Information

Patents

DE 19 17 6764.9	Self-piercing rivet & assembly
DE 10 2019 106 280.2	Method for fastening a fastening element
DE 10 2019 113 560.5	Self-piercing rivet & assembly
DE 10 2019 133 230.3	Fastening element
DE 10 2020 111 696.9	Functional element
DE 10 2020 118 262.7	Functional element
DE 10 2020 125 460.1	Self-piercing fastening element
EP 20 21 0680.3	Fastening element
EP 21 16 0968.0	Functional element
EP 21 18 4029.3	Functional element
EP 21 19 5465.6	Self-piercing fastening element
EP 21 21 5812.5	Functional element & assembly
DE 10 2021 103 979.7	Rivet element & assembly
DE 50 2021 004 212.6	Self-piercing functional element & assembly
EP 22 15 7483.3	Self-piercing functional unit & assembly
DE 10 2023 112 481.1	Self-piercing functional element
DE 10 2023 112 483.8	Functional element
EP 24 16 4485.5	Functional element
EP 24 16 4370.9	Self-piercing functional element
EP 24 17 8338.0	Functional element & assembly