


Reutlingen University


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School of Engineering

Faculty Profiles – Mechatronics


Name	Head of Study Programmes Prof. Dr.-Ing. Gernot Schullerus	
Contact Details	E-Mail: Gernot.Schullerus@Reutlingen-University.de Tel.: +49 7121 271-7045	
Teaching Areas	<p>Electrical Drives Control Laboratory</p> <ul style="list-style-type: none"> • Electrical drives and power converter control strategies • Optimal control of electrical drives • Energy efficient control of induction machines • Condition monitoring in drive systems <p>PLC Control Laboratory</p> <ul style="list-style-type: none"> • Systematic PLC software development • Computer aided debugging 	
Research Interests	<p>Subjects:</p> <ul style="list-style-type: none"> • Energy Efficient Operation of Asynchronous Machines • Condition Monitoring in Drive Systems • Development of Electronic Components for Applications in Drive Technology <p>Research projects:</p> <ul style="list-style-type: none"> • Model-Based Hierarchical Condition Monitoring • Development of a Riveting Process Using Electromagnetic Actuators <p>Industrial Projects:</p> <ul style="list-style-type: none"> • Automatic Parameter Identification for Asynchronous Machines • Evaluation of the Potential for Increasing the Efficiency of 3 Three-Phase Asynchronous Machines • Analysis of a Braking Method in 2Q Operation with V / f Characteristic Control • Parameter-Based Energy-Efficient Operation of an Asynchronous Machine for V / f Characteristic Control 	

	<ul style="list-style-type: none"> • Evaluation of the Potential for Efficiency Improvement of Three- Phase asynchronous machines 	
Publications (selected)	<ul style="list-style-type: none"> • Kärcher, Thomas; Schullerus, Gernot: Correlation-Based Condition Monitoring of a Roller Chain. In: Proceedings of the First World Congress on Condition Monitorings. London, 13.06. - 16.06., Seiten 1-12, 2017. • Borisevich, Alex; Schullerus, Gernot: Energy Efficient Control of an Induction Machine Under Torque Step Changes. In: IEEE Trans. On Energy Conversion 31 (4), 1295 - 1303, 2016. • Kärcher, Thomas; Schullerus, Gernot: Models for Roller Chain Condition Monitoring. In: Proceedings of the 13th International Conference on Condition Monitoring and Machine Failure Prevention Techniques. Paris, 10.10. - 12.10., Seiten 1-12, 2016. • Petereit, Bernd; Schlienz, Ulrich; Schullerus, Gernot; Sönmez, Ertuğrul: An Integrated Power Electronics Design Project. In: EPE 2016. ECCE Europe, 18th European Conference on Power Electronics and Applications, Karlsruhe, 5 -9 September, Seiten 1-10, 2016. 	
Education		
Employment History		

Name	Prof. Dr. rer. nat. Eberhard Binder	
Contact Details	E-Mail: Eberhard.Binder@Reutlingen-University.de Tel.: +49 7121 271-7028	
Teaching Areas	<p>Computer Engineering, Microcontrollers,</p> <p>Microcontrollers, Computer Engineering, Embedded Systems, Fundamentals of Electrical Engineering</p> <p>Micro Computer Laboratory</p> <p>Microcontrollers, Embedded Systems, Automobile Bus Systems, Automotive Informatics, System Simulation</p>	
Research Interests		
Publications		
Education		
Employment History		

Name	Prof. Dr.-Ing. Arnd Buschhaus	
Contact Details	E-Mail: Arnd.Buschhaus@Reutlingen-University.de Tel.: +49 7121 271-7072	
Teaching Areas	<ul style="list-style-type: none"> • Industrial robots • Production Automation • Mechanical Engineering • 3D-CAD 	
Research Interests	<ul style="list-style-type: none"> • Innovative robotic applications • Sensor based robot control • Accuracy improvement of industrial robots • Industrial robots in the I4.0 context • Human-robot-collaboration 	
Publications	<p>Peer-Reviewed (selection):</p> <ul style="list-style-type: none"> • BUSCHHAUS, A.; WAGNER, M.; FRANKE, J.: Inline Calibration Method for Robot Supported Process Tasks with High Accuracy requirements. In: IEEE (Hrsg.): IEEE International Conference on Advanced Intelligent Mechatronics: AIM 2017, 2017 pp. 682-687; Best Presentation Award • BUSCHHAUS, A.; KRUSEMARK, S.; KARLIDAG, E.; FRANKE, J.: Universal Fine Interpolation Algorithms for Accuracy Improvements of Industrial Robots. In: IEEE (Hrsg.): IEEE 8th International Congress on Ultra Modern Telecommunications & Control Systems: ICUMT 2016, 2016, pp. 356-362, Best Paper Award; Best Presentation Award • BUSCHHAUS, A.; APEL, N.; FRANKE, J.: Method for Vectorial Robot Movement Determination Enabling Accuracy Improvements. In: IEEE (Hrsg.): 2015 IEEE International Conference on Control, Automation and Robotics: ICCAR 2015, 2015, pp. 24–31, Best Presentation Award • BUSCHHAUS, A.; BLANK, A.; FRANKE, J.; ZIEGLER, C.: Highly Efficient Control System Enabling Robot Accuracy Improvement. In: Elsevier (Hrsg.): Procedia CIRP: 5th CIRP Conference on Assembly Technologies and Systems. CATS 2014, (Procedia CIRP), pp. 200–205 • BUSCHHAUS, A.; FRANKE, J.: Industrial Robots Accuracy Optimization in the Area of Structuring and Metallization of Three Dimensional Molded Interconnect Devices. In: NETO, P.; MOREIRA, A. P. (Hrsg.): Robotics in Smart Manufacturing: FAIM 2013. Heidelberg: Springer, 2013, pp. 179–190 	
Education	<ul style="list-style-type: none"> • 2018: Professorship for Industrial robots and production automation, Reutlingen University • 2017: Doctor's degree (Dr.-Ing.). summa cum laude, "Highly accurate, adaptive control and closed-loop control of robot-guided processes", Friedrich-Alexander-University Erlangen-Nuremberg 	

	<ul style="list-style-type: none">• 2006: Dipl.-Ing. Degree of Mechanical Engineering of Friedrich-Alexander-University Erlangen-Nuremburg
Employment History	<ul style="list-style-type: none">• 2006-2007: Patent attorney candidate, law firm RSW. Munich• 2007-2010: Design and project manager; Automation sector for the Automotive and Aerospace industry; KUKA Systems GmbH; Augsburg• 2010-2012: Research assistant in the area of handling and assembly technology, Institute for factory automation and production systems; Friedrich-Alexander-University Erlangen-Nuremburg• 2012-2017: Academic councillor; Member of the research group of Biomechatronics; Leader of the technology field of handling and assembly technologies, Institute for factory automation and production systems; Friedrich-Alexander-University Erlangen-Nuremburg


Name	Prof. Dr.-Ing. Prof. e.h. (NMU) Gerhard Gruhler	
Contact Details	E-Mail: Gerhard.Gruhler@Reutlingen-University.de Tel.: +49 7121 271-7048	
Teaching Areas	<ul style="list-style-type: none"> • Robotic Systems • Robotic Systems Laboratory • Electronics Laboratory • Creative System Design • Elements of Production Automation 	
Research Interests	<ul style="list-style-type: none"> • Robotic Systems • Assembly Technology • Fieldbus Technology • CAN • Remote Control and Remote Maintenance via the Internet • eLearning • Creative System Design 	
Publications	more than 90 publications in above areas	
Employment History	Robert Bosch, Industrial Equipment Division, since 1990 at Reutlingen University, Currently full-time Vice President (Research) of Reutlingen University	


Name	Prof. Dr.-Ing. Christoph Haslach	
Contact Details	E-Mail: Christoph.Haslach@Reutlingen-University.de Tel.: +49 7121 271-7059	
Teaching Areas	<ul style="list-style-type: none">• Digital Signal Processing Laboratory	
Research Interests		
Publications		
Education		
Employment History		

Name	Prof. Dr.-Ing. Eckhard Henning	
Contact Details	E-Mail: Eckhard.Hennig@Reutlingen-University.de Tel.: +49 7121 271-7129	
Teaching Areas	<ul style="list-style-type: none"> • Digital Engineering (Mechatronics Bachelor, 2nd Semester) • Computer-Aided Design of Digital Circuits (Mechatronics Bachelor, 3rd Semester) • Modeling and Simulation of Heterogeneous Systems (Mechatronics Bachelor, 4th Semester) • Design of Integrated Mixed-Signal Circuits (DIAS-II) (Power- and Microelectronics Master, 2nd / 3rd Semester) • Project: Design of a Performance- / Microelectronics System (Power- and Microelectronics Master, 2nd Semester) • ZEBRA - Technical Origami and Other Scientific Wild Animals for Engineers • Digital Circuit Technology Laboratory 	
Research Interests	<ul style="list-style-type: none"> • Design Methodology for Microelectronic Circuits and Systems • Low-Power-CMOS-Circuit Technology for Integrated Sensor Systems • Intelligent, Integrated Multisensors • Technical Origami 	
Publications (Selection)	<ul style="list-style-type: none"> • G. Gläser, G. Nitsche, E. Hennig, "Temporal Decoupling With Error-Bounded Predictive Quantum Control", in R. Drechsler, R. Wille (eds.), <i>Languages, Design Methods, and Tools for Electronic System Design</i>, Lecture Notes in Electrical Engineering 385, Springer International Publishing Switzerland, 2016, pp. 125-147 • G. Gläser, G. Nitsche, E. Hennig, "Temporal Decoupling With Error-Bounded Predictive Quantum Control", FDL 2015, Barcelona, Sept. 2015 • B. Saft, E. Schäfer, A. Rolapp, E. Hennig, "An Ultra-Low Power Capacitance Extrema and Ratio Detector for Electrostatic Energy Harvesters", 41st European Solid-State Circuits Conference (ESSCIRC 2015), Graz, Sept. 2015 	
Education	<ul style="list-style-type: none"> • 1989-1994: Dipl.-Ing. Electrical Engineering, TU Braunschweig 	
Employment History	<ul style="list-style-type: none"> • 1995: Research assistant at the Center for Microelectronics at the University of Kaiserslautern 	


	<ul style="list-style-type: none">• 1996-2000: Research Assistant at the Fraunhofer Institute for Technological and Economic Mathematics (ITWM) , Kaiserslautern• 2000: Dr.-Ing., TU Kaiserslautern• 2000-2008: Development Engineer at Infineon Technologies AG , Munich• 2008-2015: Scientific Strategy Manager and Research Group Leader , IMMS Institute for Microelectronics and Mechatronics Systems, non-profit-making GmbH , Ilmenau• Since Aug. 2015: Professor for Digital Technology, Reutlingen University	
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Name	Prof. Dr. rer. nat. Stefan Mack	
Contact Details	E-Mail: Stefan.Mack@Reutlingen-University.de Tel.: +49 7121 271-7070	
Teaching Areas	<ul style="list-style-type: none"> • Electrical Measurement Technology (Lecture and Laboratory) • Sensor Systems (Lecture and Project Work / Laboratory) • Sensor Technology (Lecture and Laboratory) • Sensor Laboratory • Optoelectronics Laboratory 	
Research Interests	<ul style="list-style-type: none"> • Sensor Technology for Industrial, Automotive and Housing Technology • Optical and Optoelectronic Systems and Measurement Techniques • Time-of-Flight Measurement Technology • Optics- and System Simulation • Wireless Sensory Networks, Internet of Things, Industry 4.0 • Industrial Image Processing 	
Publications		
Education	<ul style="list-style-type: none"> • Dipl. Phys. at University of Heidelberg 	
Employment History	<ul style="list-style-type: none"> • Dr. rer. nat. at Max Planck Institute for Microstructure Physics / Martin Luther University in Halle (Saale). • MEMS Sensor Development Engineer at R. Bosch GmbH, Reutlingen • Central Research and Development of Optical Inspection Systems for Semiconductor Manufacturing at Carl Zeiss Jena GmbH • Industrial Sensors Development in the Field of Image Processing and Laser Measurement Technology at Sick AG, Waldkirch • Professor at Reutlingen University 	

Name	Prof. Dr.-Ing. Antonio Notholt	
Contact Details	E-Mail: Antonio.Notholt@Reutlingen-University.de Tel.: +49 7121 271-7031	
Teaching Areas	<ul style="list-style-type: none"> • Control Engineering • Control Systems • Renewable Energy 	
Research Interests	<ul style="list-style-type: none"> • Control of Off-Grid electrical power systems • Control of electrical networks • Coupling of electrical, gas and heat networks • Use of energy storage for ancillary services • Blockchain for the Energy sector 	
Publications		
Education	PhD – University of Kassel, Germany, MSc. – Loughborough University, UK, BSc. – ITESM Monterrey, Mexico	
Employment History	2012-2016: System Architect – Business Unit Off-Grid & Storage – SMA Solar Technology 2006-2011: Fraunhofer Institute for Wind Energy and Energy Systems Technology (IWES)	


Name	Prof. Dr.-Ing. habil. David Pouhè	
Contact Details	E-Mail: David.Pouhe@Reutlingen-University.de Tel.: +49 7121 271-7104	
Teaching Areas	Teaching areas: Fundamentals of Electrical Engineering, EM Field Theory, EMC and Physics of Semi-Conductors.	
Research Interests	Electromagnetic Field Theory, Antennas and Electromagnetic Compatibility Application of the Inverse Method and Homogenization theory to Electromagnetics, RCS, Antennas and Wave Propagation, EMC.	
Publications	http://www.tec.reutlingen-university.de/prof-pouhe/ausgewaehlte-publikationen-prof-pouhe/	
Education		
Employment History		

Name	Prof. Dr.-Ing. Ertuğrul Sönmez	
Contact Details	E-Mail: Ertugrul.Soenmez@Reutlingen-University.de Tel.: +49 7121 271-7081	
Teaching Areas	<ul style="list-style-type: none"> • Semiconductor Devices • Analog Circuit Design: Basics and Bipolar/MOS Integrated Circuits • Linear and Non-Linear Circuits using Operational Amplifiers 	
Research Interests	<ul style="list-style-type: none"> • GaN-Devices • Analog Integrated Circuits • GaN-based Integrated Power Electronics • New Resilient and Scalable Power Electronic Topologies 	
Publications	<p>Peer-Reviewed (selection):</p> <ul style="list-style-type: none"> • E. Sönmez, U. Heinle, I. Daumiller, M. Kunze, “Efficient Power Electronics for the price of Silicon - 3D-GaN Technology for GaN-on-Silicon,” PCIM Europe Conference, Nuremberg, Germany, May 2012. • E. Sönmez, U. Heinle, I. Daumiller, M. Kunze, “Efficient GaN Products for 600V Operation,” PCIM Europe Conference, Nuremberg, Germany, May 2011. • U. Heinle, P. Benkart, I. Daumiller, M. Kunze, E. Sönmez, “GaN Electrochemical Probes and MEMS on Si,” Proc. of Materials Research Society (MRS) Conference, San Francisco, USA, March 2008. • S. Chartier, E. Sönmez, J. Dederer, B. Schleicher, H. Schumacher, “Millimeter-Wave Si/SiGe HBT Frequency Divider Using Dynamic and Static Division Stages,” Asia-Pacific Microwave Conference (APMC), Bangkok, Thailand, December 2007. 	
Education	<ul style="list-style-type: none"> • 2014: Professorship for Semiconductor Circuits, Microelectronics, Reutlingen University • 2007: PhD degree (Dr.-Ing.) with highest honours, University of Ulm, Germany. 24GHz Multi-Functional MMICs using SiGe HBTs. • 1998: Dipl.-Ing. degree of Electrical Engineering, University of Ulm, Germany. Focus: Microelectronics 	
Employment History	<ul style="list-style-type: none"> • 2013–2014: Micronas GmbH, Innovation Center, Senior Manager, Freiburg, Germany. • 2006–2013: MicroGaN GmbH, Management Executive, Ulm. • 2005–2006: TES Electronic Solutions GmbH, Senior Engineer, Stuttgart. • 2005–2005: ATMEL Germany GmbH, Marketing Manager, Heilbronn. • 1998–2005: University of Ulm, Competence Center "Integrated Circuits in Communications" in “Institute of Electron Devices and Circuits”, Germany. Scientific staff member and teaching assistant. 	

Name	Prof. Dr. rer. nat. Matthias Räscht	
Contact Details	E-Mail: Matthias.Raetsch@Reutlingen-University.de Tel.: +49 7121 271-4046	
Teaching Areas	<ul style="list-style-type: none"> • Computational Intelligence • Machine Vision and Artificial Intelligence • Computer Science (Computer Science for Mechanical Engineers / Mechatronics) • Image Processing Laboratory 	
Research Interests	<ul style="list-style-type: none"> • Image Understanding, Machine Learning, Artificial Intelligence, Cyber-Physical Systems • Human-Machine Interaction, Human-Robot-Collaboration, Personalized Assistance & Service Systems, Non-Verbal Communication, Facial / Emotional / Body & Hand-Gesture Recognition and Animation • Shape from Shading (3D Morphable Models) and Structure from Motion for Face Modeling and Analysis • RGB-D & Monocular SLAM Procedures in Collaboration with BOSCH & TUM for Autonomous Navigation / Localization 	
Publications (selected)	<ul style="list-style-type: none"> • <i>Development</i> (ICCTD), <i>Journal of Computers</i>, vol. 11, no. 6, pp. 439-445 (JCP, ISSN: 1796-203X), Singapore. 2016. (journal award) • Huber, Z. Feng, W. Christmas, J. Kittler, M. Räscht. Fitting 3D Morphable Models using Local Features, <i>IEEE International Conference on Image Processing (ICIP)</i>, pp 1195 - 1199, 2015, Québec City, Canada ("top 10% paper award") [DOI: 10.1109/ICIP.2015.7350989] [IEEE] [Preprint PDF (arXiv)] [BMVA meeting slides] • Wittig, U. Kloos, M. Räscht. Animation of Parameterized Facial Expressions for Collaborative Robots, <i>Informatics Inside Conference for Human-Centered Computing</i>, pp 72-73. 2015 (award) • Huber, J. Kittler, M. Räscht. Bottom-up and Top-down Face Analysis based on 3D Face Models, <i>Informatics Inside Conference for Human-Centered Computing</i>, pp 138. 2014 (award) 	

Education	<ul style="list-style-type: none"> • 2013: Professorship for Image Understanding, Interactive Robotics, Computer Science, Reutlingen University • 2008: PhD at the Department of Computer Science of the University of Basel (Switzerland) - Work Group of Thomas Vetter (GraVis) - Face Analysis, 3D Morphable Models • 2002: Diploma in Computer Science at the Faculty of Mathematics and Natural Sciences, University of Potsdam • 1994: Mathematics, Physics and Computer Science at the University of Potsdam 	
Employment History	<ul style="list-style-type: none"> • 2008 – 2013: Cognitec Systems GmbH - World Leader in Face Analysis • 2007 – 2010: Research Assistant at the Konrad-Zuse-Center for Information Technology Berlin (ZIB) and Hochschule Neubrandenburg - Applied Mathematics • 2001 – 2003: WiSenT GmbH - Computer Vision, Machine Learning • 1999 – 2001: CONTEX Technology GmbH - Image Processing, Machine Learning <p>Stays abroad:</p> <ul style="list-style-type: none"> • 2003 – 2008: Switzerland • 1992 - 1993 Great Britain <p>Patents and Industrial Property Rights:</p> <ul style="list-style-type: none"> • DE195 33 585: Method for Segmenting Characters Based on det. Fin. Automats for Optimal Optical Text Capture. 	

Name	Prof. Dr. Jens Weiland	
Contact Details	E-Mail: Jens.Weiland@Reutlingen-University.de Tel.: +49 7121 271-7054	
Teaching Areas	<ul style="list-style-type: none"> • Embedded Software • Programming and Modeling Languages • Software Engineering • Operating Systems 	
Research Interests	<p>Subjects:</p> <ul style="list-style-type: none"> • Embedded Systems • Design Exploration für System/Software Architecture • Variant-Rich and Adaptive Systems • Model-Driven Software Development <p>Research projects:</p> <ul style="list-style-type: none"> • Embedded Simulink-based Product Line-Architectures (ESPA) • Virtual Commissioning of Variant-Rich Systems (VivaSys) <p>Industrial Projects:</p> <ul style="list-style-type: none"> • Handling of Software Variants • Refactoring of MATLAB Simulink Function Models • Reengineering of Embedded Software • Components for Variant Analysis and -Design • Evaluation of Adaptive AUTOSAR Components 	
Publications	<ul style="list-style-type: none"> • P. Manhart; J. Weiland: A Classification of Modeling Variability in Simulink. In: Proceedings of the 8th International Workshop on Variability Modelling of Software-intensive Systems (VaMoS) 2014, 22.-24. January 2014, Nice, France, 2014, pp. 40-47. • J. Möck; J. Weiland: Advancing Virtual Commissioning with Variant Handling. Workshop of the ASIM/GI-Expert Group STS and GMMS, 20.-21. February 2014, Reutlingen, 2014. • M. Schulze, J. Weiland, D. Beuche: Automotive Model-Driven Development and the Challenge of Variability. In: Proceedings of the 16th International Software Product Line Conference (SPLC), 02.-07. September 2012, Salvador, Brazil, 2012, Volume 1. ACM 2012, pp 207-214, 2012. 	


Name	Prof. Dr. rer. nat. Thorsten Zenner	
Contact Details	E-Mail: Thorsten.Zenner@Reutlingen-University.de Tel.: +49 7121 271-7030	
Teaching Areas	<ul style="list-style-type: none"> • General Communication Technology • Networked Control Systems • Fieldbuses • Wireless Networks • Data Security • Technical Communication Laboratory • Control Technology Laboratory 	
Research Interests	<ul style="list-style-type: none"> • Low-Energy Radio Systems • Battery-Operated Radio Systems 	
Publications		
Education		
Employment History		

Reutlingen University

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School of Engineering

Faculty Profiles – Micro and Power Electronics

Name	Prof. Dr.-Ing. Jürgen Scheible	
Contact Details	E-Mail: Juergen.Scheible@Reutlingen-University.de Tel.: +49 7121 271-7089	
Teaching Areas	<ul style="list-style-type: none">• Synthesis of Digital Circuits• Synthesis of Digital Circuits Laboratory• Algorithms of Design Automation• Layout Design of Integrated Circuits• Layout Design of Integrated Circuits Laboratory• Project: Chip-Design	
Research Interests	<ul style="list-style-type: none">• Constraint Driven Design Flow• Methods for Automating Layout Design• Electronic Design Automation	
Publications (selection)	<ul style="list-style-type: none">• Hald, J. Seelhorst, P. Herzogenrath, J. Scheible, J. Lienig: <i>A New Method for the Analysis of Movement Dependent Parasitics in Full Custom Designed MEMS Sensors;</i> Proc. of the 14th Int. Conf. on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD 2017), Giardini Naxos - Taormina, Italy, 12.-15.06.2017, ISBN 978-1-5090-5051-2. PDF, EDA Competition Award.• V. Borisov, K. Langner, J. Scheible, B. Prautsch: <i>A Novel Approach for Automatic Common-Centroid Pattern Generation;</i> Proc. of the 14th Int. Conf. on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD 2017), Giardini Naxos - Taormina, Italy, 12.-15.06.2017.• K. Langner, J. Scheible: <i>Formal Verification of a Transistor PCell;</i> Proc. of the 13th Conf. on Ph.D. Research in Microelectronics and Electronics (PRIME 2017), Giardini Naxos - Taormina,	


	<p>Italy, 12.-15.06.2017, ISBN 978-1-5090-6507-3, pp. 205-208.</p> <ul style="list-style-type: none"> • 	
Education	<ul style="list-style-type: none"> • 09/1987: Dipl.-Ing. Electrical Engineering, University of Karlsruhe (today "KIT") 	
Employment History	<ul style="list-style-type: none"> • 1987 - 1992: Scientific Employee, University of Karlsruhe • 12/1991: Dr.-Ing. Electrical Engineering, University of Karlsruhe • 1992 - 2010: Robert Bosch GmbH - Automotive Electronics <ul style="list-style-type: none"> ○ Technical Trainee (2 years) ○ Specialist ASIC Layout Design (4 years) ○ Project Manager Hybrid Layout (2 years) ○ Group Leader Pre-Development Microelectronics (3 years) ○ Head of ASIC Layout Design (7 years) • Since 2010: Professor for Electronic Design Automation at the rbz (Reutlingen University) • Academic Dean of the Study Program: Power and Microelectronics • Vice-Dean of the Faculty 	


Reutlingen University

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School of Engineering

Faculty Profiles – Mechanical Engineering


Name	Dean of the School of Engineering Prof. Dr.-Ing. Manuchehr Parvizinia	
Contact Details	E-Mail: Manuchehr.Parvizinia@Reutlingen-University.de Tel.: +49 7121 271-7000	
Teaching Areas	<ul style="list-style-type: none"> • Computational Fluid Dynamics (CFD) • Fluid Mechanics • Power and Work Machines • Fluid Mechanics Laboratory • Power and Work Machines Laboratory 	
Research Interests		
Publications		
Education	<ul style="list-style-type: none"> • 1990-1996: Dr.-Ing. at the Department of Jet- and Turbomachines at RWTH Aachen University • Diploma in Mechanical Engineering / Turbomachines at RWTH Aachen University • Diploma in Mechanical Engineering / Propulsion Systems at Aachen University of Applied Sciences 	
Employment History	<ul style="list-style-type: none"> • 2000-2004: Development Engineer in the "Steam Turbine Technology" Department at Siemens Power Generation, Siemens AG, Mülheim an der Ruhr <ul style="list-style-type: none"> ○ Support and Coordination of Research Projects, Development of Future Low-Pressure Turbines, Flow Simulations • 1996-2000: Project Engineer at BBP Environment GmbH, Gummersbach (formerly L.& C. Steinmüller GmbH, Gummersbach) <ul style="list-style-type: none"> ○ Calculation and Configuration of Steam Generators and their Components • 1990-1996: Scientific Employee at the Department of Jet- and Turbomachines at RWTH Aachen University <ul style="list-style-type: none"> ○ Working on Projects in the Field of Gas Turbine Cooling 	


Name	Head of Study Programmes Prof. Dr.-Ing. Hans-Gerhard Hertha-Haverkamp	
Contact Details	E-Mail: Hans.Hertha-Haverkamp@Reutlingen-University.de Tel.: +49 7121 271-7039	
Teaching Areas	<ul style="list-style-type: none"> • Dynamics I • Dynamics II • Dynamics III • Statics • Team Management 	
Research Interests		
Publications	<ul style="list-style-type: none"> • Markovic, Lj., Ruzic, D., Hertha-Haverkamp, H., Kardelky, C.: <i>Some Applications And Constraints Of The FEM Within The Modal Analysis Of The Structures</i>. Tagungsband Third Serbian (28th Yu) Congress Of Theoretical And Applied Mechanics, Vlasina Lake, Serbia, 2011 	
Education	<ul style="list-style-type: none"> • 1991: Dr.-Ing. at the Faculty of Mechanical Engineering, Department of Machine Dynamics at the University of Dortmund (TU) • 1983: Diploma in Mechanical Engineering at the Faculty of Mechanical Engineering of the University of Dortmund (TU) 	
Employment History	<ul style="list-style-type: none"> • 1996: Professor at Reutlingen University • 2003 – today: Lecturer at the DHBW • 1991 – 1996: Daimler-Benz AG, Car Calculation • 1985 – 1991: Scientific Employee in the Field of Machine Dynamics of the University of Dortmund (TU) 	


Name	Prof. Dr.-Ing. Volker Läßle	
Contact Details	E-Mail: Volker.Laepple@Reutlingen-University.de Tel.: +49 7121 271-7052	
Teaching Areas	<ul style="list-style-type: none"> • Fundamentals of Geometric Product Specification / Technical Drawing • Stress Analysis II • Structural Durability • Material Science and Material Testing 	
Research Interests	<ul style="list-style-type: none"> • ISO-GPS Standard System, Geometric and Dimensional Tolerances, Tolerance Management • Material Testing, Damage Analyzes, European and International Material Standardization • Calculations in the Field of Static Strength as well as Vibration- and Operational Strength 	
Publications	<ul style="list-style-type: none"> • Läßle, V., B. Drube, D. Wittke und C. Kammer: Werkstofftechnik-Maschinenbau Europa-Lehrmittelverlag 3. Auflage, 2012 • Läßle, V.: Wärmebehandlung des Stahls Europa-Lehrmittelverlag 10. Auflage, 2010 • Kammer, C., V. Läßle: Werkstoffkunde für Praktiker Europa-Lehrmittelverlag 7. Auflage, 2012 • Läßle, V.: Einführung in die Festigkeitslehre - Lehr und Übungsbuch Vieweg-Verlag 3. Auflage 2011 D1 -8 • Läßle, V.: Lösungsbuch zur Einführung in die Festigkeitslehre Vieweg-Verlag 3. Auflage 2011 	
Education	<ul style="list-style-type: none"> • 1997: Dr.-Ing. in Mechanical Engineering at the Federal Material Testing Department (MPA), University of Stuttgart • 1985 - 1990: Diploma in Mechanical Engineering at the University of Stuttgart 	
Employment History	<ul style="list-style-type: none"> • 2000: Professor at Reutlingen University • 1998 - 2000: Development of Anti-Blocking-Systems, in Particular Fatigue Testing at Robert Bosch GmbH in Schwieberdingen • 1997 - 1998 Project planning and project management at Ziemann GmbH, brewery plant construction in Ludwigsburg • Until 1997 Research associate at the State Materials Testing Institute (MPA) of the University of Stuttgart 	

Name	Prof. Dr.-Ing. Michael Lauxmann	
Contact Details	E-Mail: Michael.Lauxmann@Reutlingen-University.de Tel.: +49 7121 271-7132	
Teaching Areas	<ul style="list-style-type: none"> • Stress Analysis • Rapid Product Development • Numerical Structural Mechanics 	
Research Interests	<ul style="list-style-type: none"> • Biomechanics: Dynamics of Physiological and Pathological Hearing • Machine Dynamics • Moisture Transport and Microclimate in Control Units • Reliability of Power Electronics Control Units 	
Publications (Selection)	<p>Papers</p> <ul style="list-style-type: none"> • <i>Lauxmann, M.; Eiber, A.; Haag, F.; Ihrle, S.:</i> Nonlinear Stiffness Characteristics of the Annular Ligament. The Journal of the Acoustic Society of America, Volume 136, pp. 1756-1767, 2014, [http://dx.doi.org/10.1121/1.4895696]. • <i>Luers, J.C.; Pazen, D.; Meister, H.; Lauxmann, M.; Eiber, A.; Beutner, D.; Hüttenbrink, K.B.:</i> Acoustic Effects of a Superior Semicircular Canal Dehiscence: a Temporal Bone Study. European Archives of Oto-Rhino-Laryngology and Head & Neck, 2014, doi: 10.1007/s00405-013-2866-5. • <i>Ihrle, S.; Lauxmann, M.; Eiber, A.; Eberhard, P.:</i> Nonlinear Modelling of the Middle Ear as an Elastic Multibody System - Applying Model Order Reduction to Acousto-Structural Coupled Systems. Erweiterter Beitrag zum Sonderheft ACOMEN 2011, Journal of Computational and Applied Mathematics, Vol. 246, pp. 18-26, 2013, [http://dx.doi.org/10.1016/j.cam.2012.07.010]. • <i>Lauxmann, M.; Eiber, A.; Heckeler, C.; Ihrle, S.; Chatzimichalis, M.; Huber, A.; Sim, J.H.:</i> In-Plane Motions of the Stapes in Human Ears. The Journal of the Acoustic Society of America, Volume 132, No. 5, pp. 3280-3291, 2012, [http://dx.doi.org/10.1121/1.4756925]. 	
Education		
Employment History		


Contact Details	E-Mail: Helmut.Nebeling@Reutlingen-University.de Tel.: +49 7121 271-7051	
Teaching Areas	<ul style="list-style-type: none"> • Machine Tools • Machine Tools Laboratory • Control Technology (including Hydraulics) • Production Technology 	
Research Interests	<ul style="list-style-type: none"> • Design, Dimensioning and Optimization of Machine Tools, Components and Machining Processes • Integration of Intelligence in Processing Processes • Investigation and Calculation of Machine- and Process Properties • Design and Optimization of Machine Tools and Components • Design and Optimization of Production Facilities and Processes • Interaction between Structural Behavior and Control-Technology Influences • Investigation of Static and Dynamic Behavior • Analysis and Optimization of the Energy Efficiency and the Efficiency of Components and Production Processes 	
Publications	<ul style="list-style-type: none"> • Nebeling, P. H.: Increasing the accuracy in grinding process; International Journal of Mechatronics and Manufacturing Systems, P. 540-552, Vol. 4 No. 6, 2011. • Nebeling, P. H.: Steigerung der Genauigkeit bei der Schleifbearbeitung, in Tawakoli, T.: 8. Seminar Moderne Schleiftechnologie und Feinstbearbeitung 2010, Vulkan-Verlag, ISBN 978-3-8027-2957-7, Villingen-Schwenningen, 2010. • Spur, G.; Uhlmann, E.: Handbuch Fertigungstechnik, Kapitel Werkzeugschleifen, Hanser-Verlag, 2012. 	
Education	<ul style="list-style-type: none"> • Dr.-Ing. at the Department of Mechanical Engineering at RWTH Aachen University • Diploma in Mechanical Engineering at RWTH Aachen University 	
Employment History	<ul style="list-style-type: none"> • 2010: Professor at Reutlingen University • 2005 – 2009: Head of Design and Development at Walter Maschinenbau GmbH, Tübingen • 2001 – 2005: Head of Design and Development at Witzig & Frank GmbH, Offenburg • 1997 – 2001: Group Leader Development of EMAG Maschinenfabrik GmbH, Salach • 1992 – 1997: Scientific Employee at the Machine Tool Laboratory (WZL) at RWTH Aachen University 	

Name	Prof. Dr.-Ing. Thomas Reibetanz	
Contact Details	E-Mail: Thomas.Reibetanz@Reutlingen-University.de Tel.: +49 7121 271-7049	
Teaching Areas	<ul style="list-style-type: none"> • Mechanical Technology • Production Technology • Quality Management Systems • CAQ Laboratory • Digital Factory 	
Research Interests	<ul style="list-style-type: none"> • Simulation Technology (Factory Planning, Casting Simulation) • CAD / CAM • Quality Management 	
Publications		
Education	<ul style="list-style-type: none"> • 1994: Dr.-Ing. at the Department of Control Technology of Machine Tools and Production Plants at the University of Stuttgart • 1987: Diploma in Mechanical Engineering at the University of Stuttgart 	
Employment History	<ul style="list-style-type: none"> • 2000: Professor at Reutlingen University • 1996 – 2000: Head of Development at Thyssen Krupp Production Systems, Hüller Hille GmbH, Ludwigsburg^ • 1995 – 1996: Product Manager for CNCs at Daimler Benz Aerospace, Gelma Industrieelektronik GmbH, München • 1987 – 1994: Scientific Employee. at the Department of Control Technology of Machine Tools and Production Plants at the University of Stuttgart 	


Name	Prof. Dr.-Ing. Steffen Ritter	
Contact Details	E-Mail: Steffen.Ritter@Reutlingen-University.de Tel.: +49 7121 271-7024	
Teaching Areas	<ul style="list-style-type: none"> • Materials Science • Design Methodology • Fundamentals of Design • Polymer Engineering I / Plastics • Product Development Project <i>PEP</i> • Design Project / Project Work • R & D Project <p>Laboratories</p> <ul style="list-style-type: none"> • Injection Molding , EPI-Center 	
Research Interests	<ul style="list-style-type: none"> • Engineering Design • Polymer Engineering / Plastics • Plastic Injection Molding • Feasible Design of Polymer Components • 3D-Printed Tool Inserts / Fundamental Investigations 	
Publications	<ul style="list-style-type: none"> • Please see: http://www.tec.reutlingen-university.de/projekte/pep-produkt-entwicklungsprojekt/ 	
Education	<ul style="list-style-type: none"> • 2001: Dr.-Ing. at the Department of Mechanical Engineering at the University of Stuttgart • 1993: Diploma in Mechanical Engineering at the University of Stuttgart 	
Employment History	<ul style="list-style-type: none"> • 2010: Professor at Reutlingen University • 2001 – 2010: Head of Development at Mann+Hummel GmbH • 1999 – 2001: Founding of a Start-Up • 1998 – 2000: Head of Development and Quality at Paul Hartmann AG • 1994 – 1998: Scientific Employee at the Department of Polymer Engineering at the University of Stuttgart <p>Patents and Property Rights</p> <ul style="list-style-type: none"> • Several Patents as an Employee of Mann+Hummel GmbH • Patent# DE 195 18 898 C2 	

Name	Prof. Dr.-Ing. Bernd Thomas	
Contact Details	E-Mail: Bernd.Thomas@Reutlingen-University.de Tel.: +49 7121 271-7041	
Teaching Areas	<ul style="list-style-type: none"> • Technical Thermodynamics • Heat Transfer • Thermodynamics Laboratory • Heat Transfer / Heating Technology Laboratory 	
Research Interests	<ul style="list-style-type: none"> • Experimental Investigations of Mini-CHPP at the CHP Test Bench inside the Laboratory • Examination of Heat Pumps • Calculation and Design of Stirling Machines • Development of Thermal Engineering Calculation Models 	
Publications	<p>Papers: 2008-2012</p> <ul style="list-style-type: none"> • Glémot, A., Crest, M., Peregrina, C., Lebars, F., Briend, Y., Tsai, Y., Thomas, B.: "Technical and economic assessment of Micro-Cogeneration Technologies for sewage Biogas", Proc. of 4th International Symposium on Energy from Biomass and Waste, San Servolo, Venedig, 12.- 15.11.2012 (zur Veröffentlichung angenommen) • Thomas, B., Wyndorps, A.: "Efficiencies and emissions of a 192 kWel Otto engine CHP-unit running on biogas at the research station "Unterer Lindenhof", Engineering in Life Sciences - Special Issue: Bio-gas, Volume 12, Issue 3, WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim, Juni 2012, S. 306-312 • Thomas, B.: „Moderne Heiztechnik mit kleinen Blockheizkraftwerken“, Ingenieurspiegel 4/2011, Public Verlagsgesellschaft mbH, Bingen, 2011, S. 33-35 • Thomas, B.: "Mini-Blockheizkraftwerke - Grundlagen, Gerätetechnik, Betriebsdaten“, Monografie, Vogel-Buchverlag, Würzburg, 2. vollst. überarbeitete Aufl., 2011 • Thomas, B.: „GuD-Kraftwerk, Wärmepumpe und/oder KWK?“, BWK Bd. 63 (2011) Nr. 7/8, S. 55-62 • Thomas, B., Wyndorps, A.: "Monitoring of a 192 kWel Biogas CHP unit at the research station "Unterer Lindenhof"", Beitrag im Tagungsband „Int. Congress Progress in Biogas II“, Universität Hohenheim, 30.3.- 1.4.2011, S. 256-261 • Thomas, B.: "Einsatzmöglichkeiten von Blockheizkraftwerken in der Wohnungswirtschaft", wohnen 1.11 – Zeitschrift der Wohnungswirtschaft Bayern, ZdW Bay 1/2011, S. 4-9 	

	<ul style="list-style-type: none"> • Bemmann, U., Heß, J., Kramer, M., Thomas, B.: "Energie für Wohn- und Gewerbeobjekte", BWK Bd. 63 (2011) Nr. 1/2, S. 57-58 • Thomas, B.: "Der Primärenergiefaktor für Blockheizkraftwerke", BWK Bd. 62 (2010) Nr. 3, S. 50-54 • Thomas, B., Wyndorps, A., Bekker, M., Oechsner, H., Kelm, T.: „Bio- und Klärgas in Stirlingmotoren und Mikrogasturbinen“, EuroHeat&Power Report Blockheizkraftwerke 2010, EW Medien und Kongress GmbH, Frankfurt a.M., S. 44-50 • Thomas, B.: „Strom und Wärme von Mini- und Mikro-KWK-Anlagen: Status und Perspektiven“ Tagungsband, 15. Herbstseminar „Best Practice Energieeffizientes Bauen und Sanieren für Systemanbieter, Fachleute und Investoren“, Bern, 26.11.2009, S. 101-114 • Thomas, B., Wyndorps, A., Oechsner, H., Bekker, M., Kelm, T.: „Gekoppelte Produktion von Kraft und Wärme aus Bio-, Klär- und Deponiegas in kleinen, dezentralen Stirling-Motor- Blockheizkraftwerken“ Forschungsbericht FZKA-BWPLUS, März 2009 • Thomas, B.: „Mini- und Mikro-KWK/BHKW“ Buchbeitrag in „Energieeffizienz in Gebäuden, Jahrbuch 2009“, Pöschk, J. (Hrsg.), Verlag und Medienservice Energie VME, 2009, S. 275-281 • Thomas, B.: "Benchmark testing of Micro-CHP units", Applied Thermal Engineering 28 (2008), S. 2049-2054 • Thomas, B.: "Mini-BHKW – noch zu groß für Ein- und Zweifamilienhäuser ?", eBWK Bd. 60 (2008) • 	
Education	<ul style="list-style-type: none"> • 1992: Dr.-Ing. at the Department of Bio- and Chemical Engineering at the University of Dortmund • Diploma in Chemical Technology at the University of Dortmund 	
Employment History	<ul style="list-style-type: none"> • 1992 - 1997: Development Engineer in the Field of Heat Pumps at Viessmann Werke GmbH & Co. KG • 1988 – 1992: Scientific Employee at the Department of Thermodynamics at the University of Dortmund 	

Name	Prof. Dr.-Ing. Frank Truckenmüller	
Contact Details	E-Mail: Frank.Truckenmueller@Reutlingen-University.de Tel.: +49 7121 271-7100	
Teaching Areas	<ul style="list-style-type: none"> • Developmental Tendencies in Energy Technology • Fundamentals of Energy Conversion • Conventional and Regenerative Energy Technology • Energy Systems • Team Management 	
Research Interests	<ul style="list-style-type: none"> • ZIM Cooperation Network " Virtual Power Plant Neckar-Alb "; In Cooperation with Prof. Thomas • DEMONSTRATOR "Virtual Power Plant Neckar-Alb": http://www.virtuelles-kraftwerk-neckar-alb.de/demonstrator/ ; Under the Management of Ellen Schur 	
Publications	<ul style="list-style-type: none"> • W. Gerschütz, M. Casy, F. Truckenmüller: <i>Experimental Investigation of Rotating Flow Stabilities in the Last Stage of a Low-pressure Model Steam Turbine during Windag</i>. Proc. IMechE Vol. 219 Part A: J. Power and Energy 2005 • H. Stüer, F. Truckenmüller, D. Borthwick, J. D. Denton: <i>Aerodynamic Concept for very Large Steam Turbine Last Stages</i>. Proceedings of ASME Turbo Expo 2005, GT2005-68746, Reno-Tahoe, Nevada, USA <p>Patents and Property Rights</p> <ul style="list-style-type: none"> • CN000100353031C: Turbine Blade [E] • DE102010041808A1: Schaufelkranzsegment, Strömungsmaschine sowie Verfahren zur Herstellung [DE] • US020080145228A1: Aero-mixing of rotating blade structures [US] • EP000001760269A1: Lager und Dichtungsanordnung in einer Dampfturbine [DE] • EP000001598522B1: Dampfturbinen-Komponente und Verfahren zum Kühlen einer Dampfturbine sowie Verwendung [DE] 	
Education	<ul style="list-style-type: none"> • 2002: Dr.-Ing. at the Faculty of Energy-, Process- and Biotechnology at the University of Stuttgart • 1992: Diploma in Mechanical Engineering at the University of Stuttgart 	
Employment History	<ul style="list-style-type: none"> • 2012: Professor at Reutlingen University • 2009 – 2012: Siemens Energy, Mülheim (D) 	

	<ul style="list-style-type: none">• 2007 – 2009: ALSTOM Power Systems GmbH, Mannheim (D)• 2005 – 2006: Siemens-Westinghouse, Orlando (USA)• 1998 – 2004: Siemens Power Generation, Mülheim (D)• 1993 – 1998: Scientific Employee at the Institute for Thermal Turbomachines at the University of Stuttgart	
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Name	Prof. Dr.-Ing. Paul Wyndorps	
Contact Details	E-Mail: Paul.Wyndorps@Reutlingen-University.de Tel.: +49 7121 271-7050	
Teaching Areas	<ul style="list-style-type: none"> • M-CAE I • Machine Elements I • Machine Elements II • Design Project / Project Work • M-CAE II • CAE-Laboratory • CAD-3D Laboratory 	
Research Interests	<ul style="list-style-type: none"> • Design & Technical Calculations • Plant and Process Engineering- and Simulation • Technical Program Development • CAD Applications (Pro / ENGINEER, CREO) 	
Publications	<ul style="list-style-type: none"> • Wyndorps, P.: <i>3D-Konstruktion mit Pro/ENGINEER-Wildfire</i>, Auflagen 2004, 2005, 2008, 2010. • Wyndorps, P.: <i>3D-Konstruktion mit Creo Parametric</i>, 2012. <p>Patents and Property Rights</p> <ul style="list-style-type: none"> • DE10015089, GB2360732: Verfahren zum Herstellen von Porenbetonkörpern • DE10060982: Anlage zum Herstellen von Griffaschen oder dergleichen Ausnehmungen in einem ungehärteten Betonblock aus insbesondere Porenbeton 	
Education	<ul style="list-style-type: none"> • 1996: Dr.-Ing. at RWTH Aachen University • 1990: Diploma in Mechanical Engineering at RWTH Aachen University 	
Employment History	<ul style="list-style-type: none"> • 2000 – 2001: Head of Design (Mechanical Engineering) at DORSTENER MASCHINENFABRIK AG • 1997 – 2000: Vice Head of Design at SCHUMAG AG, Aachen • 1996 – 1997: Vice Head of Design at KIESERLING GmbH, Solingen • 1990 – 1991: Avocational Lecturer for Engineering Design at Aachen University of Applied Sciences • 1990 – 1995: Scientific Employee at the Institute for Machine Elements and Machine Design (IME) at RWTH Aachen University • 1984 – 1990: Student Worker at the Institute for Machine Elements and Machine Design (IME) at RWTH Aachen University 	

Reutlingen University


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School of Engineering


Faculty Profiles – Distributed Energy Systems and Energy Efficiency / Reutlingen Energy Center

Name	Head of Study Programme Prof. Dr.-Ing. Frank Truckenmüller	
Contact Details	E-Mail: Frank.Truckenmueller@Reutlingen-University.de Tel.: +49 7121 271-7100	
Teaching Areas	<ul style="list-style-type: none"> • Developmental Tendencies in Energy Technology • Fundamentals of Energy Conversion • Conventional and Regenerative Energy Technology • Energy Systems • Team Management 	
Research Interests	<ul style="list-style-type: none"> • ZIM Cooperation Network " Virtual Power Plant Neckar-Alb "; In Cooperation with Prof. Thomas • DEMONSTRATOR "Virtual Power Plant Neckar-Alb": http://www.virtuelles-kraftwerk-neckar-alb.de/demonstrator/ ; Under the Management of Ellen Schur 	
Publications	<ul style="list-style-type: none"> • W. Gerschütz, M. Casy, F. Truckenmüller: <i>Experimental Investigation of Rotating Flow Stabilities in the Last Stage of a Low-pressure Model Steam Turbine during Windag</i>. Proc. IMechE Vol. 219 Part A: J. Power and Energy 2005 • H. Stürer, F. Truckenmüller, D. Borthwick, J. D. Denton: <i>Aerodynamic Concept for very Large Steam Turbine Last Stages</i>. Proceedings of ASME Turbo Expo 2005, GT2005-68746, Reno-Tahoe, Nevada, USA 	

	<p>Patents and Property Rights</p> <ul style="list-style-type: none"> • CN000100353031C: Turbine Blade [E] • DE102010041808A1: Schaufelkranzsegment, Strömungsmaschine sowie Verfahren zur Herstellung [DE] • US020080145228A1: Aero-mixing of rotating blade structures [US] • EP000001760269A1: Lager und Dichtungsanordnung in einer Dampfturbine [DE] • EP000001598522B1: Dampfturbinen-Komponente und Verfahren zum Kühlen einer Dampfturbine sowie Verwendung [DE] 	
<p>Education</p>	<ul style="list-style-type: none"> • 2002: Dr.-Ing. at the Faculty of Energy-, Process- and Biotechnology at the University of Stuttgart • 1992: Diploma in Mechanical Engineering at the University of Stuttgart 	
<p>Employment History</p>	<ul style="list-style-type: none"> • 2012: Professor at Reutlingen University • 2009 – 2012: Siemens Energy, Mülheim (D) • 2007 – 2009: ALSTOM Power Systems GmbH, Mannheim (D) • 2005 – 2006: Siemens-Westinghouse, Orlando (USA) • 1998 – 2004: Siemens Power Generation, Mülheim (D) • 1993 – 1998: Scientific Employee at the Institute for Thermal Turbomachines at the University of Stuttgart 	

Name	Prof. Dr. Sabine Löbbe	
Contact Details	E-Mail: Sabine.Loebbe@Reutlingen-University.de Tel.: +497121271 – 7127, +491724162796	
Teaching Areas	<ul style="list-style-type: none"> • Energy Economics • Business Administration in the Energy Industry • Business Models in Distributed Energy Systems: Business Models and Marketing, Market Dynamics and Strategies • Energy Trading and risk management • Business Cooperation in the Energy Industry • Change management 	
Research Interests	<ul style="list-style-type: none"> • Development of Business Models in the Energy Industry in the Context of Decentralized Energy Systems and Energy Efficiency • Customer Preferences / Consumer Behavior in Private Households, in the Industry: <ul style="list-style-type: none"> ○ Energy Efficiency ○ Heating market ○ Prosumers / Energy Communities • Business Models and Strategies, Products and Services for Decentralized Energy Systems and Energy Efficiency, innovation processes • Success Factors for the Development and Realization of Strategies and Business Models in the Energy Industry 	
Publications (Selection)	<ul style="list-style-type: none"> • Jochum G, Löbbe S. <i>Thriving Despite Disruptive Technologies: A German Utilities' Case Study</i>, in: Sionshansi F (editor): <i>Future of utilities: Utilities of the future</i>, S. 323 – 341, Academic Press, Elsevier, Amsterdam, 2016. ISBN 9780128042496, http://dx.doi.org/10.1016/B978-0-12-804249-6.00017-8. ▪ Löbbe, S.; Hackbarth, A. (2017): <i>The Transformation of the German Electricity Sector and the Emergence of New Business Models in Distributed Energy Systems</i>, in: F. Sionshansi (editor): <i>Innovation and Disruption at the Grid's Edge - How distributed energy resources are disrupting the utility business model</i>, Edition: first, Chapter: 15, Elsevier, 9780128117637, pp.287-318 	

<p>Education</p>	<p>Prof. Dr. Sabine Löbbe lectures and researches at Reutlingen University of Applied Sciences on “Distributed Energy Systems & Energy Efficiency” since 02/2015. She is a member of “Reutlingen Energy Center Distributed Energy Systems & Energy Efficiency”. Her focus is on strategy development and business models in the energy industry, on marketing strategies and customer (household, industrial, commercial) behavior regarding energy issues. She is in the energy industry since 30 years. Prior to joining Reutlingen University, she ran her own consulting business, Löbbe Consulting, for 13 years and co-founded Utility Consulting Group (Germany). Prior to this, she was of Head of “Business development“ within swb AG Bremen, a once municipal utility, Senior Consultant at Arthur D. Little, Germany. She started her career at VSE AG Saarbrücken (regional utility), and Saarbrücken university. She holds a PhD and a Master in business administration from Universität des Saarlandes. She lectures at Hochschule HTW Chur, Switzerland and is a trained systemic consultant.</p>	
<p>Employment History</p>	<ul style="list-style-type: none"> • February 2015 onwards: Distributed Energy Systems and Energy Efficiency / Reutlingen Energy Center. See above for details • February 2002 until today: Löbbe Consulting. Owner. Main activities and responsibilities: Acquisition and realization of consulting mandates in strategy development, organizational development. • In Germany, Switzerland, Tunisia; Short term engagements in Uganda / Kenya (utilities) and D.R. Kongo (organizational development of GTZ bureau) • May 1997 – April 2001: swb AG, Saarbrücken Head of department “Business development”; proxy since 2000. Main activities and responsibilities : Strategy development and coordination of its realization, portfolio management, coordination and Integration of new businesses, Acquisition of participations etc. 	

Name	Prof. Dr.-Ing. Debora Coll-Mayor	
Contact Details	E-Mail: Debora.Coll-Mayor@Reutlingen-University.de Tel.: +497121271 – 7127, +491724162796	
Teaching Areas	<ul style="list-style-type: none"> • Basics on energy conversion technologies and energy supply systems • Integration of distributed energy and storage in the energy system • Distributed ledgers and blockchain applied to the energy sector • Energy and data management systems 	
Research Interests	<ul style="list-style-type: none"> • Application of new technologies to the energy sector and their business cases 	
Publications (selection)	ARTICLES IN PEER-REVIEWED JOURNALS / CONTRIBUTIONS TO BOOKS <ul style="list-style-type: none"> ▪ Coll-Mayor Debora, Schmid Jürgen. “Opportunities and barriers of high-voltage direct current grids: a state of the art analysis”. WIREs Energy & Environment. 2012, 1: 233-242. ▪ Coll-Mayor, D.; Pardo, D. and Perez-Donsion, M. “Methodology based on the value of lost load for evaluating economic losses due to disturbances in the power quality”. Energy Policy. 2012, vol. 50, issue C, pages 407-418. ▪ Coll-Mayor, D.; Notholt, A. “Application of smart-grid concept to islanded power systems: challenges and perspectives”. International Journal of Distributed Energy Resources. Volume 7, number 1, 41-56. 2011. PUBLISHED CONTRIBUTIONS TO CONFERENCES <ul style="list-style-type: none"> ▪ Castellanos, A.; Coll-Mayor, D. and Notholt, A. „Cryptocurrency as Guarantees of Origin: Simulating a Green Certificate Market with the Ethereum Blockchain” Published in Proceedings of the 5th IEEE International Conference on Smart Energy Grid Engineering (SEGE). Oshawa, Canada, 2017. 	
Education	2006 PhD in Electrical engineering “Effect of market-driven minigrids on the frequency stabilization process of isolated middle sized power grids” Kassel University (FB 16: Elektrotechnik/Informatik) 2007 Master degree in electronics engineering University of the Balearic Islands	


	1999 Master degree in mechanical engineering Politechnical University of Catalonia	
Employment History	<p>Sep.2015 to Spe. 2017 – Professor for Energy economics and technologies with the University of applied sciences in Mannheim</p> <p>Sep. 2011- Aug. 2015 Business Development Manager and Senior Expert Engineer for Smart Grids with the SMA Solar Technology AG</p> <p>Aug. 2010 – Aug. 2011 Different positions at the Fraunhofer Institute für Windenergie und Energiesystemtechnik (FhG IWES)</p> <p>März 2010 – Jul. 2010 Invited professor at the University of Kassel</p> <p>Sep. 2003 – Jul. 2012 Associate Professor with the University of Balearic Islands</p> <p>Sep. 2002 – Sep. 2003 Junior Professor with the University of Balearic Islands</p>	

Reutlingen University

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School of Engineering


Faculty Profiles – TEC

Name	Prof. Dr. rer. nat. Christian Höfert	
Contact Details	E-Mail: Christian.Hoefert@Reutlingen-University.de Tel.: +49 7121 271-7058	
Teaching Areas	<ul style="list-style-type: none">• Fundamentals of Mathematics• Numerics• Computer Science	
Research Interests		
Publications		
Education		
Employment History		

Name	Prof. Dr. Eckhard Letsch	
Contact Details	E-Mail: Eckhard.Letsch@Reutlingen-University.de Tel.: +49 7121 271-2033	
Teaching Areas	<ul style="list-style-type: none">• Mathematics for Chemists and Biomedical Sciences• Mathematics II for Mechatronics• Mathematics II Exercises• Mathematics• Mathematics Laboratory	
Research Interests		
Publications		
Education	<ul style="list-style-type: none">• Dr. of Mathematics• Diploma in Physics	
Employment History		

Name	Prof. Dr. rer. nat Barbara Priwitzer
Contact Details	E-Mail: Barbara.Priwitzer@Reutlingen-University.de Tel.: +49 (0)7121 271-7143
Teaching Areas	Mathematics for Engineers
Research Interests	Applications of Machine Learning
Publications	<p>Selection from peer-reviewed publications</p> <ol style="list-style-type: none"> 1. Barbara Priwitzer: <i>Mean curvature flow with Dirichlet boundary conditions in Riemannian manifolds with symmetries</i>, Ann. Global Anal. Geom. 23, 157-171 (2003) 2. I. Hofacker, B. Priwitzer, P. Stadler: <i>Prediction of locally stable RNA secondary structure for genome-wide surveys</i>. Bioinf. 20, 191-198 (2004) 3. Kerstin Lenk, Kay Barthold, Barbara Priwitzer, Olaf H.-U. Schröder: <i>Simulation of neuronal network without and with self-inhibition</i>, Proceedings of the 8th International Meeting on Substrate-Integrated Microelectrode Arrays 2012, Reutlingen, ISSN 2194-5519, p.109 4. Reinhardt, F.; Reichmann; Reckhardt, M.; Altmann, O.; Nitzsche, N.; Priwitzer, B.; Gerber, M.; Suchfort, M.: <i>Verlaufsbesonderheiten des akuten mikroangiopathischen Schlaganfalls, radiologische Beurteilungskriterien und posturale Stabilität als Trainingsziel</i>, Aktuelle Neurologie 41 (2), 90-99, 2014 5. Kerstin Lenk, Barbara Priwitzer, Laura Ylä-Outinen, Lukas H B Tietz, Susanna Narkilahti, Jari A K Hyttinen: <i>Simulation of Developing Human Neuronal Cell Networks</i>, BioMedical Engineering OnLine 15 (1), 2016, http://dx.doi.org/10.1186/s12938-016-0226-6 6. Tobias Steinmetzer, Ingrid Bönninger, Barbara Priwitzer, Fritjof Reinhardt, Markus Christoph Reckhardt, Dorothea Erk, Carlos M. Travieso: <i>Clustering of Human Gait with Parkinson's Disease by using Dynamic Time Warping</i>, 2018 IEEE International Work Conference on Bioinspired Intelligence (IWOBI), Costa Rica
Education	<p>1991 Diploma in Mathematics, Eberhard-Karls Universität Tübingen, Germany</p> <p>1991-1992 Academic stay at Lomonossov University, Moscow, Russia</p> <p>1995 Dr.rer.nat (mathematics) on "16-dimensional compact projective planes with large semi-simple groups", Eberhard-Karls Universität Tübingen, Germany</p>
Employment History	1995 – 1996 Birkhäuser Verlag, Basel, Switzerland

	<p>1996 – 2000 Research associate, Eberhard-Karls Universität Tübingen, Germany</p> <p>2001 – 2005 Software Engineer at Pattern Expert, Borsdorf (Sa.), Germany</p> <p>2006 – 2007 Teaching Fellow at Bath University, UK</p> <p>2007 – 2018 Professor for Intelligent Systems at Hochschule Lausitz/ BTU Cottbus – Senftenberg, Senftenberg, Germany</p> <p>Since 2018 Professor for Engineering Mathematics at Hochschule Reutlingen, Germany</p>	
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Name	Prof. Dr. Carsten Raudzis	
Contact Details	E-Mail: Carsten.Raudzis@Reutlingen-University.de Tel.: +49 7121 271-7128	
Teaching Areas	<ul style="list-style-type: none">• Physics• Physics Laboratory	
Research Interests	<ul style="list-style-type: none">• Reliability of Technical Products• Testing• Microsystems Technology• Electrical Measurement Technology• Heat Transport in Coating Systems	
Publications		
Education		
Employment History		