

CURRICULUM VITAE

Prof. DI Dr. Michael Krommer
as at March 2024



Head, Institute of Technical Mechanics
Johannes Kepler University Linz
Altenberger Strae 69, A-4040 Linz, Austria
phone: +43 732 2468 6281
e-mail: michael.krommer@jku.at

www.jku.at/en/institute-of-technical-mechanics-tmech/

Austrian citizen

Languages: German (mother tongue) and English (fluent)

Born in Linz, Austria

February, 20th, 1971

Married to Kimberly Lydia Krommer (4 children)

April, 3rd, 2003

1 Academic education

- **Habilitation in Technical Mechanics** *January, 2007*
Johannes Kepler University (JKU) Linz
- **Ph.D. in Technical Sciences** *April, 2001*
JKU Linz, (with honors)
- **Master of Engineering in Mechatronics** *November, 1996*
JKU Linz, (with honors)

2 Professional career

- **Interim Institute Head** *2023 to present*
Institute of Automatic Control and Control Systems Technology, JKU Linz
- **Member - Board of Directors** *2023 to present*
Linz Center of Mechatronics GmbH
- **Professor for Technical Mechanics & Institute Head** *2020 to present*
Institute of Technical Mechanics, JKU Linz
- **Professor for Mechanics of Solids** *2014 to 2019*
Research group for Mechanics of Solids, Institute of Mechanics and Mechatronics, TU Wien
- **Associate Professor** *2011 to 2014*
Institute of Technical Mechanics, JKU Linz
- **Area coordinator & adjunct key researcher** *2009-10 to 2014*
K2 Austrian Center of Competence in Mechatronics - Area 2: Mechanics and Model Based Control
- **Adjunct senior researcher** *2003 to 2009-9*
KPlus Linz Center of Competence in Mechatronics *2003 to 2008-8*
K2 Austrian Center of Competence in Mechatronics *2008-9 to 2009-9*

- **University assistant** 2000 to 2011
Institute of Technical Mechanics, JKU Linz
- **Lecturer** 1998 to 2000
Lecture *Selected Topics in Strength of Materials*, Institute of Technical Mechanics, JKU Linz
- **Research assistant** 1997 to 1999
FWF Project *Mechanics of Smart Structures*, Institute of Technical Mechanics, JKU Linz

3 Fellowships and awards

- **Upper Austrian Savings Bank-Science Promotion-Richard Büche Award** 2001
Awarded for best Ph.D. thesis at Faculty of Engineering and Natural Sciences, JKU Linz
- **MAX-KADE post-doctoral fellowship** July 2002 to June 2003
Awarded by the Austrian Academy of Sciences
Host institution: Department of Engineering Sciences and Mechanics, Pennsylvania State University (advisor: Prof. Vasundara V. Varadan)
- **Wilhelm Macke Award** 2004
Awarded by the Rotary Club Linz for outstanding scientific achievements

4 Scientific community service

4.1 Editorial work for international journals

- *Advisory Board Structural Control & Health Monitoring*, Wiley 2012 to 2022
- *Editorial Advisory Board Acta Mechanica*, SpringerNature 2013 to 2016 & 2020 to present
- *Co-Editor Acta Mechanica*, SpringerNature 2016 to 2020
- *Academic Editor Structural Control & Health Monitoring*, Wiley & Hindawi 2022 to present

4.2 Scientific associations / committees

- *Scientific Committee, International Conferences on Advanced Dynamics and Model Based Control of Structures and Machines* 2012 to present
- *Scientific Committee, International Symposia on Design, Modelling and Experiments on Adaptive Structures and Smart Materials* 2012 to present
- **European Association for the Control of Structures** 2012 to 2022
- **Austrian National Committee for Theoretical and Applied Mechanics** 2014 to present
- *Scientific Committee, Bi-Annual ECCOMAS Thematic Conferences on Smart Materials and Structures* 2015 to present
- *Board of Directors, International Association for Structural Control and Monitoring* 2016 to present
- *Board of Directors, European Association for the Control of Structures* 2022 to present

4.3 Workshops and conferences

- **3rd European Conference on Structural Control** July 2004
Member of the Organizing Committee, Vienna University of Technology, Austria
- **INTAS Strategic Scientific Workshop on Advanced Dynamical Modelling in Structural Control** July 2004
Member of the Organizing Committee, Vienna University of Technology, Austria
- **1st Japan-Austria Joint Workshop on Mechanics and Control of Smart Materials and Structures** September 2008
Member of the Organizing Committee, Johannes Kepler University Linz, Austria
- **Russia - Austria Joint Workshop on Advanced Dynamics and Model Based Control of Structures and Machines** April 2010
Member of the Organizing Committee, Johannes Kepler University Linz, Austria

- **5th International Symposium on Design, Modelling and Experiments of Advanced Structures and Systems** *October 2012*
Chair of the Organizing Committee, Ulrichsberg, Austria
- **2012 RAS-JKU-ACCM Joint Workshop on Advanced Dynamics and Model Based Control of Structures and Machines** *November 2012*
Chair of the Organizing Committee, Johannes Kepler University Linz, Austria
- **2nd International Conference on Advanced Dynamics and Model Based Control of Structures and Machines** *September 2015*
Co-chair of the Organizing Committee, Vienna, Austria
- **Symposium "200 Years of Mechanics at TU Vienna"** *November 2016*
Co-chair of the Organizing Committee, Vienna, Austria
- **4th International Workshop on Advanced Dynamics and Model Based Control of Structures and Machines** *September 2019*
Co-chair of the Workshop, Linz, Austria
- **Symposium "Mechatroniktag des Instituts für Mechanik und Mechatronik"** *November 2019*
Chair of the Organizing Committee, Vienna, Austria
- **Symposium "Austrian Mechanics Day 2020"** *December 2020*
Chair of the Symposium, Linz, Austria

4.4 Thematic mini-symposia and special sessions

- **Mini-Symposium "Sensor Systems for Structural and Health Monitoring"** *September 2008*
together with Yu. Vetyukov, 4th European Conference on Structural Control, St. Petersburg, Russia
- **Session "Coupled Problems"** *March 2010*
together with S. Kinkel, 81st Annual Meeting of the International Association of Applied Mathematics and Mechanics (GAMM 2010), Karlsruhe, Germany
- **Special Session "Piezoelectricity and its Applications to Structural Control and Health Monitoring"** *June 2012*
together with J. Gerstmayr, 5th European Conference on Structural Control (EACS 2012), Genoa, Italy
- **Special Session "Material Behaviour, Simulation and Testing of Controlled Smart Structures with Piezoelectric Actuators and Sensors"** *June 2013*
together with A. Benjeddou, 6th ECCOMAS Thematic Conference on Smart Structures and Materials (SMART 2013), Torino, Italy
- **Special Session "Global Approaches to Structural Monitoring and Control"** *July 2014*
together with H. Irschik and J. Holnicki-Sculz, 6th World Conference on Structural Control and Monitoring (6WC-SCM), Barcelona, Spain
- **Mini-Symposium "Piezoelectric Sensors, Actuators & Transducers for Structural Control and Health Monitoring"** *June 2015*
together with A. Benjeddou, 7th ECCOMAS Thematic Conference on Smart Structures and Materials (SMART 2015), Ponta Delgada, Azores
- **Thematic Session "Axially Moving Structures"** *September 2015*
together with Yu. Vetyukov, 3rd Polish Congress of Mechanics & 21st International Conference on Computer Methods in Mechanics (PCM-CMM-2015), Gdansk, Poland
- **Mini-Symposium "Mechanics and Model-Based Control"** *March 2016*
together with H. Irschik & K. Schlacher, 87th Annual Meeting of the International Association of Applied Mathematics and Mechanics (GAMM 2016), Braunschweig, Germany
- **Mini-Symposium "Non-linear Modeling of Smart Materials and Structures"** *June 2017*
together with A. Humer, 8th ECCOMAS Thematic Conference on Smart Structures and Materials (SMART 2017), Madrid, Spain
- **Mini-Symposium "Advances in Modeling and Design of Smart Structures"** *June 2018*
together with E. Zappino, A. Araujo, F. Moleiro & A. Ehrenhofer, 1st International Conference on Mechanics of Advanced Materials and Structures (ICMAMS), Torino, Italy

- **Section "S01 Multi-body dynamics"** *February 2019*
together with J. Gerstmayr, 90th Annual Meeting of the International Association of Applied Mathematics and Mechanics (GAMM 2019), Vienna, Austria
- **Mini-Symposium** *July 2019*
"Advances in Non-linear Modeling of Smart Materials and Structures"
together with A. Humer, 9th ECCOMAS Thematic Conference on Smart Structures and Materials (SMART 2019), Paris, France
- **Special Session "Recent advances in nonlinear modeling and numerical methods for smart materials and structures"** *July 2023*
together with A. Humer & Astrid Pechstein, 10th ECCOMAS Thematic Conference on Smart Structures and Materials (SMART 2023), Patras, Greece

4.5 Referee for funding organisations

- **MIUR (Ministry of Education, University and Research)**, Italy *since 2012*
- **IWT - Agency for Innovation by Science and Technology**, Belgium *since 2014*

4.6 Reviewer for international journals

International Journal of Solids and Structures, Journal of Applied Mechanics, Journal of Sound and Vibration, Acta Mechanica, Composite Structures, International Journal for Numerical Methods in Engineering, IEEE Transactions on Control Systems Technology, IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, Smart Structures and Systems, Structural Control and Health Monitoring, Smart Materials and Structures, IEEE Sensors Journal, Mechatronics, Meccanica, European Journal of Mechanics - A/Solids, Control Engineering Practice, Proceedings of the Institution of Mechanical Engineers - Part G - Journal of Aerospace Engineering, International Journal of Thermal Sciences, ZAMM, Journal of Computational and Nonlinear Dynamics, Journal of Vibration and Control, Nonlinear Dynamics, Engineering Structures, Journal of Sensors and Sensor Systems, Journal of Intelligent Material Systems and Structures

4.7 Invited participation in strategic workshops

- **ESF/NSF Jointly Sponsored Workshop on Smart Structures and Advanced Sensor Technologies**, Santorini, Greece, 2005
- **AFOSR/ARO/NSF/ONR/ESF Jointly Sponsored Workshop on Autonomous Structural Systems for Threat Mitigation**, Juan les Pins, France, 2006.
- **7th International Workshop on Structural Control and Monitoring (7IWSCM)**, July, 2016, Incheon, Korea.
- **9th International Workshop on Structural Control and Monitoring (9IWSCM)**, June, 2024, Zürich, Switzerland.

5 University commissions and committees

5.1 Administrative committees

- **Curriculum and Academics Programs Board in Mechatronics** *2004 to 2014*
Vice-head, Faculty of Technical and Natural Sciences, JKU Linz
- **Research and Teaching Fellowship Commission** *2006 to 2014*
Member, Faculty of Technical and Natural Sciences, JKU Linz
- **TEquality - Technology.Gender.Equality Committee** *2009 to 2014*
Member, Faculty of Technical and Natural Sciences, JKU Linz
- **Faculty Assembly, Faculty of Mechanical and Industrial Engineering** *2016 to 2019*
Member, Faculty of Mechanical and Industrial Engineering, TU Wien
- **Faculty Assembly, Faculty of Technical and Natural Sciences** *2009 to 2014 & 2020 to present*
Member, Faculty of Technical and Natural Sciences, JKU Linz

5.2 Professorship appointment committees

- **Lightweight Design Engineering** 2007
Member of the Advisory Committee for the preparation of the position posting, Faculty of Technical and Natural Sciences, JKU Linz
- **Polymer Product Engineering** 2008
Member of the Advisory Committee for the preparation of the position posting, Faculty of Technical and Natural Sciences, JKU Linz
- **Medicine Mechatronics** 2012
Member of the Appointment Committee, Faculty of Technical and Natural Sciences, JKU Linz
- **3D Printing und Biofabrication** 2018
Member of the Appointment Committee, Faculty of Mechanical and Industrial Engineering, TU Wien
- **Lightweight Engineering** 2018
Nonvoting member of the Appointment Committee, Faculty of Mechanical and Industrial Engineering, TU Wien
- **Technical Dynamics** 2019
Member of the Advisory Committee for the preparation of the position posting, Faculty of Mechanical and Industrial Engineering, TU Wien
- **Automatic Control and Control Systems Technology** 2023
Member of the Advisory Committee for the preparation of the position posting, Faculty of Technical and Natural Sciences, JKU Linz
- **Automatic Control and Control Systems Technology** 2023
Head of the Appointment Committee, Faculty of Technical and Natural Sciences, JKU Linz
- **Fluid Mechanics and Heat Transfer** 2024
Member of the Advisory Committee for the preparation of the position posting, Faculty of Technical and Natural Sciences, JKU Linz
- **Fluid Mechanics and Heat Transfer** 2024
Member of the Appointment Committee, Faculty of Technical and Natural Sciences, JKU Linz

5.3 Habilitation committees

- **Dr. Yury Vetyukov** 2017
Head, Faculty of Mechanical and Industrial Engineering, TU Wien
- **Dr. Alexander Schirrer** 2018
Member, Faculty of Mechanical and Industrial Engineering, TU Wien
- **Dr. Aleksandr Ovsianikov** 2018
Member, Faculty of Mechanical and Industrial Engineering, TU Wien
- **Dr. Astrid Pechstein** 2020
Head, Faculty of Technical and Natural Sciences, JKU Linz
- **Dr. Alexander Humer** 2020
Head, Faculty of Technical and Natural Sciences, JKU Linz
- **Dr. Thomas Lichtenegger** 2021
Member, Faculty of Technical and Natural Sciences, JKU Linz
- **Dr. Gudrun Mikota** 2021
Member, Faculty of Technical and Natural Sciences, JKU Linz
- **Dr. Mahdi Saeedipour** 2024
Member, Faculty of Technical and Natural Sciences, JKU Linz
- **Dr. Stefan Sieberer** 2024
Member, Faculty of Technical and Natural Sciences, JKU Linz
- **Dr. Stefan Puttinger** 2024
Member, Faculty of Technical and Natural Sciences, JKU Linz

6 Teaching

6.1 Classroom teaching

PREPARATORY CLASSES

- Lecture **Fundamentals of Physics for Mechatronics and Information Technology** (JKU Linz) *2009 to 2014*
- Tutorial **Intensive Math** (2.5 ECTS - JKU Linz) *2011 to 2014*

UNDERGRADUATE CLASSES

- Lecture **Engineering Mechanics 1** (JKU Linz) *2020 to present*
- Lecture **Engineering Mechanics 2** (JKU Linz) *2006 & 2020 to present*
- Tutorial **Engineering Mechanics 1** (JKU Linz) *2001 to 2014*
- Tutorial **Engineering Mechanics 2** (JKU Linz) *2000 to 2014 & 2020*
- Lecture **Basics of Lightweight Engineering** (JKU Linz) *2009*
- Lecture **Mechanics 3** (TU Wien) *2014 to 2019*
- Lecture & Tutorial **Advanced Strength of Materials** (TU Wien) *2015 to 2020*
- Lecture & Tutorial **Continuum Mechanics** (JKU Linz) *2021 to present*
- Lecture & Tutorial **Theory of Vibrations** (JKU Linz) *2023 to present*

GRADUATE CLASSES

- Lecture **Advanced Strength of Materials III** (JKU Linz) *1998 to 2002*
- Lecture **Selected Topics in Strength of Materials** (JKU Linz) *2006 to 2014*
- Lecture & Tutorial **Mechanics of Intelligent Structures** (JKU Linz) *2010 to 2014*
- Lecture & Tutorial **Theory of Plane Structures** (TU Wien) *2015 to 2019*
- Lecture & Tutorial **Mechanics of Intelligent Structures** (TU Wien) *2016 to 2019*
- Lecture & Tutorial **Nonlinear Field Theories of Mechanics** (JKU Linz) *2020*
- Lecture & Tutorial **Structural Mechanics** (JKU Linz) *2022 to present*
- Lecture & Tutorial **Structural Dynamics and Stability** (JKU Linz) *2024*

6.2 Theses (co-)supervision

BACHELOR THESES

1. A. Reischl: **Numerische und experimentelle Verifikation piezoelektrischer Balkenelemente**, Institute for Technical Mechanics, JKU Linz, 2010.
2. M. Meindlhumer: **Analytische Modellierung von Balken mit piezoelektrischen Sensoren**, Institute for Technical Mechanics, JKU Linz, 2010.
3. J. Scharinger: **Experimentelle Untersuchungen eines Kragbalkens mit piezoelektrischen Aktoren und Vergleich mit analytischen Ergebnissen**, Institute for Technical Mechanics, JKU Linz, 2011.
4. R. Wallner-Silberhuber: **Analytische Untersuchungen eines Kragbalkens mit piezoelektrischen Aktoren und Vergleich mit experimentellen Ergebnissen**, Institute for Technical Mechanics, JKU Linz, 2011.
5. K. Krumphuber: **Evaluierung verschiedener Näherungslösungen für einen schwingenden Balken**, Institute for Technical Mechanics, JKU Linz, 2013.
6. H. Ondracek: **Modellierung des Dachtrgers eines geschlossenen Stahl-Email-Behälters**, Institute for Mechanics and Mechatronics, TU Wien, 2016.
7. M. Mesterhazi: **Einfluss der Beschnittkantenausführung auf die Lebensdauer**, Institute for Mechanics and Mechatronics, TU Wien, 2017.
8. L. Ozcan: **Vergleich von Scheiben und Balkenlösungen schlanker Stäbe mittels des Ritz'schen Verfahrens**, Institute for Mechanics and Mechatronics, TU Wien, 2020.

MASTER THESES

1. M. Gruber: **Analytische Lösung für elastische Rechteckscheiben mit piezoelektrischen Schichten**, Institute for Technical Mechanics, JKU Linz, 1999.
2. H. Gattringer: **Kollokative Regelung von piezoelektrischen Platten mit geshapeten Elektroden**, Institute for Technical Mechanics, JKU Linz, 2001.
3. M. Nader: **Exakte Verformungskontrolle dynamisch belasteter piezoelektrischer Platten**, Institute for Technical Mechanics, JKU Linz, 2001.
4. K. Heilbrunner: **Entwurf piezoelektrischer Sensoren zur Messung strukturmechanischer Größen**, Institute for Technical Mechanics, JKU Linz, 2007.
5. M. Zellhofer: **Verformungskontrolle eines elastischen Tragwerks mittels diskreter piezoelektrischer Aktorik**, Institute for Technical Mechanics, JKU Linz, 2007.
6. M. Hörl: **Aktive Schwingungskompensation an einem Magnetresonanztomographen mit piezoelektrischen Sensoren und Aktoren**, Institute for Technical Mechanics, JKU Linz, 2008.
7. G. Zenz: **“Shunt Damping“ - Elektrische Netzwerke zur Schwingungsdämpfung mit piezoelektrischen Sensoren/ Aktoren**, Institute for Technical Mechanics, JKU Linz, 2010.
8. A. Reischl: **Structural Health Monitoring eines 3-stöckigen Rahentragwerks: Modellbildung, Schadenserkennung und experimentelle Verifizierung**, Institute for Technical Mechanics, JKU Linz, 2013.
9. M. Pieber: **Modelling and Control of a Thin Piezoelectric Shell**, Institute for Technical Mechanics, JKU Linz, 2014.
10. M. Meindlhumer: **Optimal Actuator Distributions for Shape Control of Thin Rectangular Plates**, Institute for Technical Mechanics, JKU Linz, 2014.
11. S. Brötz: **Untersuchung zur Verbesserung des Crashverhaltens von 2-Kammer-Profilen**, Institute for Mechanics and Mechatronics, TU Wien, 2017.
12. I. Mayrhofer: **Entwicklung eines standardisierten Berechnungsmodells zur einfachen Spannungsanalyse für Rohrleitungen im Anlagenbau zur Stahlerzeugung**, Institute for Mechanics and Mechatronics, TU Wien, 2018.
13. T. Hötzer: **Vibration Based Structural Health Monitoring of the Giuseppe Meazza Stadium**, Institute for Mechanics and Mechatronics, TU Wien, 2020.

PH.D. THESES

1. M. Nader: **Compensation of Vibrations in Smart Structures: Shape Control, Experimental Realization and Feedback Control**, Institute for Technical Mechanics, JKU Linz, 2007.
2. M. Höge: **Sensorische Rückwirkung von piezoelektrischen Aktoren und ihre Anwendung im Kraftfahrzeug**, Institute for Technical Mechanics, JKU Linz, 2007.
3. D. Huber: **Modeling and control of thin plate structures by piezoelectric actuators and sensors**, Institute for Technical Mechanics, JKU Linz, 2011.
4. P. Berik: **Experimental benchmarking and Saint-Venant type solutions of piezoelectric d_{15} shear and torsion transducers**, Institute for Technical Mechanics, JKU Linz, 2013.
5. E. Staudigl: **Nonlinear modeling and analysis of thin dielectric elastomer structures as electro-elastic material bodies and surfaces**, Institute for Mechanics and Mechatronics, TU Wien, 2020.
6. M. Feri: **Elasticity for layered FGM plates**
Institute for Mechanics and Mechatronics, TU Wien. *In progress*
7. L. Doppelbauer: **Efficient modeling of periodically structured contact zones**
Institute for Technical Mechanics, JKU Linz. *In progress*
8. M. Kunzemann: **Finite Element modelling of large deformation viscoelasticity**
Institute for Technical Mechanics, JKU Linz. *In progress*
9. S. Platzer: **Advanced modeling and simulation of thin plates and shells with a complex material structure**, Institute for Technical Mechanics, JKU Linz. *In progress*

PH.D. THESES - EXTERNAL REFEREE

1. S. Duczek: **Higher order finite elements and the fictitious domain concept for wave propagation analysis**
Institute for Mechanics, Otto von Guericke Universität Magdeburg, 2014.

2. G. Simon: **Modeling and Simulation of Bulging in a Continuous Casting Machine**
Institute for Technical Mechanics, JKU Linz, 2015.
3. J. Scheidl: **Mixed kinematic modelling and simulation of slack belt drives using structural theories of rods and shells**
Institute for Mechanics and Mechatronics, TU Wien, 2021.
4. A. Kaup: **Constitutive Modeling of Superelastic Shape Memory Alloy Damping Considering Dynamic Effects**
Lehrstuhl für Baustatik und Baudynamik, RWTH Aachen, 2022.
5. N. Huller: **Development of an intelligent rotary drivetrain including lifespan monitoring, lifespan optimisation, gear backlash monitoring and event-related gear backlash elimination**
Institute of Engineering Design and Product Development, TU Wien, 2023.

7 Research projects

7.1 Public funding

- **Mechanics of Smart Structures - JKU Linz** *1997-1999*

 FUNDING: FWF - P11993-TEC
 FUNCTION: Junior researcher / Project leader: Hans Irschik
- **SCN-Structural Control Network - JKU Linz** *2004-2006*

 FUNDING: EU - RIO (Regional Innovation System Upper Austria)
 PARTNERS: Profactor Produktionsforschungs GmbH, Linz Center of Mechatronics GmbH, Institute of Automatic Control and Control Systems Technology, Upper Austrian Technology Management and Regional Development Agency
 FUNCTION: Senior researcher / Project leader: Hans Irschik
- **Sensor Systems for Structural and Health Monitoring - JKU Linz** *2008-2011*

 FUNDING: FWF - L441-N14
 PARTNERS: Linz Center of Mechatronics GmbH
 FUNCTION: Principal investigator
- **VET in Rapid Earthquake Damage Assessment of Buildings to Avoid the Demolishing - JKU Linz** *2012-2014*

 FUNDING: EU - Leonardo da Vinci (LdV) Transfer of Innovation 2011-1-TR1-LEO05-27938
 PARTNERS: BUPIM (Turkey), ERBIL (Turkey), Aratos Technologies (Greece), University of Pavia (Italy), SIART SRL (Italy), Bogazici University Kandilli Observatory & Earthquake Research Institute (Turkey)
 FUNCTION: Responsible key researcher
- **Eulerian Mechanics of Belts - TU Wien (as national research partner)** *2015-2018*

 FUNDING: FWF - I2093
 PARTNERS: Institute of Technical Mechanical (JKU Linz), Institute for Problems in Mechanical Engineering (RAS St.Petersburg), St. Petersburg Polytechnic University (Russia)
 FUNCTION: Key researcher / Project leader: Hans Irschik

7.2 Industrial funding

- **Nano-imprint Lithography: Improvement of Precision by Smart Actuation/ Sensing - JKU Linz** *2004 - 2005*

 FUNDING: Linz Center of Mechatronics GmbH - Non-KPlus research
 PARTNERS: Profactor Produktionsforschungs GmbH
 FUNCTION: Senior researcher / Project leader: Hans Irschik

7.3 Joint public and industrial funding

- **Linz Center of Competence in Mechatronics**
Advanced Dynamics and Control in Mechanical Systems - JKU Linz *2003-2007*

 FUNDING: FFG - COMET-KPlus

 - **PROJECT 2.8: Specially Shaped Piezoelectric Sensors and Actuators in Light-weighted Structures**

 PARTNERS: Siemens Corporate Technology Munich - Microsystems / Linz Center of Mechatronics GmbH
 FUNCTION: Senior researcher / Project leader: Hans Irschik
 - **PROJECT 140400: Deformation and Noise Cancellation in Dynamically Loaded Structures and Machines by Active and Passive Control**

 PARTNERS: Siemens Corporate Technology Munich - Power Systems and Sensors / Linz Center of Mechatronics GmbH
 FUNCTION: Senior researcher / Project leader: Hans Irschik
 - **PROJECT 240100: Combination of Symbolic and Numerical Computations in the Dynamics and Control of Machines**

 PARTNERS: Linz Center of Mechatronics GmbH
 FUNCTION: Senior researcher / Project leader: Hans Irschik

- **Austrian Center for Competence in Mechatronics**
Area Mechanics and Model Based Control (Funding Period 1) - JKU Linz *2008-2012*

 FUNDING: FFG - COMET-K2

 - **PROJECT A120201: New Methods for Nonlinear Modeling of Smart Structures and Machines in Multi-Field and Multi-Body Dynamics**

 PARTNERS: Siemens AG CT PS8 / Linz Center of Mechatronics GmbH
 FUNCTION: Key researcher / Project leader: Hans Irschik
 - **PROJECT A220401: Mechanical Modelling of Structures, Robots and Machines**

 PARTNERS: Linz Center of Mechatronics GmbH
 FUNCTION: Project leader & responsible key researcher

- **Austrian Center for Competence in Mechatronics**
Area Mechanics and Model Based Control (Funding Period 2) - JKU Linz *2013-2014*

 FUNDING: FFG - COMET-K2

 - **PROJECT MFP2.1: Optimization and Control of Inelastic Constitutive Processes**

 PARTNERS: Siemens Erlangen Metal Technologies / Salvagnini Maschinenbau GmbH / Linz Center of Mechatronics GmbH / University of Applied Science Upper Austria
 FUNCTION: Key researcher / Project leaders: Christian Zehetner
 - **PROJECT STP2: Frontiers in the Mechanics of Controlled Structures and Machines**

 PARTNERS: Linz Center of Mechatronics GmbH
 FUNCTION: Project leader & responsible key researcher

- **Frontiers in the Mechanics of Controlled Structures and Machines** - TU Wien *2015 - 2017*

 FUNDING: FFG - COMET-K2 (TU Wien as subcontractor)
 SUBCONTRACTING PARTNER: Institute of Technical Mechanical, JKU Linz
 FUNCTION: Key researcher

- **Modelling of the Sheet Run and Control for Hot Roll Mills** - TU Wien *2015 - 2017*

 FUNDING: FFG - COMET-K2 (TU Wien as subcontractor)
 SUBCONTRACTING PARTNER: Institute of Technical Mechanical, JKU Linz
 FUNCTION: Key researcher

- **Modellbildung und Simulation des lateralen Laufverhaltens von schwach gespannten Prozessstahlbändern (LaLaBand) - TU Wien** *2017 - 2020*

FUNDING: FFG - Bridge
PARTNERS: Berndorf Band GmbH
FUNCTION: Key researcher / Project leader: Yury Vetyukov
- **Prototypenentwicklung eines Hochleistungs-Mehrschicht-Schallabsorber - JKU Linz** *2020*

FUNDING: FFG
PARTNERS: A.I.-GROUP - Aircraftcover
FUNCTION: Project leader & key researcher
- **Symbiotic Mechatronics Area Mechanics and Control (Funding Period 2) - JKU Linz** *2022-2026*

FUNDING: FFG - COMET-K2

 - **PROJECT MFP2.1: Process Simulation and Material Modeling**
PARTNERS: Salvagnini Maschinenbau GmbH / Linz Center of Mechatronics GmbH / University of Applied Science Upper Austria
FUNCTION: Responsible key researcher / Project leader: Thomas Gross
 - **PROJECT STP4.2: Digital Twin and Simulation Credibility**
PARTNERS: Linz Center of Mechatronics GmbH
FUNCTION: Responsible key researcher / Project leader: Markus Schörgenhumer
- **Intelligent, integrated and impregnated cellulose based sensors for reliable biobased structures (i³Sense) - JKU Linz** *2022-2025*

FUNDING: FFG - COMET-Module

 - **PROJECT I.4: Sensor Design, Development and validation**
PARTNERS: Wood Competence Center (WOOD K-Plus) / Soft Matter Physics, JKU Linz
FUNCTION: Key researcher
- **Characterization and Simulation of an Innovative Join Connection for Novel Plain Bearing Solutions (InnoF) - JKU Linz** *2023 - 2025*

FUNDING: FFG - Production of the Future
PARTNERS: MIBA Gleitlager GmbH
FUNCTION: Project leader & key researcher