CURRICULUM VITAE

Carsten Proppe (Sobiechowski), born 10.06.1969 in Berlin

RESEARCH INTERESTS

Computational Stochastic Mechanics, Multiscale Methods, Dynamics and Control, Fatigue and Fracture Mechanics
>100 publications in international journals or conference proceedings, h-index: 17

PROFESSIONAL EXPERIENCE

since 2005 — Karlsruhe Institute of Technology: Professor (W3) for Engineering Mechanics
Member of Executive Board, Institut für Technische Mechanik

10/02-12/04 — Bombardier Transportation GmbH, Hennigsdorf: *Vehicle Dynamics Analyst*

- Development of numerical models for ride comfort and vehicle dynamics during project and bid phase
- Determination of dynamical loads and execution of fatigue analysis
- Development and monitoring of dynamical test programmes

04/99-09/02 — Institut für Mechanik, Leopold-Franzens-Universität, Innsbruck, Austria: *University Assistent*

EDUCATION

04/95-03/99 — Institut für Mechanik, Otto-von-Guericke-Universität, Magdeburg:
Research and Teaching Assistant
Doctoral Thesis in Random Vibrations
Supervisor: Prof. Dr. L. Sperling, Grade: summa cum laude

91-95 — Studies in Mathematics, TU Berlin
Degree: Dipl.-Math., Grade: sehr gut (first class honors)
Focus: Differential Geometry, Functional Analysis, Complex Analysis
Diploma Thesis on Affine Differential Geometry

88-94 — Studies in Physical Engineering, TU Berlin
Degree: Dipl.-Ing., Grade: sehr gut (first class honours)
Focus: Fluid Mechanics, Engineering Mechanics, Numerical Methods
Diploma Thesis on Boundary Layer Flows

90-91 — Studies at Ecole Centrale de Lyon, France, Certificat International d'Etudes Specialisées

06/88 — Abitur (school leaving examination), Berlin, Grade: 1.2 (on a scale from 1 to 6)

AWARDS

11/00 — Department Prize, Department of Mechanical Engineering, Otto-von-Guericke-Universität Magdeburg

10/95 — Erwin Stephan Prize, TU Berlin, Germany

90-91 — Erasmus grant for studies in France, EU

ACQUIRED PROJECTS

2014	Wind warning system for Fehmarnsund Bridge (Schleswig-Holstein, 35.000 €)
2013	“Bestes Maschinenhaus” (VDMA, 100.000 €)
2012	DFG: Multiscale modeling of metal foams (PR 1114/10-1, 170.000 €) AIF: Surface and contact models for friction and wear (KF3000901RR2, 171.000 €)
2011	BS-ERA: Reliability and durability of Machines and Mechanisms used in Oil Industry (BS-ERA.NET 007, 50.000 €)
2009	Meyer Werft, Papenburg: Vibration analysis of a lift gate at Ems barrage
2008	Daimler AG: Design and construction of a test rig for an active suspension strut (100.000 €)
2007	Bosch Rexroth: Experimental modal analysis of a pump housing; Design of an actor for a test bench (25.000 €)
2006	AIF: Multi-body simulation of run ups for turbo chargers with nonlinear floating ring bearings (381.900 €)

INTERNATIONAL COOPERATIONS

L. Socha, (Kardinal Stefan Wyszynski Universität Warschau, Silesian Technical University, Katowice): cooperation since 1997, several joint publications; at the moment joint research on modelling and analysis of non-smooth stochastic dynamical systems
C. Baker (University of Birmingham), F. Cheli, D. Rocchi (Politecnico di Milano), N. Paradot (SNCF), A. Orellano (Bombardier Transportation): Joint state of the art paper on cross wind influence on rail and road vehicles, invited by International Association for Vehicle System Dynamics (IAVSD)

INTERNATIONAL EXPERIENCE

since 2005	Visiting Professor, TU Budapest (2005, 2007) and TU Sofia (2006), IFMA France (2010)
96	Research stay (three months), Prof. C. Borri, University of Florence, Italy
91	Training (two months) at von-Kármán Institute, Brussels, Belgium: Numerical Simulation with FLUENT of the flow in a nozzle
90-91	Studies at Ecole Centrale de Lyon, France

LANGUAGES

Fluent in English and French; basic knowledge in Italian

EDITORIAL AND REVIEW ACTIVITIES

Editorial Board Member:
International Journal of Railway Technology, ISRN Probability and Statistics, Mathematical Problems in Engineering

Reviewer:
Applied Mathematics and Computation
Archive of Applied Mechanics
Computational Materials Science
Frontiers of Structural and Civil Engineering
International Journal for Numerical Methods in Engineering
International Journal of Fracture
International Journal of Vibration and Control
International Journal of Non-Linear Mechanics
Journal of Computational and Nonlinear Dynamics (ASME)
Journal of Mechanical Engineering Science (Proc. IME, Part C)
Journal of Scientific Computing

Journal of Rail and Rapid Transit
Journal of Tribology (ASME)
Journal of Wind Engineering and Industrial Aerodynamics
Nonlinear Dynamics
Probabilistic Engineering Mechanics
Shock & Vibration
Vehicle System Dynamics
Zeitschrift für Angewandte Mathematik und Mechanik

ACADEMIC MANAGEMENT

2019-2020	Member Executive Board, Unit III (Electrical and Mechanical Engineering), KIT
2017-2020	Dean, Department of Mechanical Engineering Member of the Academic Senate, KIT
2012-2017	Academic Dean, Department of Mechanical Engineering Head of Doctoral Committee Member Executive Board, Department of Mechanical Engineering, KIT
since 2005	Member Department Assembly Erasmus coordinator, Department of Mechanical Engineering (since Winter 06/07) Member commission for studies (Winter 06/07 to Summer 17) Deputy member WG Curriculum (Winter 05/06) Director, WG Modelling & Simulation (since Winter 06/07) Member appointment committees „Railway System Technology“, „Continuum Mechanics in Mechanical Engineering“, „Continuum Mechanics and Material Theory“, „Mathematical Statistics“, „Mathematical Stochastics“, „Multi Body Systems“ (Universität Kassel, external member), „Non-Smooth Structural Dynamics“, „Structural Dynamics“
10/01-09/02	Member of the University Assembly and the group of non-professorial teaching staff, Academic Senate, Universität Innsbruck; deputy member, department council

Karlsruhe, 29.03.23