

CURRICULUM VITAE

PRIV. DOZ. DR.-ING. GEORG HERDRICH

PERSONAL INFORMATION

Priv. Doz. Dr.-Ing. Georg Herdrich
Adj. Assoc. Prof./ Baylor University
Email: georg.herdrich@german-asa.de (business)



Family Status: married, two children
Citizenship: German
Date of birth: 06.04.1969
Place of birth: Ettenheim

EDUCATION

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|-----------------|---|
| 05.1988 | Higher Education Entrance Qualification at „Städtisches Gymnasium“ in Ettenheim |
| 10.1989-07.1996 | Aerospace-Engineering, University of Stuttgart
Special Subjects: Flight Mechanics and Control, Space Systems and Applications |
| 07.1991-11.1991 | Graduate internship Dornier GmbH: Space Material- / Process data base (product assurance) |
| 12.2004 | Dissertation: „Aufbau, Qualifikation und Charakterisierung einer induktiv beheizten Plasmawindkanalanlage zur Simulation atmosphärischer Eintrittsmanöver“, Institut für Raumfahrtssysteme, Universität Stuttgart, URN: urn:nbn:de:bsz:93-opus-21478, URL: http://elib.uni-stuttgart.de/opus/volltexte/2005/2147/ , and in extended print run with Shaker Publishing Company ISBN 3-8322-4338-0, Dec. 2004, Certification: very good |
| 05.2012 | Habilitation: „Raumfahrtrelevante Plasmen und deren anwendungsbezogene Klassifizierung“. |

PRIZES AND AWARDS

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| 1997 | Reinhardt Abraham - Lufthansa - Prize for „Emissionsspektroskopische Untersuchung der Stickstoff-Molekülstrahlung im Plasmawindkanal“ (diploma thesis at Institute of Space Systems of University of Stuttgart) |
| 1997 | Price of “Freunde der Universität Stuttgart“ for best diploma thesis |
| 2006 | NESC (NASA Engineering and Safety Centre) Group Achievement Award: “In recognition of outstanding technical contributions to the NESC Stardust Hypervelocity Entry Observing Campaign Team” |
| 2007 | Du Pont Plunkett Award (together with Dipl.-Ing. A. Nawaz, IRS, and Dipl.-Chem. M. Schlipf, ElringKlinger GmbH) for the development of a Teflon [®] helix propellant feeding system for the pulsed magnetoplasma dynamic thruster ADD-SIMPLEX |
| 2007 | NASA Group Achievement Award: Recognition prize for the „Reentry observation of the STARDUST capsule“ (dust specimen from comet Wild 2) |
| 2008 | Land der Ideen: Teflon as solid propellant, Award in collaboration with ElringKlinger GmbH by the President of the Federal Republic of Germany |
| 2009 | IAPS Journal: Best Paper of the Year Award |
| 2010 | NASA Group Achievement Award in recognition of the achievements in the reentry observation of Hayabusa |

PUBLICATIONS

More than 70 reviewed articles in scientific Journals and books, more than 100

conference articles, thereof more than 50 in proceedings, more than 60 reports for industrial projects. Co-authorship in internationally reviewed and adopted reports and papers (UN, RTO). Three patents (Electric Propulsion, Plasma Technology).

MILITARY

10.1988-12.1989 Military Service, Rommel Barracks, Dornstadt near Ulm

STAYS ABROAD

01.1992-02.1992 Research work at Imperial College, London: Analysis of ROSAT data (Supernova SN1987A)
12.1994-05.1995 Politecnico di Torino, Italy: Optimization of a Rocket's Ascent Trajectory
11.2000-12.2000 Research stay at "Complexe de Recherche Interprofessionnel en Aérothermochimie / Centre National de la Recherche Scientifique (CORIA / CNRS)", Rouen, France: Experimental Investigations using the inductive Plasma Wind Tunnel of CORIA
02.2007-08.2007 Stay as Visiting Professor at the University of Tokyo: Research stay at the Graduate School of Frontier Sciences, Department of Advanced Energy, Japan: Investigation of the arcjet facility of the University of Tokyo, Lecture "Atmospheric Entry"

WORKING EXPERIENCE

Since 10.1996 Research scientist, Department "Space Transportation Systems", Institut für Raumfahrtssysteme, Universität Stuttgart
Since 2004 Project Manager Steinbeis Centers (SZ PRT, ASA)
Since 12.2004 Head of Administration of Steinbeis Transfer Centre Plasma and Space Technology
Since 02.2007 Visiting Associate Professor for Plasma Technology and Atmospheric Entry at University of Tokyo, Graduate School of Frontier Sciences, Department of Advanced Energy
Since 03.2010 Adjunct Associate Professor in space sciences with focus on natural space plasmas at Baylor University, Waco, Texas, USA.
Since 09.2013 Managing Director "Concept Evolutions UG (liability limited)"

PROJECTS – STZ PLASMA UND RAUMFAHRTTECHNOLOGIE AND SHB

2005 Experimental investigation of combustion chamber materials (Bayern Chemie Protac)
2005 Experimental characterization of intelligent structures for areas of high temperature (HPS GmbH)
2006 Experimental investigations of PM2000 material (Alta)
2006 Observation campaign of STARDUST Reentry (NASA, SETI Institute)
2006-2007 Alternative hardening processes for heavy duty alloys (EADS, MTU)
Since 2007 Development and performance of a laboratory for craft- and working machines (HFH)
Since 2010 Business plan development of Plasma Waste Treatment Technology for different applications (HFH)

LANGUAGES

English Business Fluent
French Fluent
Italian Fluent

Esslingen, 30.03.2015

Priv. Doz. Dr.-Ing., Adj. Assoc. Prof./ Baylor University Georg Herdrich