

# Curriculum vitae

## **Prof. Dr.-Ing. habil. Monika Auweter-Kurtz**

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## **Education**

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|----------------|--|
| 1969 –<br>1975 | Study of Physics, University of Stuttgart  |
| 1985           | Dissertation for the academic title "Dr.-Ing.": "The Dynamics of an Arc-Column in a Cold Gas Flow" |
| 1991           | Dissertation for the academic title "Dr.-Ing. habil.": "Arcjet Thrusters for Space Applications"   |

## **Research Fields**

- Electric Space Propulsion
- Reentry Technology
- Entry into Atmospheres of other Celestial Bodies
- Plasma Technology
- Magnetohydrodynamics
- Aerothermodynamics
- Measurement Methods for Plasma Flows
- Plasma Modeling and numerical Simulation
- Sensor Development for Space and High Temperature Applications

## **Employment History**

Since 2011      Head of the Steinbeis Innovation Center ASA

since Nov. 2010    Director of the German Aerospace Academy ASA

2006-2009      President of the University of Hamburg

since 2007	Professor at the University of Hamburg
since 2004	Head of the 'Steinbeistransferzentrum': "Plasma and Space Transportation Technology"
2003 – 2006	Associate Editor for the AIAA Journal
Sept. 2002 – Oct. 2006	Head of the department "Space Transportation Technology" at the Institute of Space Systems, University of Stuttgart
Jan. 2000 – Sept. 2002	Interim Director of the Institute of Space Systems, University of Stuttgart
July 2001-2006	Head of the Technology Transfer Center: "Space and Plasma Technology", TTI-GmbH
2000 – 2003	Scientific collaborator for NASDA (National Space Development Agency of Japan) in the area of space transportation vehicles
2000	Offered the Aerothermodynamik Professorship at the "Universität der Bundeswehr", Munich, declined
Jan. 2000 – Sept. 2002	Interim Director of the Institute of Space Systems
Oct. 1998 – Sept. 2000	Dean of the Faculty: Aerospace Technology
Oct. 1997 – Sept. 1998	Deputy Dean of the Faculty: Aerospace Technology
1994 – August 2002	Department Head "Electric Propulsion and Plasma Technology"
June 1992 – Oct. 2006	Deputy Director of the Institute of Space Systems, University of Stuttgart
June 1992 – Oct. 2006	Professor for Space Transportation Technology, University of Stuttgart
June 1991	Venia legendi for "Electric Propulsion and Space Transportation Technologies", University of Stuttgart
1988 – 1993	Head of the group "Electric Propulsion" together with Dr. Schrade
1987 – Aug. 2002	Head of the group "Plasma Wind Tunnel Technology", Institute of Space Systems, University of Stuttgart
seit 1975	Scientific collaborator at the Institute of Space Systems, University of Stuttgart. Theoretical and experimental work: arcjet propulsion and plasma technology

1973 – 1982      Teacher of Math and Physics at Heidehofgymnasium Stuttgart

### **Elected Offices and Voluntary Positions**

Since 2010	Member of the “Vergabekommission des Margarete Wrangell Habilitationsprogramms der Landesregierung Baden-Württembergs”
since 2010	Member of the International Amelia Earhart Award Committee
since 2006	Member of the Kuratorium of the German Institute of Global and Area Studies (GIGA)
2004	Member of the ESA ELIPS panel for the selection of experiments for the ISS
June 2004 – Oct. 2006	Member of the ESA-EU Working Group "Nuclear Power in Space"
since June 2004	Member of the Mentoring Program for Women in Science and Research of the University of Stuttgart
since June 2002	Member of the scholarship committee "Irene-Rosenberg-Promotionsprogram des Landes Baden-Württemberg"
since Aug. 2001	Member of the "Kuratorium der Physikalisch-Technischen Bundesanstalt" (PTB)
Oct. 2000 – Sept. 2003	Member of the University Council, University of Stuttgart
since July 1998	Member of the Board of Directors - Electric Rocket Propulsion Society
since May 1997	Member of the AIAA Thermophysics Technical Committee
since June 1991	Member of the AIAA Electric Propulsion Technical Committee
1990-2008	Member of the International Amelia Earhart Award Committee
1999/2000	Member of the "Rektor" Search Committee, University of Stuttgart
1999	Member of the "Kanzler" Search Committee, University of Stuttgart
Oct. 1998 – Sept. 2000	Member of the Board of Directors - "Hermann-Reissner-Stiftung"
Nov. 1998 – Sept. 2000	Member of the University Senate Committee "Frauenförderung"
Nov. 1998 – Sept. 2000	Member of the University Senate Committee "Landesgraduierertenförderung"

Nov. 1998 – Sept. 2000	Member of the University Senate Committee "Struktur"
Oct. 1997 – Sept. 1998	Deputy Women's Commissioner, University of Stuttgart
Oct. 1996 – Dec. 1998	State spokesperson for the women's commissioners in Baden-Württemberg
Oct. 1996 – Sept. 1998	Elected senator to the University of Stuttgart Senate
Oct. 1994 – Oct. 1996	Elected senator to the University of Stuttgart "Grosser Senat"
Oct. 1992 – Sept. 1997	Women's Commissioner of the University of Stuttgart
Aug. 1992 – Juli 1998	Chairperson of the DGLR committee "Electric and Unconventional Thrusters"
	Member of the Technical Committee for Electric Propulsion of EUCASS Conference 2007
	Member of the Executive Committee of the 5th International Symposium on Applied Plasma Science, 2005
	Member of the Editorial Board of the 5th International Symposium on Applied Plasma Science, 2005
	Member of the Organizing Committee of the 5th International Symposium on Applied Plasma Science, 2005
	Member of the Editorial Board of the 5th International Symposium on Applied Plasma Science, 2005
	Member of the Organizing Committee of the 5th International Symposium on Applied Plasma Science, 2005
	Member of the Technical and Programme Committee of the 5th European Symposium on Aerothermodynamics for Space Vehicles, 2004
	Member of the Executive Committee of the 4th International Symposium on Applied Plasma Science, 2003
	Member of the Organizing Committee of the 4th International Symposium on Applied Plasma Science 2003
	Member of the International Advisory Committee of the 9th International Workshop on Combustion and Propulsion 2003
	Member of the Technical Committee of the 4th European Symposium on Aerothermo-dynamics for Space Vehicles, 2001

Member of the Organizing Committee of the 4th International Symposium on Applied Plasma Science 2003

Member of the Technical Committee of the 3rd International Conference on Spacecraft Propulsion 2000

International Chairperson of the 26th International Electric Propulsion Conference 1999

International Chairperson of the 25th International Electric Propulsion Conference 1997

Member of the International Steering Committee of the International Symposium on Non-Linear Electromagnet Systems (ISEM)

### **Reviewer for the following magazines**

Zeitschrift für Flugwissenschaften (ZFW)

Journal of Propulsion and Power (AIAA)

Journal of Thermophysics and Heat Transfer (AIAA)

Journal of Aerospace Engineering (MEP)

International Journal of Applied Electromagnetics in Materials

Aerospace Science and Technology

Vacuum, Surface Engineering, Surface Instrumentation & Vacuum Technology

Journal of Applied Physics (American Institute of Physics)

### **Consultant for the following organizations**

German Research Foundation (DFG)

Italian Ministry for Education University and Research (MIUR)

American Institute of Aeronautics and Astronautics(AIAA)

European Space Agency (ESA)

European Science Foundation (ESF)

ISAPS (Institute of Applied Plasma Science)

## **Professional memberships**

Internationales Begegnungszentrum (IBZ)

Deutsche Gesellschaft für Luft- und Raumfahrt (DGLR)

American Institute of Aeronautics and Astronautics (AIAA) - Associate Fellow

Deutsche Physikalische Gesellschaft (DPG)

Electric Rocket Propulsion Society - Board of Directors

Deutscher Hochschulverband

Verein der Freunde der Universität Stuttgart

Internationales Begegnungszentrum e.V.

## **Publications**

1 Book

more than 19 scientific contributions to books

more than 58 articles in scientific magazines

more than 184 papers in conference proceedings

more than 143 pre-prints at international conferences

more than 143 contract reports

more than 24 internal reports

7 lectures at the annual conference of the "Deutsche Physikalische Gesellschaft"

more than 41 invited lectures

## **Awards**

2009 Ernst Stuhlinger Medal for Outstanding Achievements in Electric Propulsion

2009 Foreign Associate of the N. S. National Academy of Engineering

2007 Fellow of the American Institute of Aeronautics and Astronautics (AAIA)

2006 Medal of Honor, first degree, of the Federal Republic of Germany

- 2004 DODO prize for Women for humor, persistence and success, awarded by the Vice-President of the State Parliament of the State of Baden-Wuerttemberg
- 2003 Associate Fellow of the American Institute of Aeronautics and Astronautics
- 2003 36th AIAA Thermophysics Conference Best Paper Award
- 2002 AIAA Electric Propulsion TC Best Paper Award 2001
- 1999 Medal of Honor of the Federal Republic of Germany
- 1982 Window of Science Award, US Air Force
- 1980 Amelia Earhart Fellowship Award of the Zonta International Society
- 1979 Amelia Earhart Fellowship Award of the Zonta International Society