

# Dr. André D. Thess

## Director

Institute of Engineering Thermodynamics  
DLR German Aerospace Center  
Pfaffenwaldring 38-40  
70569 Stuttgart  
Telephone: +49-711-6862-358  
Cell phone: +49-174-325-4573  
E-Mail: [andre.thess@dlr.de](mailto:andre.thess@dlr.de)



## Professor of Energy Storage

Institute of Energy Storage  
University of Stuttgart  
Pfaffenwaldring 31  
70569 Stuttgart  
Telephone: +49-711-6856-2660  
E-Mail: [thess@ies.uni-stuttgart.de](mailto:thess@ies.uni-stuttgart.de)

## General information

Born: 22 February 1964, Leningrad (now St. Petersburg), Russia  
Married: to Gabriele Thess since 1988  
Children: two sons, Maximilian (born 1987) und Sebastian (born 1990)

## Education

09/1970 – 08/1978 Elementary school, Dresden  
09/1978 – 08/1982 Extended secondary school, Dresden  
09/1982 - 08/1987 B.Sc and M.S. in Physics, Dresden University of Technology  
09/1987 - 08/1990 PhD student, Central Institute of Nuclear Research Rossendorf, now Helmholtz Center Dresden-Rossendorf  
1991 PhD (summa cum laude) Theoretical Physics, Dresden

## Professional experience

09/1990 - 02/1991 Scientist at Central Institute of Nuclear Research Rossendorf,  
Now Helmholtz Center Dresden-Rossendorf

03/1991 - 09/1991	Postdoctoral research associate Ecole Normale Superieure de Lyon, France, research topic: turbulence
09/1991 - 01/1992	Postdoctoral research associate Institute de Mécanique de Grenoble, France, research topic: magnetohydrodynamics
01/1992 - 12/1993	Junior research group leader, Central Institute of Nuclear Research
03/1993 - 12/1993	Post-doctoral fellow in the „Program for Applied and Computational Mathematics" with Prof. Steven Orszag at Princeton University (USA) (Fellow of the German Science Foundation DFG, „Habilitationstipendium“
01/1994 – 09/1998	Junior research group leader, at the Institute of Fluid Mechanics (after 07/96 Institute of Aerospace Engineering) at Dresden University of Technology (with Prof. Roger Grundmann)
07/1995	Habilitation (German second doctoral degree) in Theoretical Physics, Dresden University of Technology
02/1998	Lecturer in Magnetohydrodynamics at Dresden University of Technology
10/1998 – 09/2004	Professor of Engineering Thermodynamics, Ilmenau University of Technology
10/2004 – 03/2014	Professor of Thermodynamics and Magnetohydrodynamics, Ilmenau University of Technology
02/2001 – 12/2007	Chairman of DFG-Research Group „Magnetohydrodynamics" at Ilmenau University of Technology
since 01/2008	Member of the scientific board (Fachkollegium) 404 on Thermodynamics and Fluid Mechanics of the German Science Foundation DFG
01/2010 – 12/2013	Chairman of the DFG-Research and Training Group „Lorentz force velocimetry and Lorentz force eddy current testing“ at Ilmenau University of Technology
since 04/2012	Chairman (“Sprecher”) of the scientific board (Fachkollegium) 404 on Thermodynamics and Fluid Mechanics of the German Science Foundation DFG
since 04/2014	Professor of Energy Storage at Stuttgart University and Director of the Institute of Engineering Thermodynamics at the German Aerospace Center DLR, Stuttgart

## **Fellowships, Visiting Professorships**

- (1) 1991: "Bourse de Recherche" French Research Ministry
- (2) 1992: NATO-fellowship "Lecture- and Research Visit" USA
- (3) 1993/1994: DFG-fellow Princeton University
- (4) 1996: EPSRC-Fellowship (UK) Strathclyde University Glasgow
- (5) 2002: Visiting Professor, Nagoya University, Japan
- (6) 2003: Visiting Professor, Northeastern University, Shenyang, China
- (7) 2004: Visiting Professor, Summer Program on Turbulence, Stanford University, USA
- (8) 2004: Visiting Professor, Northeastern University, Shenyang, China
- (9) 2006: Visiting Professor, Northeastern University, Shenyang, China
- (10) 2006: Visiting Professor, Summer Program on Turbulence, Stanford University, USA
- (11) 2009: Visiting Professor Northeastern University Shenyang, China
- (12) 2011: Visiting Professor Northeastern University, Shenyang, China
- (13) 2012: Visiting Professor Northeastern University, Shenyang, China
- (14) 2012: Visiting Professor RIST, Pohang, Korea
- (13) 2013: Visiting Professor Northeastern University, Shenyang, China
- (14) 2014: Visiting Professor Northeastern University, Shenyang, China

## **Memberships**

- (1) Deutsche Physikalische Gesellschaft (DPG)
- (2) International Association for Hydromagnetic Phenomena and Applications (HYDROMAG)
- (3) American Physical Society (APS) (Lifetime Member)
- (4) Deutscher Hochschulverband (DHV)
- (5) Förderverein der Fakultät Maschinenbau der TU Ilmenau
- (6) Förderverein Elektrowärme der TU Ilmenau
- (7) Gesellschaft für Angewandte Mathematik und Mechanik (GAMM)
- (8) Wissenschaftlicher Arbeitskreis Technische Thermodynamik (WATT)
- (9) International Union of Theoretical and Applied Mechanics (IUTAM)
- (10) Gesellschaft für Angewandte Laseranemometrie (GALA)

- (11) Verein Deutscher Ingenieure (VDI)
- (12) Deutsche Gesellschaft für Luft- und Raumfahrt (DGLR)