

## CURRICULUM VITAE

**Thomas Alexander,  
Director and Professor Dr.-Ing.**

Head of Division 2 "Products and Work Systems"  
Federal Institute for Occupational Safety and Health (BAuA)

Vice President, Treasurer,  
International Ergonomic Association (IEA)

## EDUCATIONAL AND SCIENTIFIC BACKGROUND

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**Centre for Registration of European Ergonomists • 12/2012, 12/2017, 12/2022**

- Certification as European Ergonomist (Eur.Erg.)

**Management training • continuously**

- Coaching „personnel management, cooperation and collaboration“
- Management by objectives
- Performance-based payment and progress reviews
- Efficient communication and management for research and development

**Fed. Institute for Occupational Safety and Health • 06/2022**

- Appointment as Director and Professor for lifetime  
by the President of the Federal Republic of Germany

**University Wuppertal • 05/2002**

- PhD (Dr.-Ing.) at Faculty of Safety Engineering „*summa cum laude*“,  
„Analysis of goal-directed arm-movement under informational workload“

**University Wuppertal • 1989 - 1994**

- B. Sc and M.Sc. (Dipl.-Ing.) at faculty of safety engineering
- M.Sc. thesis at German Aerospace Airbus, Hamburg, „Analysis of different anthropometric tools for cockpit design“ (Note: sehr gut)

## PROFESSION

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**Head of Division 2 “Products and Work Systems” at the Federal Institute for Occupational Safety and Health (BAuA), Germany • since 2019**

- Responsible Management of ~90 persons (mostly scientists with academic background) in 6 subordinated research groups of the division (product safety, physical agents, ergonomics/human factors, Artificial Intelligence, Technicum, workplaces/machinery safety).
- Multiple Topics in
  - research and development (internal, extramural, third-party funded projects),
  - statutory and sovereign tasks for German Federal Ministry of Labor and Social Affairs,
  - providing expertise for politics advisory, federal ministries and federal OSH committees,
  - transfer of results from science to practice.
- Member of the Management Team of BAuA
- [https://www.baua.de/EN/Home/Home\\_node.html](https://www.baua.de/EN/Home/Home_node.html)

**Head of Department Human Factors at Fraunhofer-FKIE • 2014 - 2019**

- Initiation and Management of Department Human Factors (ca. 15 persons)
- Topics:
  - Digital human modeling and simulation,
  - Innovative human-technology-interaction,
  - Mobile information access by digital technologies,
  - Perceptive assistance by means of Virtual and Augmented Reality,
  - Physical assistance by exoskeletons.

**Head of Research Group Human Factors • 2008 - 2014** (ca. 10 persons)

- Fraunhofer-FKIE (2009: Integration of former institute into Fraunhofer-Society)
- Management of Research Group
- Topics: Digital human modeling, mobile human-computer interaction and computer-supported cooperative work

**Management of project group 3D visualization and interaktion • 2005 – 2008**

- FKIE - Department Ergonomics and Information Systems
- Management of different research projects in the area of digital human modeling, workload, mobile human-computer-interaction and tele-maintenance

**Visiting Scientist NASA Ames Research Center • 2004 – 2005**

- NASA Ames Research Center, Human System Integration Division
- Senior scientist for Tele-Presence and Virtual Environments

**Project Leader • 2000 – 2004**

- FKIE - Department Ergonomics and Information Systems
- Management of reserach project in topics of Digital Human Modeling, Virtual Environments, Augmented Reality, Cognitive Models

**Scientist • 1994 – 2000**

- FKIE - Department Ergonomics and Information Systems
- Working in different projects about Virtual Humen, Digital Human Modeling and workload

**Student • 1993 – 1994**

- FGAN, Department Workplace Design
- Digital Human Models for Workplace Design

**ACADEMIC AND GENERAL UNIVERSITY LECTURES**

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**RWTH Aachen University • 2009 - 2017**

- Lecture „Digital Human Modeling“ (Prof. Dr. Schlick)

**Carl-Cranz-Gesellschaft for technical-scientific education, München • seit 2007**

- Manager/Organizer CCG-Seminar „Digital Human Modeling“ (2018)
- Seminar „Computer-based workplace analysis“  
in „Ergonomics and human-machine-systems“

**Federal Academy (BAkWVT), Mannheim • 2001 - 2017**

- Lecture „Interface design for Virtual Environments“ for annual course „Software-Ergonomics“
- Lecture „Virtuelle Umgebungen – A new method for designing human-machine interfaces“ for annual course „Ergonomics“

**University Wuppertal • 2004 - 2008**

- Lecture (SS) „Vehicle Ergonomics“, 2 SWS (Prof. Dr. Gärtner)

## COMMITTEES AND BOARDS

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**Vice President, Treasurer,  
International Ergonomic Association (IEA) • elected, since 2021**

**Executive Committee, International Ergonomic Association (IEA) • since 2016**

- Chairman and member of Executive Committee of the IEA,
- Chairperson Science, Technology and Practice (STP) Standing Committee,
- Liaison IEA Triennial World Congress (2018: Florence; 2021: Vancouver; 2024: Jeju),
- Liaison International Standards Organization (ISO),
- <https://iea.cc>

**Federal Commission for Occupational Health and Safety (OH&S) and Standardization (KAN) • since 2019**

- Full (voting) member of the commission.
- <https://www.kan.de/>

**Federal Commission for Plant Safety (KAS) • since 2019**

- Full (voting) member of the commission.
- <https://www.kas-bmu.de>

**Association for safety, health and environmental protection at work (VDSI) • since 2019**

- Full member of the scientific advisory board
- <https://vdsi.de>

**Deutsches Institut für Normung (DIN) • since 2019**

- Full member, representing federal interests
- <https://www.din.de>

**G7 - Employment Working group • 2022**

- Member, subject matter expert for scientific perspectives,
- introducing occupational safety and health, and climate change to G7-labour and employment ministerial meeting

**Steering Committee of the German social accident insurance SARS-CoV2 • 2020-2022**

- Member, representing BAuA perspectives, liaison to federal technical rules

**Applied Human Factors and Ergonomics (AHFE) Conference • 2017 - 2019**

- Track chair “Digital Human Modeling and Applied Organization”

**DIN National Committee on Ergonomics (NAErg) • 2016 - 2019**

- Full Member of NA 023-00-06 AA “work- and production design in Industry4.0”

**VDI-Committee „Digital Factory“ • 2012 - 2019**

- Full member GPL RA 3633 Bl 6 Modelling personnel for factory simulations
- Full member GPL RA 4499 Bl 5 Prognosis of environmental factors in the Digital Factory

**Boards of international Journals and Conferences (Selection!) • since 2008**

- Editorial Board: International Journal of Human Factors Modeling and Simulation (IJHFMS) (since 2010)
- Review Board: International Journal of Mobile Human-Computer-Interaction (IJMHCI) (2008 - 2019)
- Program Committee: Applied Human Factors and Ergonomics Conference (since 2010)  
<http://www.ahfe2018.org/>
- Program Committee: Human Computer Interaction international (2009 - 2017)  
<http://2017.hci.international/>

**German Representative in committees of the European Union • 2007 - 2019**

- Government Expert European Defense Agency (EDA), CAPTECH ESM04 on Human Factors, Reviewer of EDA-CAT-A Project “Advanced Helmet and Devices for Individual Protection (AHEAD)” (2009)

**Technical Committee-Chairman, International Ergonomic Association (IEA) • 2006 - 2016**

- Chairman Technical Committee on Human Simulation & Virtual Environments (TC HSVE), seit 2009
- Chairman Triennial World Congress of the IEA, International Symposium on Human Simulation and Virtual Reality in Ergonomics (2006: Maastricht, NL; 2009: Beijing, China; 2012: Recife, BRA; 2015: Melbourne, AUS; 2018: Florence, ITA)
- Founding Member, Steering Committee, Digital Human Modeling Symposium (2011: Lyon, 2013: Ann Arbor, 2014: Tokio, 2017: Bonn)

**Society of Automotive Engineers Int. (SAE) • 1998 - 2007**

- Member of the General Committee G-13 Technical Standards Committee on Human Modeling Technology and Standards
- Program Committee and Session Chair der SAE Digital Human Modeling Conference (annual conferences, international locations)

**Programm Committee, IEEE Computer Society Keynotes • 2002 -2010**

- IEEE Virtual Reality Conference (international locations, 2002 - 2007)
- IEEE Information Visualization Conference (London, 2004 - 2010)