## Academic Curriculum vitae Prof. Ille C. Gebeshuber



Title: Prof. Dipl.-Ing. Dr. techn.
Born: April 10, 1969, Bruck/Mur

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Prof. Ille C. Gebeshuber is a University Professor of Physics from Austria, Europe. She is expert in Nanotechnology, Biomimetics and Tribology. She was born on April 10, 1969, in the small city Kindberg. On the schoolbus, when she wrote a message on the window to a friend who was outside, she discovered that - a natural lefthander - she can write in mirror. She uses this ability to stimulate the right side of her brain and thereby her creativity and cross-border thinking. This has had major influence on her scholarly development and achievements - unlike most other physicists and engineers her approach to science is wide and holistic, and inherently trans- and interdisciplinary, bridging over to biology, the arts and the social sciences. 2017 she was elected 'Austrian of the Year' in the category 'Research'.

From 2008 untill 2015 she has been living and working in Malaysia, since 2016 she is back at her home institution, the Vienna University of Technology. Prof. Ille is associate editor of the IMechE Journal of Mechanical Engineering Science (SAGE Publishing, London, UK), editorial board member of various scientific journals, author of two books on biomimetics and nanotechnology and editor of a book on biomimetics by Springer Scientific Publishing. Since 2011 she has been scientific advisory board member regarding nanotechnology for the Lifeboat Foundation, a US American think tank safeguarding humanity. Her research interests comprise the use of nanotechnology and biomimetics to address global challenges for humankind.

Prof. Ille C. Gebeshuber serves on various international strategy boards. She has been acting as reviewer and advisor for agencies, universities, research institutions and public bodies. Prof. Ille is doing extensive public science outreach work and her professional activities are widely covered in the media. She loves to go on rainforest expeditions with her students, who come from different cultures and different fields (Europe & Asia, physics, engineering, biology, veterinary medicine, applied arts, fine arts).

Her research interests are located at the interface of biology, engineering and the arts, systems thinking and nanotechnology. She has experience in various expert panels, including the Science Advisory Board (Arlington, USA), the Strategy Board of the Austrian Center of Competence for Tribology (Wiener Neustadt, Austria), QS and THES University Rankings and the ISESCO Expert Panel on Nanotechnology.

#### Education

1987

Habilitation (*venia legendi*) in "Experimental Physics", University of Technology Vienna (TU Vienna), Austria

PhD in Technical Sciences (Dr. techn.) (with highest honors). Thesis "Stochastic and Deterministic Influences on the Peripheral Coding of Auditory Signals", Supervisor DDDr. Frank Rattay, TU Vienna, Austria

MSc (Dipl.-Ing.) in Physics Engineering (with highest honors), TU Vienna, Austria

Matura (School Leaving Examination) (with highest honors), Bundesgymnasium Kapfenberg, Austria

# **Professional Career**

Since 2016: Back @ Institute of Applied Physics (IAP), TU Vienna, Austria

2009-2015: Full Professor, Principal Scientist "Physics, Nanotechnology and Bio-

mimetics", Universiti Kebangsaan Malaysia, Malaysia

From 2011: Director, Aramis Technologies Sdn. Bhd., Malaysia

From 10/2010: Strategy Board Member, Austrian Center of Competence for Tribology

(AC2T), Wiener Neustadt, Austria

From 2009: Associate Professor, Institute of Applied Physics (IAP), TU Vienna,

Austria

10/2006-10/2010: Principal Scientist and Key Researcher, AC2T, Austria

10/2002-01/2009: Assistant Professor, IAP TU Vienna, Austria

01/2003-09/2006: Senior Researcher and Head of Strategic Research, AC2T, Austria

01/2000-12/2002: PostDoc, IAP TU Wien, Austria

12/1999-12/1999: Scientific Co-worker, TU Vienna, Austria

06/1999-11/1999: PostDoc, University of California Santa Barbara (UCSB), USA

07/1998-06/1999: PostDoc, TU Vienna, Austria

03/1998-06/1998: Research Assistant, TU Vienna, Austria

10/1995-09/2000: Tutor, TU Vienna, Austria

## **Honors and Awards** (Selection)

Look! Business Award (Category MINT Industries) 2018, Austrian of the Year (Category Research) 2017, Tribology Top 10 Articles 2007-2012 (Maney Publishing, UK), Special Award for Quality (Universiti Kebangsaan Malaysia, 2011), CD of the Month (ORF Ö1, Austrian Radio Broadcasting Agency, June 2010), FWF Bilder der Wissenschaft 2008 (Ranked amongst the best 15 science images of the year, FWF, 2009), The Top Ten Women in Science & Research ("The 333 most important women in Austria", Woman, 2008), Expert of the Month (Funding Agency, FEMtech, 2008), Winner of the Photo Competition (TU Vienna, 2006), Winner of the Innovative Project Initiative (TU Vienna, 2005), Winner of the Research Project Initiative, (Funding Agency, Hochschuljubiläumsstiftung der Stadt Wien, 1999), Winner of the SUCCESS prize (European Space Agency, 1999), Winner of the Wiener Wirtschaft Technology Prize (Funding Agency, Fonds 150 Years Vienna University of Technology, 1999), Winner of the first prize at the students competition (ETH Zürich, Switzerland, 1996)

### Journal Boards (Selection)

Chaos, Solitons and Fractals, Elsevier, NL, Guest Editor (September 2000)

Friction (from 2014)

International Journal of Mechanical and Materials Engineering (from 2009)

ISRN Mechanical Engineering (from 2013)

Jurnal Tribologi (2014-2016)

Nanosciences and Nanotechnologies: An Int. J., Assoc. Editor-in-Chief (from 2012)

Proceedings of the Institution of Mechanical Engineers Part C: Journal of Mechanical Engineering Science, London, UK, Editorial Board Member (from 2006), Assoc. Editor (from 2009), Guest Editor (01/2012)

## **Committees** (Selection)

5th World Tribology Congress, Italy. Scientific Committee Member (2013)

Int. Society of Bionic Engineering. Member of the Board of Directors (from 2014)

ITS LEIF EU FP6 III, Europe. Deputy Coordinator, JRA4 (2006-2009)

Lifeboat Foundation, CA, USA. Scientific Advisory Board Member (from 2011)

Viennano Conference, Austria and Italy. Scientific Committee Member (2007-2013)

WEMESURF EU FP7 RTN, Europe. Scientific Committee Member (2006-2009)

XTribology Excellence Centre of Tribology, Austria. Strategy Board Member (from 2010)

## **Invited Talks** (Selection)

20th North American Diatom Symposium, USA. Plenary Address (2009)

5th World Tribology Congress, Italy. Keynote (2013)

Design for Sustainable Well-Being & Empowerment, IISc India. Panel (2014)

DGM "Friction, Wear and Wear Protection", Germany. Plenary Address (2011)

EU ASEAN STI Days, Thailand. Panel (2014)

European Forum Alpbach, Austria. Invited Talk (2007, 2010, 2015)

Microtribology Symposium, Poland. Keynote (2005, 2009, 2012, 2014)

#### **Academic Contributions**

80 articles in peer review journals; 66 invited bookchapters; one book review; 272 research abstracts; 155 invited lectures, plenary addresses and keynote presentations at international conferences; scientific committee member in 89 conferences and projects; 30 honors and awards; reviewer for 102 international journals & books and 11 grant agencies; comprehensive scientific outreach work (119 public lectures and workshops, 2 CDs on Physics, 72 radio broadcastings, TV, 33 popular science articles in magazines and books, 2 books for the general public, 50 panel discussions, press conferences and exhibitions) and extensive media coverage of research and professional activities.

For complete CV, please see <a href="http://www.iap.tuwien.ac.at/~gebeshuber/CV">http://www.iap.tuwien.ac.at/~gebeshuber/CV</a> ICG.HTML