



## Prof. Dr. Pascale Ehrenfreund

Space Policy Institute  
Institute for International Science  
and Technology Policy  
Elliott School of International Affairs  
George Washington University  
1957 E Street NW, Suite 403  
Washington, DC 20052, USA

Leiden Observatory  
P.O. Box 9513  
NL-2300 RA Leiden  
The Netherlands

Languages: German, English, French, Dutch  
E-Mail: [REDACTED]

### Academic Education:

- |           |   |
|-----------|---|
| 2008      | <b>M.A. Management &amp; Leadership</b><br>Webster University, Leiden<br>Title: <i>Managing Global Space Exploration</i> , GPA: 3.83  |
| 1999      | <b>Habilitation in Astrochemistry</b><br>University of Vienna<br>Title: <i>Cosmic Dust</i>  |
| 1990      | <b>PhD Astrophysics</b><br>University Paris VII, Groupe de Physique des Solides, and University of Vienna<br>Title: <i>Visible and Infrared Spectroscopic Studies of Polycyclic Aromatic Hydrocarbons and other Carbon Clusters</i> |
| 1988      | <b>M.S. Molecular Biology</b><br>Austrian Academy of Sciences, Institute of Molecular Biology, Salzburg<br>Title: <i>Purification and properties of an Iminopeptidase from Streptomyces plicatus</i>                                |
| 1983-1988 | <b>Biology/Genetics and Astronomy</b><br>University of Vienna   |

### Professional Experience:

- |           |   |
|-----------|---|
| 2008-     | <b>Research Professor</b> , Space Policy & International Affairs,<br>Elliott School of International Affairs, George Washington University, USA |
| 2006-     | <b>Professor</b> , Astrobiology, University of Leiden, The Netherlands  |
| 2021-2023 | <b>President</b> , International Space University, Strasbourg, France   |
| 2015-2020 | <b>Chair of the Executive Board</b> , German Aerospace Center   |
| 2013-2015 | <b>President</b> , Austrian Science Fund FWF  |
| 2008-2017 | <b>Lead Investigator</b> , NASA Astrobiology Institute, Node Wisconsin  |
| 2005-2008 | <b>Distinguished Visiting Scientist/Consultant</b> , JPL/Caltech, Pasadena, USA   |
| 2004-2005 | <b>Professor</b> , Astrobiology, University of Leiden, Institute of Chemistry, The Netherlands  |
| 2003-2004 | <b>Professor</b> , Astrobiology, University of Amsterdam, The Netherlands   |
| 2002-2008 | <b>Adjunct Professor</b> , Univ. Nijmegen, Institute of Astronomy, The Netherlands  |
| 2001-2003 | <b>Associate Professor</b> , Leiden Observatory, The Netherlands  |

## **Memberships in Academies and Committees (currently active):**

2023-	<b>Co-Chair</b> , Global Future Council on Space, World Economic Forum
2023-	<b>Member</b> , Jet Propulsion Laboratory JPL, Advisory Council
2022-	<b>President</b> , Committee on Space Research COSPAR
2022-	<b>Board of Directors</b> , Space Foundation
2020-	<b>Special Advisor to Vice President Maroš Šefčovič</b> : Foresight, European Commission
2020-	<b>External Review Committee</b> (ERC), MIT Portugal Program
2018	<b>Honorary Member</b> , Académie de l'Air et de l'Espace

## **Memberships in national and international Committees (completed):**

2022-2023	<b>Member</b> , Karista/Cosmocapital, Strategic Committee
2020-2022	<b>Member</b> , World Economic Forum, Global Future Council on Space
2019-2022	<b>President</b> , International Astronautical Federation IAF
2015-2021	<b>Board of Trustees</b> , Universities Space Research Association <b>USRA</b> , Region III
2018-2021	<b>Chancellor</b> , International Space University ISU
2018-2020	<b>Chair</b> , European Space Research Establishment ESRE
2016-2019	<b>Vice President</b> , International Astronautical Federation: <i>Communication, Publications and Global Conferences</i>
2016-2018	<b>Vice Chancellor</b> , International Space University
2015-2020	<b>Vice President</b> , Helmholtz Association (Aeronautics, Space and Transport)
2010-2019	<b>Chair</b> , Committee on Space Research COSPAR Panel on Exploration PEX
2013-2015	<b>Member</b> , Horizon2020 Space Advisory Group SAG, European Commission
2013	<b>Member</b> , Independent Assessment Team (ITA), NASA Mars Rover 2020, USA
2012-2014	<b>Member</b> , National Research Council: Committee on Human Spaceflight, USA
2012-2017	<b>President</b> , IAU International Astronomical Union, Commission 51
2012-2018	<b>Member</b> , NRC Committee on Astrobiology and Planetary Science CAPS, USA
2012-2013	<b>Member</b> , FP7 Space Advisory Group – Subcommittee on Horizon2020-Space
2011-2013	<b>Member</b> , European Commission: FP7 Space Advisory Group SAG
2011-2015	<b>Member</b> , Eidgenössische Kommission für Weltraumfragen CFAS, Switzerland
2009-2011	<b>Steering Committee</b> , National Research Council NRC, Planetary Decadal Survey
2009-2012	<b>Vice President</b> , IAU International Astronomical Union, Commission 51
2008-2014	<b>Treasurer</b> , ISSOL International Astrobiology Society
2005-2009	<b>Member</b> , European Science Foundation/ European Space Science Committee: <i>“Steering group on Science-driven Scenario for Exploration”</i>
2001-2013	<b>Vice President</b> , European Astrobiology Network Association EANA
2004-2007	<b>Member</b> , Life Science Working Group LSWG, European Space Agency ESA
2003-2007	<b>Member</b> , European Science Foundation/European Space Science Committee: <i>“Steering group on Funding of European Space Research”</i>
2004-2006	<b>Member</b> , Life and Physical Science Advisory Committee LPSAC, ESA
2004-2006	<b>Chair</b> , Organic Working group and Member: ESA Pasteur Working Group
2003-2006	<b>Member</b> , US Space Studies Board Committee: Origins and Evolution of Life, USA
2002-2006	<b>Chair</b> , Life Science Panel, European Science Foundation/ESSC
2002-2005	<b>Member</b> , Scientific Advisory Board: SRON (Dutch Space Agency), The Netherlands
2001-2006	<b>Member</b> , SETI Strategic Planning group: Extraterrestrial Organic Chemistry

## **Research Expertise: Astrophysics, Space Exploration, Space Policy, S & T Policy:**

per November 2023

**Publications in peer-reviewed journals: 214**

**h-index: 75**

**Invited reviews, book chapters and conference papers: 136**

**Edition of books: 12**

## **Space Research Responsibilities:**

2021-	<b>Science Team Member</b> , Abzu: Improved Mars life-detection strategy mission concept, NASA Ames Research Center
2022-2022	<b>Advisory Board</b> , European Research Institute for Space Resources (ERIS)
2015-2018	<b>Head of Delegation</b> to the ESA Council, German Aerospace Center, Germany
2014-2018	<b>FP7 Framework Consortium</b> : MASE Mars Analogues for Space Exploration
2011-2014	<b>Science Team Member</b> : MarcoPolo-R Asteroid Sample Return, ESA Cosmic Vision M3
2010-2015	<b>Science Team Member</b> : OREOCube, International Space Station
2010-2015	<b>Science Team Member</b> : EXPOSE-R2, International Space Station
2008-2013	<b>NASA Project Scientist</b> : O/OREOS Satellite
2005-	<b>Science Team Member</b> : Mars Organic Molecule Analyser MOMA, ExoMars
2005-2012	<b>Science Team Member</b> : Life Marker Chip, ExoMars
2003-2009	<b>NASA Deputy Principal Investigator</b> : Urey Life Detection Instrument, ExoMars
2000-2010	<b>Principal Investigator</b> : RCL- Recognized Cooperating Laboratory, Mars-Express
2000-2006	<b>Co-Investigator</b> : Advanced Microcamera Imaging Experiment, SMART-1
2000-2007	<b>Principal Investigator</b> : Photostability of complex organics in space, BIOPAN V
1996-2013	<b>Principal Investigator</b> : Evolution of organic matter in space, EXPOSE-R
1996-	<b>Rosetta, Comet rendezvous mission/Science Team</b> : Evolved Gas Analyser COSAC; Micro-Imaging Dust Analysis System MIDAS
1994-2000	<b>Science Team, Infrared Space Observatory ISO</b> : Solid state database for ISO
1991-1993	<b>Interface Scientist</b> : Aerosol Collector Pyrolyser, Cassini-Huygens

## **Fellowships, Prizes & Awards:**

2022	<b>Stanford University's World Ranking Top 2% Scientists</b>
2022	<b>Harrie Massey Award</b> , Committee on Space Research COSPAR
2022	<b>Polarstern Preis</b> , Österreichisches Weltraum Forum
2020	<b>Jean Dominique Cassini Medal</b> , European Geophysical Union
2020	<b>Women in Aerospace Europe</b> , Outstanding Achievement Award
2019	<b>Chevalier of the Legion of Honour</b> , France
2011	<b>NASA Group Achievement Award</b> for the O/OREOS Satellite mission
2008-2018	<b>Lead Investigator</b> , NASA Astrobiology Institute grant, Node Wisconsin, USA
2001-2006	<b>New Impulse</b> grant, NWO, The Netherlands
2001	<b>Pastoor-Schmeits Prize</b> for Astronomy, The Netherlands
1999	<b>Asteroid 9826 Ehrenfreund 2114 T-3</b>
1999-2001	<b>NOVA fellow</b> (Netherlands Research School for Astronomy), The Netherlands
1996-1999	<b>APART Prize</b> , Austrian Academy of Science, Austria
1994-1996	<b>Postdoc fellowship</b> , Marie Curie, European Commission
1991-1993	<b>Postdoc fellowship</b> , Centre national d'études spatiales CNES, France
1990-1991	<b>Postdoc fellowship</b> , European Space Agency/Leiden Observatory, The Netherlands