# CURRICULUM VITAE

**Dr. SIEGFRIED J. BAUER**

em. o. Univ. Professor der Karl-Franzens-Universität Graz

Geboren am 13. September 1930 in Klagenfurt; 1948 Matura am Stiftsgymnasium St. Paul im Lavanttal; 1948-1953 Studium der Physik, Geophysik und Meteorologie an der Universität Graz. Im Jahre 1953, nach der Promotion zum Dr. phil. mit einer Dissertation auf dem Gebiet der Ionosphären-Forschung bei Otto Burkard, Emigration in die USA über das militärische „Project Paperclip". Bis 1960 Wissenschaftler am US Army Signal R&D Laboratory, Fort Monmouth, N.J. mit Untersuchungen auf dem Gebiet von Wetter-Radar, Sferics, ionosphärischen Effekten von Hurricanes und Atombombenexplosionen, sowie Bestimmung der Ausdehnung der Erdionosphäre mit dem Diana Mondradar. Von 1961-1981 Wissenschaftler und Führungspositionen (Leiter der Abteilung für Ionosphären und Radiophysik und zuletzt Associate Director of Sciences) am NASA Goddard Space Flight Center, Greenbelt, Maryland. Dort Forschung mit Raketen und Satelliten der Ionosphäre von Erde, Venus und Mars. 1981 Berufung zum Ordinarius für Meteorologie und Geophysik an der Karl-Franzens-Universität Graz mit einer Amtsperiode als Dekan der Naturwissenschaftlichen Fakultät. Bis zur Emeritierung im Herbst 1998 auch Abteilungsleiter und Stellv. Direktor des Grazer Instituts für Weltraumforschung der Österreichischen Akademie der Wissenschaften (ÖAW). Eigene Forschung auf dem Gebiet der Planetenatmosphären und von globalen Umweltproblemen. Beteiligung an der amerikanischen Pioneer Venus und Mars Global Surveyor Mission sowie an der europäischen Huygens Sonde die im Jänner 2005 auf dem Saturnmond Titan landete.

Er ist ein international renommierter Experte auf dem Gebiet der Planeten-Aeronomie, die sich mit den Eigenschaften der Atmosphären am Rande des Weltraums befasst und Autor von über 165 wissenschaftlichen Publikationen, Mitherausgeber von acht Büchern sowie Autor der klassischen Monografie „Physics of Planetary Ionospheres"(1973) und mit H. Lammer „Planetary Aeronomy"(2004), und von zwei autobiografischen Werken („Siegfried J. Bauer-Solar System: Planets, Atmospheres and Life", 2003 und „Zwischen Venus und Mars: Erinnerungen eines Weltraumforschers auf zwei Kontinenten", 2005).

Er ist Mitglied der Österreichischen Akademie der Wissenschaften (w. M. ÖAW), der Academia Europaea und der International Academy of Astronautics sowie Fellow der American Association for the Advancement of Science (AAAS) und der American Geophysical Union (AGU) und Honorary Fellow der Royal Astronomical Society. Zu seinen Auszeichnungen gehören die NASA Exceptional Scientific Achievement Medal und die David Bates Medal der European Geophysical Society (EGU), der Erwin-Schrödinger-Preis der ÖAW und das Österreichische Ehrenzeichen für Wissenschaft und Kunst (Mitglied der Kurie für Wissenschaft).

EHRUNGEN:

1970 Fellow, American Association for the Advancement of Science (AAAS)

1974 NASA Exceptional Scientific Achievement Medal

1978 Fellow, American Geophysical Union (AGU)

1980 korresp. Mitglied im Ausland, Österr. Akademie der Wissenschaften (ÖAW)

1983 wirkliches Mitglied der ÖAW

1986 ord. Member, International Academy of Astronautics (Paris)

1991 Erwin-Schrödinger-Preis der ÖAW

1991 Österr. Ehrenkreuz für Wissenschaft und Kunst I. Klasse

1992 Member, Academia Europaea (London)

1996 Österr. Ehrenzeichen für Wissenschaft und Kunst (Kurie für Wissenschaft)

2000 David Bates Medal, European Geophysical Society

2003 Goldenes Doktor-Diplom der Karl-Franzens-Universität Graz

2006 Großes Goldenes Ehrenzeichen des Landes Steiermark

2011 Honorary Fellow, Royal Astronomical Society (London)

# Biographical Sketch of

**Siegfried J. Bauer**
(Emeritus Professor, University of Graz)

Siegfried J. Bauer was born 1930 in Klagenfurt. From 1948 to 1953 he studied physics, geophysics and meteorology at the University of Graz, receiving a doctorate (Phil.Dr.) with a dissertation in ionospheric research under O. Burkard. Soon afterwards he came to the United States through the military „Project Paperclip“ to work at the U.S. Army Signal Research and Development Laboratory, Fort Monmouth, N.J., where he remained until 1960. There his research was concerned with atmospheric effects on radio propagation,weather radar and the ionospheric response to hurricanes and surface atomic explosions. During the last three years he conducted measurements of the ionospheric electron content with the Diana moon radar. In 1961 he joined the newly-established NASA Goddard Space Flight Center, Greenbelt.MD. where he remained for two decades. There his personal research concentrated on rocket and satellite experiments of the topside ionosphere and associated theoretical studies and later also on the ionospheres of Venus and Mars. During his NASA period he also served as Head, Ionosphere and Radio Physics Branch, Associate Chief, Laboratory for Planetary Atmospheres and last as Associate Director of Sciences. In 1981 he returned to his native Austria upon his appointment to the Chair of Meteorology and Geophysics at the University of Graz, a position once held by Alfred Wegener of continental drift fame; in addition he was a Department Head at the Space Research Institute of the Austrian Academy of Sciences until becoming Emeritus Professor in the fall of 1998. His personal research in Austria focused on planetary atmosphers and ionospheres on account of his association with the American Pioneer Venus and Mars Global Surveyor missions and the European Huygens Probe that landed on Titan. In addition to numerous publications, he is the author of the classic monograph „Physics of Planetary Ionospheres“ that also appeared in Russian and Japanese, and with H. Lammer of „Planetary Aeronomy“. He holds membership in the Austrian Academy of Sciences, in the Academia Europaea and in the International Academy of Astronautics. He also is a Fellow of the American Association for the Advancement of Science (AAAS), the American Geophysical Union (AGU) and Honorary Fellow of the Royal Astronomical Society and a recipient of the NASA Exceptional Scientific Achievement Medal and the David Bates Medal of the European Geophysical Society (now EGU). In 1996 he was awarded the Austrian Decoration for Science and Art.

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**Siegfried J. Bauer**


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