

CURRICULUM VITAE

ERNST K. ZINNER

- Born:** January 30, 1937, in Steyr, Austria
- Education:** Technische Hochschule, Vienna, Dipl. Ing. (equivalent to M.S.), Physics, 1960
Washington University, St. Louis, MO, Ph.D., Physics, 1972
- Employment:** 1963-1964: Instructor of Physics, College for Veterinary Medicine, Vienna
1964-1965: Programming and calculation of magnetic field distributions
Brown-Boveri Co., Baden, Switzerland
1972-1974: Research Associate, Laboratory for Space Physics, Washington
University, St. Louis, MO
1974-1989: Senior Research Scientist, McDonnell Center for the Space Sciences
Washington University, St. Louis, MO
1980-1982: Guest Professor, Technical University Vienna, Austria
1989-1991: Research Professor of Physics, McDonnell Center for the Space
Sciences, Washington University, St. Louis, MO
1991-present: Research Professor of Physics and Earth and Planetary Sciences
McDonnell Center for the Space Sciences, Washington University, St.
Louis, MO

Scientific Work: Dissertation research in high energy physics on the decay $K^+ \rightarrow \pi^0 \mu^+ \nu$. Work on the effects of the interplanetary environment on the moon and meteoritic parent bodies, based on the study of nuclear particle tracks, solar wind implanted elements and micrometeoroid craters. Team leader of the Washington University-JSC-MPI Heidelberg-Univ. Munich LDEF interplanetary dust experiment which was launched in April 1984 and retrieved in January 1990. Ion microprobe isotopic and trace element studies of meteorites and interplanetary dust with implications for early solar system chronology, nucleosynthesis of elements in stars and the history of presolar material. Discovery of interstellar grains in meteorites. Member of the Antarctic meteorite collection team 1985-1986. Team member of the Stardust mission preliminary examination team.

Professional Societies:

American Physical Society
Meteoritical Society
American Association for the Advancement of Science
American Geophysical Union
Sigma Xi

Honors and Awards:

Venia Legendi, Technical University Vienna, Austria, 1985
Antarctic Service Medal, National Science Foundation, 1987
Elected Fellow of the Meteoritical Society, 1988
Elected Fellow of the American Physical Society, 1991

J Lawrence Smith Medal of the National Academy of Sciences, 1997
 Leonard Medal of the Meteoritical Society, 1997
 Geochemistry Fellow of the Geochem. Society and the Europ. Assoc. for
 Geochemistry, 1998
 Corresponding Member of the Austrian Academy of Sciences, 2002
 Elected Fellow of the American Association for the Advancement of Science, 2011

Committees: Member, Lunar Science Review Panel, 1976-1978
 Associate Editor, Proceedings 10th Lunar and Planetary Science Conference, 1979
 Member, Organizing Committee, SEM/1988
 Member, Geodynamics Committee Task Group (NAS) on Geochemical
 Instrumentation, 1988
 Member, ESA/NASA Science Definition Team of Rosetta (Comet Nucleus Sample
 Return Mission), 1988-1991
 Member, Program Committee, Int. Workshop on Physics and Mechanics of Cometary
 Materials, 1989
 Session Advocate, GSA 1989 Annual Meeting
 Symposium Convenor, 7th Int. Conf. on Geochronology, Cosmochronology and
 Isotope Geology, 1990
 Member, Steering Committee, NASA Workshop on Isotopic Anomalies, 1990
 Member, Lunar and Planetary Geoscience Review Panel, 1992-1994
 Chairman, Organizing Committee, NASA Workshop on Isotopic Anomalies, 1993
 Member, Program Committee, Nuclei in the Cosmos III, 1994
 Member, Organizing Committee, Goldschmidt Conference, 1994
 Member, Organizing Committee, Workshop on Stellar Evolution, 1994
 Member, Program Committee, Nuclei in the Cosmos IV, 1996
 Member, Organizing Committee, Conference on the Astrophysical Implications of the
 Laboratory Study of Presolar Materials, 1996
 Associate Editor, Meteoritics and Planetary Science, 1996-2005
 Member, Program Committee, 2nd Symposium on Atomic and Nuclear Physics in the
 Universe, 1997
 Member, IAU Working Group on Abundances in Red Giants, 2001–
 Member, Scientific Organizing Committee and Associate Editor, Workshop on Chondrites
 and the Protoplanetary Disk, 2004
 Member, Scientific Organizing Committee, Astrophysics with Radioactivities V, 2005
 Member, Scientific Organizing Committee, Joint Discussion on AGB Stars, IAU
 Symposium, 2006
 Member, Scientific Advisory Committee, 9th Torino workshop, 2007
 Member, Scientific Organizing Committee, IAU Symposium “Organic Matter in Space”,
 2008
 Member, International Advisory Committee, Nuclei in the Cosmos X, 2008
 Member, International Advisory Committee, Nuclei in the Cosmos XI, 2010

Visits: Visiting Scientist, Max-Planck-Institut f. Kernphysik, Heidelberg, Germany, May 1980
 Visiting Scientist, Max-Planck-Institut für Chemie, Mainz, Germany, June 1980
 Visiting Scientist, University of Pavia, Italy, July-September 1989
 Visiting Professor, University of Bern, Switzerland, July-September 1994

Visiting Fellow, Australian National University, Canberra, June-July 1995
Visiting Scientist, Max-Planck-Institut für Chemie, Mainz, Germany, June-September 2001
Visiting Fellow, Australian National University, Canberra, December 2002
Visiting Scientist, Max-Planck-Institut für Chemie, Mainz, Germany, June-September 2003
Visiting Scientist, Max-Planck-Institut für Chemie, Mainz, Germany, September 2004
Visiting Scientist, Museum National d'Histoire Naturelle, Paris, July 2006
Tuve Fellow, Carnegie Institution of Washington, April-May 2010
Visiting Scientist, University of Perugia, Italy, October 2011
Visiting Scientist, University of Granada, Spain, May 2013

Invited Presentations:

Conference on the Ancient Sun, Boulder, 1979
160th Meeting of the Electro Chem. Society, Denver, 1981
AIAA Shuttle Environment and Operations Meeting, Washington, DC, 1983
6th Intl. Conf. Geochronology, Cosmochronology and Isotope Geology, Cambridge, UK, 1986.
AGU Spring Meeting, Baltimore, 1987.
USGS Workshop on New Frontiers in Stable Isotope Research, Reston, VA, 1988
V. M. Goldschmidt Conference, Baltimore, 1990
ESF Workshop, Bad Honnef, West Germany, 1990
Alfred Nier Symposium, Durango, CO, 1991
SIMS VIII, Amsterdam, 1991
German Mineralogical Society, München, Germany, 1993
Nuclei in the Cosmos III, Gran Sasso, Italy, 1994
57th Meteoritical Society Meeting, Prague, Czech Republic, 1994
XXII General Assembly, IAU, The Hague, Netherlands, 1994
20th Symposium on Antarctic Meteorites, Tokyo, Japan, 1995
6th Annual October Astrophysics Conference in Maryland, 1995
Symposium on Nuclear Astrophysics, Caltech, Pasadena, 1995
Todai International Symposium on Cosmochronology and Isotope Science, University of Tokyo, 1996
Nuclei in the Cosmos IV, Notre Dame, IN, 1996
Godfrey Distinguished Lecture, Clemson University, 1997
Gordon Conference on Origins of Solar Systems, New Hampshire, 1997
60th Meteoritical Society Meeting, Maui. Leonard medalist award talk, 1997
SIMS XI, Orlando FL, 1997
Dust in the Local Interstellar Medium, ISSI Workshop, Bern, Switzerland, 1998
Workshop on "The Early Solar System", MPI Mainz, Germany, 2000
Nucleosynthesis 2000, ACS Meeting, Washington, D.C., 2000
63rd Meteoritical Society Meeting. Chicago, 2000
Robert M. Walker Symposium, St. Louis, MO, 2003
Enrico Fermi Institute Symposium, Univ. of Chicago, 2003
The 16th Sanibel Conference on Mass Spectrometry, 2004
DANCE Workshop, Santa Fe, NM, 2004
Nuclei in the Cosmos VIII, Vancouver, Canada, 2004
40th Anniversary of the Karlsruhe Van de Graaff, Karlsruhe, Germany, 2004
15th Ann. Goldschmidt Conference, Moscow, Idaho, 2005

AAS Meeting, Minneapolis, MN, 2005
Astronomy with Radioactivities V, Clemson, SC, 2005
AAAS Annual Meeting, St. Louis, MO, 2006
Nuclear Astrophysics: Beyond the first 50 years, Pasadena, CA, 2007
Ninth Torino Workshop, Perugia, Italy, 2007
IAU Symposium "Organic Matter in Space", Hong Kong, 2008
European Week of Astronomy and Space Science, Hatfield, UK, 2009
Gordon Research Conference "Origins of Solar Systems", South Hadley, MA, 2009
Tuve Lecture, Carnegie Institution of Washington, 2010
WE-Heraeus Summer School on Nuclear Astrophysics in the Cosmos, Darmstadt, Germany, 2010
74th Meteoritical Society Meeting, Greenwich, England, 2011
St. Louis Astronomical Society, 2012
Dust on core-collapse supernovae near & far: understanding its formation and evolution. Ascona, Switzerland, 2012
Dust in EuroGENESIS environments: from primitive, massive stars to novae. Perugia, Italy, 2012
Nuclear Physics in Astrophysics VI, Lisbon. Portugal, 2013