

# Harald Hiesinger

## 1) General information

- Hiesinger, Harald, Dr. rer. nat., date of birth: 26/05/1964, male.
- Institut für Planetologie, Westfälische Wilhelms-Universität Münster, Wilhelm-Klemm-Str. 10, D-48149 Münster, Tel.: +49 251 83 39057, e-mail: hiesinger@uni-muenster.de.
- Current position: Professor of Geological Planetology (W2)

## 2) Academic education and degrees

- Geology (1984-1990), Ludwig-Maximilians-Universität Munich, Diploma (Prof. Dr. Bodechtel, Prof. Dr. Klemm)

## 3) Scientific degrees

- Doctoral degree: Dr. rer. nat., Geology/Planetologie; Doctoral thesis: Geochemical and stratigraphic investigation of lunar mare basalts with remote sensing techniques, Freie Universität Berlin, 1999 (Prof. Dr. G. Neukum)

## 4) Professional experience

- 2007-2012, 2014-present, Acting director, Institut für Planetologie, Westfälische Wilhelms-Universität, Münster
- 2006-present, Professor, Institut für Planetologie, Westfälische Wilhelms-Universität, Münster
- 2007-present, Visiting Professor, Department of Geological Sciences, Brown University, RI, USA
- 2004-2006, Assistant Professor, Dept of Physics and Earth Sciences, Central Connecticut State University, CT, USA
- 2002-2007, Senior Research Associate, Department of Geological Sciences, Brown University, RI, USA
- 1998-2002, Research Associate, Department of Geological Sciences, Brown University, RI USA
- 1997-1998, Visiting Researcher, Department of Geological Sciences, Brown University, RI, USA
- 1997-1999, Scientific Research Assistant, Institute of Geoinformatics, Free University Berlin
- 1992-1997, Scientific Research Assistant, DLR (German Aerospace Research Center), Institute of Planetary Exploration, Berlin
- 1990-1992, Scientific Research Assistant, DLR (German Aerospace Research Center), Institute for Optoelectronics, Oberpfaffenhofe:
- 1988-1990, Internship, Isotopic Geology Working Group, Ludwig-Maximilians-University, Munich:

## 5) Professional activities

- Co-I, BepiColombo mission; Mercury Imaging X-ray Spectrometer (MIXS): 2014-present
- Co-I, MARE (proposal): 2014-present
- Science Member, FARSIDE (proposal): 2014-present
- Co-I, JUICE mission; JANUS camera: 2012-present
- Participating Scientist, Dawn mission: 2010-present
- Co-I, Moonrise (proposal): 2009-present
- Associate Co-I, SELENE/Kaguya mission, Terrain Camera: 2008-2009
- PI, BepiColombo mission; Mercury Thermal Infrared Spectrometer (MERTIS): 2007-present
- Co-I, BepiColombo mission; Mercury Thermal Infrared Spectrometer (MERTIS): 2006-2007
- Co-I, Lunar Reconnaissance Orbiter mission; LROC camera: 2004-present
- Co-I, Mars Express mission; HRSC camera: 2006-present
- Associate, Smart-1 mission; SIR-Spectrometer (with U. Mall): 2003-2006
- Associate, Moonrise mission; (proposal, with J. Head): 2003-2005
- Associate, Mars Global Surveyor mission; MOLA (with J. Head): 1998-2006
- Associate, Mars Express mission; HRSC camera (with G. Neukum and J. Head): 1997-2006
- Associate, Galileo mission; SSI camera (with G. Neukum and J. Head): 1990-2003
- Member, ESA Lunar Sample Return Science Definition Team: 2014-present
- Member, IAU Task Group for Lunar Nomenclature: 2008-present
- Panel Member, Committee on the Scientific Context for Lunar Exploration, Space Studies Board, National Academy of Science: 2006-2007
- Member of the "Committee on Science Goals and Priorities for Lunar Exploration", Space Studies

- Board, National Research Council: 2006
- Contributions to "The Next Steps in Exploring Deep Space", International Academy of Astronautics: 2003-2004
- Contributions to "New Frontiers in the Solar System", Space Studies Board, National Academy of Science: 2002-2003
- Chairman for "Mars", Planetary Geology and Geophysics (PG&G) program: 2005-2007
- Reviewer / Panel Member, Planetary Data Archiving, Restoration, and Tools (PDART) Program: 2015
- Reviewer / Panel Member, Mars Fundamental Research Program (MFRP): 2006
- Reviewer / Panel Member, Planetary Geology and Geophysics (PG&G) program: 2002-2004
- Reviewer / Panel Member, Planetary Data System (NEAR mission): 2002
- Reviewer, NASA Postdoctoral Program: 2006
- Reviewer, Mars Data Analysis Program (MDAP): 2003-present
- Reviewer, Science, Journal of Geophysical Research (Planets), Geophysical Research Letters, Icarus, Meteoritics and Planetary Science, Planetary and Space Science
- Organizer, 3rd European Planetary Science Congress, 2008
- Organizer, "Lunar Exploration - The Next Decade", 352nd Wilhelm and Else Heraeus Seminar, Bonn, Germany: 2005
- Member of the European Geophysical Union (EGU): 1992-present
- Member of the American Geophysical Union (AGU): 1999-present
- Member of the Geological Society of America (GSA) and Planetary Division: 1999-present
- Participant of the International Lunar Exploration Working Group (ILEWG)
- Editor, Geological Society London Special Publication 401 "Volcanism and Tectonism Across the Inner Solar System, 2015
- More than 100 peer-reviewed publications and 4 book chapters

## 6) Publications

*Published or accepted peer-reviewed publications, book chapters, etc.*

- Platz, T., Byrne, P. K., Massironi, M., Hiesinger, H., (2015), Volcanism and tectonism across the inner solar system: An overview. *Geol. Soc. Lond. Sec. Pub.*, 10.1144/SP401.22.
- Hiesinger, H., Jaumann, R., (2014), The Moon, In: *Encyclopedia of the Solar System* (Spohn, T., Johnson, T., Breuer, D., eds.), 493-538, Elsevier.
- Schmedemann, N., Kneissl, T., Ivanov, B. A., Michael, G., Wagner, R., Neukum, G., Ruesch, O., Hiesinger, H., Krohn, K., Roatsch, T., Preusker, F., Sierks, H., Jaumann, R., Reddy, V., Nathues, A., Raymond, C. A., Russell, C. T., (2014), The cratering record, chronology and surface ages of (4) Vesta in comparison to smaller asteroids and ages of HED meteorites. *Planet. Space. Sci.*, 10.1016/j.pss.2014.04.004.
- Hiesinger, H., Head, J. W., Wolf, U., Jaumann, R., Neukum, G., (2011), Ages and stratigraphy of lunar mare basalts: A synthesis. In: *Recent advances and current research issues in lunar stratigraphy* (Ambrose, W. A., Williams, D. A.; eds.) *Geol. Soc. Am. Spec. Paper* 477, 1-51, 10.1130/2011.2477(01).
- Hiesinger, H., Head, J. W., Wolf, U., Jaumann, R., Neukum, G., (2010), Ages and stratigraphy of lunar mare basalts in Mare Frigoris and other nearside maria based on crater size-frequency distribution measurements. *J. Geophys. Res.*, 115, 10.1029/2009JE003380.
- Hiesinger, H., Helbert, J., MERTIS Co-I Team, (2010), The Mercury Radiometer and Thermal Infrared Spectrometer (MERTIS) for the BepiColombo mission. *Planet. Space Sci.*, 58, 144-165, 10.1016/j.pss.2008.09.019.
- Hiesinger, H., Head, J. W., (2006), New views of lunar geoscience: An introduction and overview. In *New Views of the Moon* (B. Jolliff, M. Wieczorek, editors.), *Rev. Min.*, 60, 1-81, Mineralogical Society of America.
- Hiesinger, H., Head, J. W., Wolf, U., Neukum, G., (2003), Ages and stratigraphy of mare basalts in Oceanus Procellarum, Mare Nubium, Mare Cognitum, and Mare Insularum. *J. Geophys. Res.*, 108, 10.1029/2002JE001985.
- Hiesinger, H., Jaumann, R., Neukum, G., Head, J. W., (2000), Ages of mare basalts on the lunar nearside. *J. Geophys. Res.*, 105, 29239-29275.
- Head, J. W., Hiesinger, H., Ivanov, M. A., Kreslavsky, M. A., Pratt, S., Thomson, B., (1999), Possible ancient oceans on Mars: evidence from Mars Orbiter Laser Altimeter data. *Science*, 286, 2134-2137,

10.1126/science.286.5447.2134.